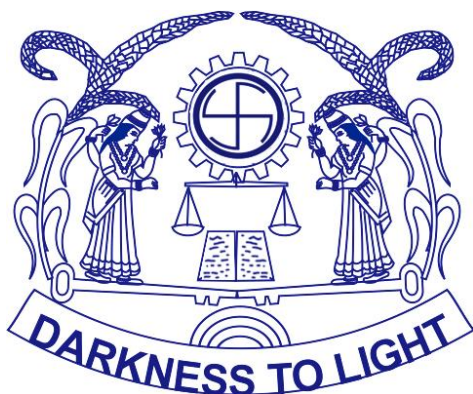


DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF ECONOMICS
B.A. (Economics)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

SCHEME OF EXAMINATIONS**SEMESTER – I**

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Foundation Course: Tamil – I or any Language	6	3	100	3
2	Foundation Course: English – I	6	3	100	3
3	Core Course: Indian Economy – I	6	3	100	4
4	Core Course: Statistics for Economists – I	6	3	100	4
5	Allied: Marketing – I	6	3	100	5
6	Non – Major: Elements of Insurance		3	100	2
7	Soft Skill – I		3	100	2

SEMESTER – II

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Foundation Course: Tamil – II or any Language	6	3	100	3
2	Foundation Course: English – II	6	3	100	3
3	Core Course: Indian Economy – II	6	3	100	4
4	Core Course: Statistics for Economists – II	6	3	100	4
5	Allied: Marketing – II	6	3	100	5
6	Non – Major: Human Resources Management		3	100	2
7	Soft Skill – II		3	100	2

B.A.-ECONOMICS

SEMESTER – III

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Foundation Course: Tamil – III or any Language	6	3	100	3
2	Foundation Course: English – III	6	3	100	3
3	Core Course: Micro Economics – I	6	3	100	4
4	Core Course Monetary Economics– I	6	3	100	4
5	Allied: Cost Accounting	6	3	100	5
6	Soft Skill – III		3	100	3

SEMESTER – IV

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Foundation Course: Tamil – IV or any Language	6	3	100	3
2	Foundation Course: English – IV	6	3	100	3
3	Core Course: Micro Economics – II	6	3	100	4
4	Core Course: Monetary Economics – II	6	3	100	4
5	Allied: Management Accounting	6	3	100	5
6	Soft Skill IV		3	100	3
7	Environmental Studies		3	100	2

B.A.-ECONOMICS

SEMESTER – V

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Macro Economics - I	6	3	100	4
2	Managerial Economics	6	3	100	4
3	Fiscal Economics – I	6	3	100	4
4	History of Economic Thought	6	3	100	5
5	Environmental Economics	6	3	100	5

SEMESTER – VI

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Macro Economics - II	6	3	100	4
2	International Economics	6	3	100	5
3	Fiscal Economics – II	6	3	100	4
4	Health Economics	6	3	100	5
5	Entrepreneurial Development	6	3	100	5
6	Value Education				2
7	Extension Activities				1

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M011A	Indian Economy – I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Features of under developed countries – Concept of growth and development – determinants of growth
UNIT 2	Capital formation – Human and physical – National income – Methods, trends, limitations
UNIT 3	Population – Population and its effect – population policy - Unemployment
UNIT 4	Agriculture – its contribution to economic development – food security – Remedial measures – Measures to increase agricultural productivity – Land reforms – Green revolution – Agricultural inputs and agricultural credit – Evaluation of agricultural policy during plan period
UNIT 5	New Economic Policies – Liberalization, Privatization, Globalization (LPG) - WTO

Reference Books:

1. Dutt and Sundaram – Indian Economy
2. Jhingan M.L – Economic of Development and Planning
3. Economic Survey – Government of India
4. Dhingara I C – Indian Economy
5. Sankaran S – Indian Economy

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M011B	Statistics for Economists – I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Nature, Significance and limitations of Statistics – Collection, Classification and tabulation of data
UNIT 2	Diagrammatic and graphic representation – Bar diagram – Pie diagrams – Histograms – Frequency graphs
UNIT 3	Measures of Central tendency – Arithmetic Mean – Median – Mode
UNIT 4	Measures of dispersion – Range – Quartile Deviation – Mean Deviation – Standard deviation – Co-efficient of Variation – Percentiles and Deciles
UNIT 5	Skewness and Kurtosis – Pearsonian measure of skewness – Bowley's measure of skewness - Kurtosis

Reference Books:

1. D.N.Elhance – Fundamentals of Statistics
2. R.G.D.Allen – Statistics for Economists – Macmillan India
3. Crompton F B and Cowden D J – Applied General Statistics
4. S.P.Gupta – Statistical Methods
5. R.S.N. Pillai and V.Bhagwati – Statistics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14C011A	Marketing – I	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Nature – Structure – Classification of Market – Scope and Significance of Marketing – Evolution of Marketing - Basic concepts of marketing – different types of market – modern marketing – marketing environment
UNIT 2	Functions of marketing in Exchange – Storage and Warehousing – Transportation – Different models of transport – Roadways, Railways, Waterways and Airways
UNIT 3	Facilitating function – Grading and Standardization – Branding packaging and labeling – Marketing information system – Marketing risk – Marketing finance
UNIT 4	Product – New Product – Product life cycle – Characteristics and channels of distribution
UNIT 5	Marketing of agricultural products – Regulated and organized market

Reference Books:

1. Ramaswamy and Ramakumari – Marketing Management
2. Tousey, Clark and Clark – Principles of Marketing
3. William J Stanton – Fundamentals of Marketing
4. Jayasankar – Marketing Management
5. Dr.Radha – Marketing Management

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14N601A	Elements of Insurance	1	-	-	2

UNIT	SYLLABUS
UNIT 1	Introduction to Insurance – Origin, History, Nature of Insurance, Insurance in India, Market potential – Emerging Scenario – Principles of Insurance
UNIT 2	Life insurance – Selection of risk and policy conditions – Risk management and reinsurance - Selection of risks – Computation of premium
UNIT 3	Life Insurance Products term Insurance, Whole life and Endowment Annuities insurance – Document – Proposal forms - Agents confidential report – Declaration of good health, medical report, policy form etc., policy conditions and privileges – Age admission, revival, loans claims etc.,
UNIT 4	Introduction to general insurance – Fire Motor, Marine, Health, Miscellaneous, Group insurance schemes – Group Insurance, Group Gratuity, Superannuation and Pension plan – Rural insurance and insurance for weaker sections of society
UNIT 5	Marketing of Insurance products – Selling Processes

Reference Books:

1. Life Insurance – Institute of Insurance, Mumbai
2. General Insurance – Institute of Insurance, Mumbai
3. Arifkhan M – Theory and Practice of Insurance (1976) Educational Book House S Aligarh
4. Sharma R S – Insurance Principles and Practice, 1960 Vora Mumbai
5. Murthy A – Elements of Insurance

COURSE CODE	COURSE TITLE	L	T	P	C
14M012C	Indian Economy – II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Role of Industries in economic development – Cottages, Small scale and large scale (Cotton, Iron, Steel, Paper, Jute, Sugar and Tea) – Public Sector – Privatization – Industrial Policy – Industrial Finance – Development Banking
UNIT 2	Industrial Labour – Trade Unions and Globalization Labour unrest – Industrial relations – Social Security schemes - Unemployment and employment policy – Evaluation of Government Policy
UNIT 3	Transport – Importance of Transport (Road, Railways, Shipping and Civil Aviation) to Economic growth –Transport Co-ordination
UNIT 4	Planning in India – Objectives – Strategy –Current Five Year Plan – Role of deficit financing – Role of foreign aid in Indian Economic development – Problems of foreign aid
UNIT 5	Poverty in India – Poverty eradication programmes – Regional Development disparities – Economic development and social changes – 12 th Finance Commission Report – Government Subsidies in India

Reference Books

1. Dutt and Sundaram – Indian Economy
2. Jhingan M.L – Economic of Development and Planning
3. Economic Survey – Government of India
4. Dhingara I C – Indian Economy
5. Sankaran S – Indian Economy

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M012D	Statistics for Economists – II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Sampling – Population and Sample – Types of Sampling – Simple, random and Stratified random sampling – Design of Questionnaire – Sampling errors – Sampling design
UNIT 2	Correlation – Limitation of Coefficient of Correlation – Calculation of Co-efficient of Correlation – Rank Correlation Co-efficient
UNIT 3	Regression – Meaning – Two variable linear regression – Meaning – Regression lines and regression Co-efficient
UNIT 4	Index Numbers – Marshall and Edgeworth's Index Numbers –Construction – Uses – Wholesale price index and consumer price index – Index of industrial production
UNIT 5	Analysis of time series – Four components – Measurement of Secular trend – Moving Average Methods and Methods of Least squares – Uses of time series analysis

Reference Books:

1. D.N.Elhance – Fundamentals of Statistics
2. R.G.D.Allen – Statistics for Economists – Macmillan India
3. Crompton F B and Cowden D J – Applied General Statistics
1. S.P.Gupta – Statistical Methods
2. R.S.N. Pillai and V.Bhagwati – Statistics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14C012B	Marketing – II	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Consumer and Marketing – Consumer Movement – Consumerism – Consumer Co-operatives and Consumer councils
UNIT 2	Price – Pricing objectives and price determination – Basic methods of setting prices – Pricing Strategies and policies
UNIT 3	Promotional programme – Promotional Mix – Advertising and other sales promotion efforts – Super markets – Departmental and Chain stores
UNIT 4	Advertising – Social Economic Effects of Advertising – Planning and Knowledge of Advertisement – Advertising media and agencies – Advertising budget
UNIT 5	Personal Selling – Salesmanship – Nature and function of Salesman – Recruitment and training of Salesman – Salesmanship – Sales force Management – Sales Organization and Selling Methods – E – Marketing

Reference Books:

1. Ramaswamy and Ramakumari – Marketing Management
2. Tousey, Clark and Clark – Principles of Marketing
3. William J Stanton – Fundamentals of Marketing
4. Jayasankar – Marketing Management
5. Dr.Radha – Marketing Management

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14N601B	Human Resources Management	1	-	-	2

UNIT	SYLLABUS
UNIT 1	Human Resource – Definition & Significance Human Resource Management and its concepts, Concept of Personal Management – Personal Management and HRM
UNIT 2	Functions of HRM – Role of HRM – Development of HRM
UNIT 3	Human Resource Planning and Process of Human Resource Planning – Barriers to effective HRP
UNIT 4	Job analysis – Concept, process and methods Job description and Job specification
UNIT 5	Concept of recruitment – Process, Planning and source of recruitment – Selection – Concept, Process and Selection, test and interview

Reference Books:

1. David A De, Cenzo – Personnel / Human Resources Management
2. Hemmeman, Schwat – Personnel / Human Resources Management
3. AswathaPpaa – Human Resources Management
4. Dr.V.Balu – Human Resources Management
5. L M Prasad – Human Resources Management

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M013E	Micro Economics – I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Definition of Economics – Adam Smith, Marshall, Lionel Robins, Sameulson – Definition of Micro Economics – Wants – Utility – Value in use – Value in Exchange
UNIT 2	Theory of demand – Elasticity of demand – Types and Measurement – Supply – Price Elasticity of Supply – Market Equilibrium - Consumer's surplus
UNIT 3	Theory of consumer behaviour – Cardinal & Ordinal Utility – Marginal rate of Substitution (MRS) – Law of diminishing Marginal Utility - Indifference curve - Properties – Budget Line - Income, price and substitution effects – Consumer Equilibrium - Price consumption curve and demand curve
UNIT 4	Production function – Stages of total, average and marginal product curve - Law of variable proportions – ISO Quants – Properties – MRTS – Law of returns to scale – ISO Cost Line – Producers Equilibrium – Expansion path
UNIT 5	Cost concepts – Cost output relationship in the short run and in the long run Revenue curves – Economist of Scale - Break Even Point (BEP)

Reference Books:

1. Richard A Bilas – Micro Economic Theory
2. A Koutsoyiannis – Modern Micro Economics
3. Cohen and Cyert – The Theory of the Firm
4. Sankaran S – Micro Economics
5. Sundaram K P M – Micro Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M013G	Monetary Economics – I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Money – Functions and classification – Gresham’s Law – Role of money in Capitalist, Socialist and Mixed Economies
UNIT 2	Value of Money – Index numbers – Fishers equation – Cambridge Equation – Evaluation of the quantity theory of money
UNIT 3	Money standards – Paper currency – systems of note issue – Indian currency system – Development and problems
UNIT 4	Factors influencing money supply – Measurement - Money supply and price level – Keynesian approach – Neutrality of money – Real balance effect - Friedman’s restatement of quantity theory of money
UNIT 5	Inflation – Causes, types and remedies – Effects of inflation on different sectors of the Economy – Concept of Deflation and Stagflation – Trade cycle – Faces of trade cycle

Reference Books:

1. Basu C R – Central Banking in an Planned Economy
2. Chandler L V – Economics of Money and Banking
3. Vaish M C – Monetary Theory
4. Sankaran S – Monetary Economics
5. R.R.Paul – Monetary Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M014H	Micro Economics – II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Market Structure – Total, Average and Marginal curves – Perfect Competition – Imperfect Competition – Features of Perfect Competition - Equilibrium of firm and the Perfect Competition
UNIT 2	Price and Output determination under imperfect competition – Monopoly – Price discrimination – Monopolistic competition – product differentiation and selling cost – Duopoly – Cornot – Oligopoly – Cartal – Kinked demand curve
UNIT 3	Theory of distribution – Marginal productivity – Theory of distribution – Rent – Ricardian theory of rent – Quasi - rent – Modern theory of rent
UNIT 4	Wages – Theories of wages – real and money wages – Collective bargaining – Trade union and wages – Interest – Gross and Net interest – Classical theory of interest – Liquidity preference – Theory of interest
UNIT 5	Profit – Theories of profit – Income – Inequality – Causes and remedial measures

Reference Books:

1. Richard A Bilas – Micro Economic Theory
2. A Koutsoyiannis – Modern Micro Economics
3. Cohen and Cyert – The Theory of the Firm
4. Sankaran S – Micro Economics
5. Sundaram K P M – Micro Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M014J	Monetary Economics – II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Commercial Banking – Types – Function – The process of credit creation – Purpose and limitations – Liabilities and assets of banks
UNIT 2	Nationalization of Banks – A critical appraisal of the progress of commercial banking after nationalization – Recent reforms in banking sector in India
UNIT 3	Central banking – Functions of a Central Bank – Quantitative and qualitative methods of credit control – Efficiency and limitations
UNIT 4	Objectives and Functions of Reserve Bank of India – Role of RBI in agricultural and Industrial development – Monetary Policy – Objectives - RBI and Credit control
UNIT 5	Functions of Money Market & Capital Market in India

Reference Books:

1. Basu C R – Central Banking in an Planned Economy
2. Chandler L V – Economics of Money and Banking
3. Vaish M C – Monetary Theory
4. Sankaran S – Monetary Economics
5. R.R.Paul – Monetary Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M015K	Macro Economics – I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Nature and scope of Macro Economics – Micro and Macro Economics – Circular flow of income
UNIT 2	National income – GNP – Personal income – Disposable income – Real income – Per Capita Income – Measurement – Difficulties - Uses – Social Accounting
UNIT 3	Classical theory of Employment and Income – Say’s Law of Market
UNIT 4	Consumption function – Meaning – Keynes’s Psychological Law of Consumption – Theories of Consumption function – Absolute, Relative, Permanent life hypothesis
UNIT 5	Investment function – Meaning – Types – Determinants of Investment – MEC – Simple Keynesian model of income and employment determination

Reference Books:

1. Broo Man – Macro Economics
2. Derberg and McDougal – Macro Economics
3. Dillard D – Macro Economics
4. Jhingan M L – Macro Economic Theory
- 5.
6. Sankaran S – Macro Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M015L	Managerial Economics	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Nature and scope of Managerial Economics – Managerial Economists – Role and responsibilities – Demand analysis – Elasticity of Demand – Demand Forecasting
UNIT 2	Cost Analysis – Costs – Output relationship – Cost control – Cost reduction – Production functions
UNIT 3	Market Structure – Price and Output under different market conditions
UNIT 4	Pricing methods – Pricing new product – Price regulation – Profit and Profit management – Profit planning and forecasting – BEP
UNIT 5	Capital Budgeting – Cost of Capital – Capital Management – Project Profitability – Methods of appraising Project Profitability

Reference Books:

1. Baumol William J _ Economic Theory and Operation Analysis
2. Dean, Joel – Managerial Economics
3. Hague D C – Managerial Economics
4. Varshney R L and Maheswari K L – Managerial Economics
5. Sankaran S – Managerial Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M015M	Fiscal Economics – I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Meaning and Scope of Public finance – Distinction between private and public finance – Public goods Vs Private goods – Principle of maximum social advantage – Market failure – Role of Government
UNIT 2	Principles of public expenditure – Classification – Canon - Causes for Escalation - Effects of public expenditure with reference to India
UNIT 3	Public revenue - Sources – Direct & indirect taxes - Distinction between tax revenue and non tax revenue – Trends – Canons – Theories of taxation – Impact and incidence of taxation
UNIT 4	Characteristics of a good tax system – Taxable capacity – Factors determining taxable capacity – Limits – Measurement of taxable capacity
UNIT 5	Individual taxes - (With reference to India) Income Tax – Expenditure tax – Wealth tax – Property tax – Estate duty – Gift tax – Death duty – Customs duty – Excise duty – Sales tax – Value Added Tax (VAT) – MODVAT, CENVAT

Reference Books:

1. Bhargava R N – Indian Public Finance
2. Bhatia – Public Finance
3. Chelliah R – Fiscal policy in under developed countries
4. Sankaran S – Fiscal Economics
5. Sundaram K P M – Fiscal Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M015N	History of Economic Thought	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Nature and significance of the History of Economic Thought - Mercantilism – Factors & rise of Mercantilism – Physiocracy – Factors and rise to Physiocracy - Classical School – A Smith – T R Malthus – D Ricardo – J S Mill – J B Say
UNIT 2	Rise of Socialism – Forms of Socialism - Karl Marx - Historical School – Roscher – Hildebrand – Karl knies – Schmoller - Institutional School – Veblen – J.R.Commons
UNIT 3	The Marginal Revolution – William Stanley Jevons – Austrian School – Principles of the Austrian Schools – Carl Menger – Bohn – Bawerk
UNIT 4	Alfred Marshall – J A Schumpeter – Keynesian revolution limitations – welfare Economics – Pigou – Hicks – Pareto – Nobel Laureates – AmartyaSen
UNIT 5	Indian Economic Thought - Rajaji – Nehru – V K R V Rao – Gadgil – Indira Gandhi – E V R Periyar – C.N.Annadurai

Reference Books:

1. E Roll – History of Economic Thought
2. Dr.ShanmugaSundaram – Indian Economics Thought Development & Policies
3. T N Hajela – History of Economic Thought
4. Sankaran S – History of Economic Thought
5. Lokanathan V – History of Economic Thought

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14A015A	Environmental Economics	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Economic and Environment – Definition and role of Environmental Economics – Scope and Significance of Environmental Economics – Ecology – Relationship between the Environment and the Economic System – Environment as a Resource – Environment Quality
UNIT 2	Resource – Concept and Definition – Classification of Resources – Renewable and Non – renewable resources – Recycling – Waste reduction – Energy Definition – Sources of Energy and their classification – Atomic energy – Energy scenario in India
UNIT 3	Global Warming – Ozone Depletion – Green house effect – Effect of Global warming – Contribution of India towards warming – Programming in India
UNIT 4	Environmental awareness – Environmental education through environmental movements – Environmental protection – Tiwari Committee's findings – The Environment (Protection) Act, 1986 – The Forest Conservation Act
UNIT 5	International Environmental Policy – Transfrontier pollution – International agreements – Stockholm conference on Human environment – Recommendations United Nations Conference on Environment and Environment and Development at Rio de Janeiro (Agenda 21, June 1992) An Assessment

Reference Books:

1. D W Pearu – Environmental Economics
2. Joseph J Sereca and Michael K Taussig – Environmental Economics
3. Kneese A V – Economics of the Environmental
4. S Sankaran – Environmental Economics
5. Karpagam M – Environmental Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M016P	Macro Economics – II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Income Multiplier – Static and dynamic multipliers – Induced investment and accelerator – The interaction principle – Basis of income and employment multiplier
UNIT 2	Money in the Keynesian Model – Demand for Money in the Keynesian Theory – Liquidity trap – Keynesian Revolution and its application to less developed countries
UNIT 3	Monetary theory in relation to underemployment and full employment – Integration of monetary and output theories – Patinkin
UNIT 4	Post Keynesian Macro Analysis – General equilibrium of monetary and real sector – Contribution of Hicks, Hanson – IS – LM – Diagram
UNIT 5	Monetary and Fiscal Policy – Objectives & importance - Impacts

Reference Books:

1. Broo Man – Macro Economics
2. Derberg and McDougal – Macro Economics
3. Dillard D – Macro Economics
4. Jhingan M L – Macro Economic Theory
5. Sankaran S – Macro Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M016Q	International Economics	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Introduction of International Trade – Interregional and international trade – Theories of international trade – Classical – Adam Smith – Ricardo – Haberler – Hicks and Ohlin
UNIT 2	Free trade Vs Protection – Cases for and against free trade and protection – Transfers – Meaning and types – Effects of tariffs (Concepts only) – Quotas – Meaning and types – Effects of quotas on imports – Dumping – Anti dumping measures
UNIT 3	Balance of Payments – Concepts – Structure – Balance of trade – disequilibrium in BOP and BOT – Measures for removal of disequilibrium
UNIT 4	Foreign Exchange - Meaning – Demand for and supply of foreign exchange – Equilibrium exchange rate – Foreign exchange market – Functions – Purchasing power parity theory – Stable and flexible exchange rates – Devaluation – Convertibility
UNIT 5	Evolution of IMF and World Bank – Functions GATT and WTO – Functions of WTO with reference to India

Reference Books:

1. Mannor – International Trade
2. Chandra R K and Suriyakumar S M – International Economics
3. Bosodesten – International Economics
4. Sankaran S – International Economics
5. Jingan M L – International Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M016R	Fiscal Economics – II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Public debt – need and sources – Effects of public debt – Public debt of Central Government – Management of public debt
UNIT 2	Deficit financing – Meaning – Objectives – Role of deficit financing in Indian plans – Effects on prices, production and distribution
UNIT 3	Federal finance – Principles – Central State financial relationship – Finance Commission – Features of current Finance Commission report
UNIT 4	Local finance – Sources of finance to local bodies
UNIT 5	Fiscal policy – Objectives and instruments of fiscal policy in a developing economy with reference to India – Components of central budgets – Features of recent budget

Reference Books:

1. Bhargava R N – Indian Public Finance
2. Bhatia – Public Finance
3. U K Hicks – Public Finance
4. Sankaran S – Fiscal Economics
5. Sundaram K P M – Fiscal Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M016S	Health Economics	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Health Economics: Meaning and definition of health economics – Scope of health economics – theoretical issues – Classification of health economics – Conceptual framework – issues in health economics
UNIT 2	Concept of health and medical care: Meaning – Utility analysis of health – demand for and supply of health care. Determinants of health, poverty, malnutrition and environmental issues
UNIT 3	Economic and Societal Dimension of Health Care: Financing of health care and resource constraints – National health policy under Five year plans. Health care delivery – problems in health care delivery – inequalities – rural and urban bias
UNIT 4	Health Education: Meaning – Objectives – approaches to public health – Indicators of health status – physical quality of life index – human development index
UNIT 5	Health Insurance: Meaning – Community health insurance in India – Private health insurance – Demand for health insurance – Factors influencing demand for health insurance

Reference Books:

1. Park E and Park – Preventive and Social Medicine
2. Umashankar – Urban Health System
3. Berman P, Health Economics, Health financing and the Health needs of poor women and children in India
4. YasodhaShanmugasundaram – Studies in Health Economics
5. Santerre – Health Economics

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14A016B	Entrepreneurial Development	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Concept of Entrepreneur: Entrepreneurship – Concept, Origin – types – Characteristics of Entrepreneur – Theories of Schumpeter, Walker and Duncker - Functions
UNIT 2	Growth of Entrepreneurs: Qualities – Motivating forces – Economic and Socio demographic variables influencing growth
UNIT 3	Entrepreneurial Development Programme: Objectives – Training – Evolution of EDP in India – Incentives and Subsidies
UNIT 4	Institutions for ED – Commercial Banks – District Industries Centre – Indian Investment Centre – Alliance of young entrepreneurs – Technical consultancy of Paris
UNIT 5	Organisation of ownership: Sole proprietorship – Partnership co-operative undertaking – Corporate enterprise – Organisational structure of an export company

Reference Books:

1. Kuldeep Mathur A P – Entrepreneurial Development under TRYSEM
2. Misra P N – Development Bank and New Entrepreneurship in India
3. Rao S K – Entrepreneurial Development in India
4. Saravanavel P – Entrepreneurial Development
5. Vasant Desai – Entrepreneurial Development

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14C013C	Cost Accounting	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Nature and scope of cost accounting - Cost analysis concepts and Classifications Installation of costing systems, cost centers and profit centers
UNIT 2	Cost sheet, tenders and quotations - Reconciliation of cost and financial accounts.
UNIT 3	Material purchase control, Level, aspects, need and essentials of material control. Stores control – Stores Department. EOQ, Stores records, ABC Analysis, VED Analysis. Material costing- Issue of material – FIFO,LIFO,HIFO,SAM,WAM, Market price, Base stock method and Standard price method.
UNIT 4	Labour cost – Computation and control. Time keeping. Methods of wage payment – Time rate and Piece rate System Payroll procedures. Idle time and over time. Labour turnover.
UNIT 5	Overheads – Classification. Allocation, Apportionment and Absorption. Accounting and control of overheads – Manufacturing, Administration, Selling and Distribution. (Primary and Secondary Distribution). Machine Hour Rate.

Reference Books:

1. Jain S.P and Narang K. L. – Cost Accounting
2. Reddy and Murthy – Cost Accounting
3. N.K. Prasad and V.K. Prasad – Cost Accounting

B.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14C014D	Management Accounting	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Management Accounting – Meaning, Scope, Importance and limitations – Management Accounting vs. Cost Accounting. Management Accounting vs. Financial Accounting
UNIT 2	Analysis and interpretation of financial statements – Nature, objectives, tools – Methods – Comparative Statements, Common Size Statement and Trend analysis.
UNIT 3	Ratio Analysis – Interpretation, benefits and limitations, Classification of ratios – Liquidity, profitability, turn over, capital structure and leverage.
UNIT 4	Funds flow and Cash flow statements. Budgets and budgetary control – Meaning, objectives, merits and demerits – Types of Budgets – Production, Cash and Flexible Budgets.
UNIT 5	Marginal costing (excluding decision making) Absorption Costing and Marginal Costing – CVP analysis – Break Even Analysis – Break Even Chart.

Reference Books:

1. Dr. Maheswari S.N – Management Accounting
2. Reddy & Murthy – Management Accounting
3. Sharma and Shashi K. Gupta - Management Accounting

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF MANAGEMENT STUDIES
B.B.A



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

SCHEME OF EXMINATIONS

SEMESTER I

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Foundation Course: Tamil-I or any language	5	3	100	3
II	Foundation Course: English – I	5	3	100	3
Core I	Core Course: Financial Accounting	6	3	100	4
Core II	Core Course: Business Economics	6	3	100	4
Allied Subject -I	Allied – I Business Statistics	6	3	100	5
	Basics of Retail Marketing	1	3	100	2
	Soft Skill	1	3	100	2

SEMESTER II

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
	Foundation Course: Tamil/language II	5	3	100	3
	Foundation Course: English – II	5	3	100	3
Core III	Production and Materials Management	6	3	100	4
Core IV	Core Course: Management Information System	6	3	100	4
Allied Subject II	Allied – II Quantitative Analysis for Management	6	3	100	5
	Fundamental of Insurance	1	3	100	2
	Soft Skill	1	3	100	2

SEMESTER III

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core V	Business Management	6	3	100	3
Core VI	International Business	6	3	100	3
Core VII	Cost Accounting	5	3	100	4
Core VIII	Introduction to Information Technology Theory – 50 Marks Practical's – 30 marks	6	3	100	4
Allied Subject -III	Allied – IV Business Mathematics	6	3	100	5
	Personality Enrichment	1	3	100	3

SEMESTER IV

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core IX	Company Law	5	3	100	3
Core X	Services Marketing	5	3	100	3
Core XI	Management Accounting	6	3	100	4
Core XII	Business Communication	5	3	100	4
Allied Subject – IV	Allied – IV Business Environment	5	3	100	5
	Environmental Studies	2	3	100	2
	Computing Skill	2	3	100	3

SEMESTER V

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core XIII	Human Resource Management	6	3	100	4
Core XIV	Corporate Financial Management	6	3	100	4
Core XV	Strategic Management	6	3	100	4
Core XVI	Marketing Management	6	3	100	5
Core XVII	Application Oriented Subject I Entrepreneurial Development	6	3	100	5

SEMESTER VI

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core XVIII	Core Course: Marketing Research	6	3	100	4
Core XIX	Research Methodology	6	3	100	5
Core XX	Computer Applications – Tally	6	3	100	4
Core XXI	Organizational Behaviour	5	3	100	5
Core XXII	Application Oriented Subject II- Project Work (Project Report and Viva Voce Examination)	6	3	100	5
	Value Education	1	3	100	2
	Extension Activities				1

COURSE CODE	COURSE TITLE	L	T	P	C
14M411A	FINANCIAL ACCOUNTING	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Meaning and scope of Accounting, Basic Accounting Concepts and Conventions – Objectives of Accounting – Accounting Transactions – Double Entry Book Keeping – Journal, Ledger, Preparation of Trial Balance – Preparation of Cash Book.
UNIT 2	Preparation of Final Accounts of a Sole Trading Concern – Adjustments – Closing Stock, Outstanding and Prepaid items, Depreciation, Provision for Bad Debts, Provision for Discount on Debtors, Interest on Capital and Drawings (Simple Problems).
UNIT 3	Classification of Errors – Rectification of Errors – Preparation of Suspense Account. Average Due Date .
UNIT 4	Depreciation – Meaning, Causes, Types – Straight Line Methods, Written Down Value Method (Change in Method Excluded). Bank Reconciliation Statement (Simple Problems).
UNIT 5	Single Entry – Meaning, Features, Defects, Difference between Single Entry and Double Entry System – Statement of Affairs Methods- Conversion Methods (Only Simple Problems).

REFERENCE BOOK:

1. R.L. Gupta & V.K. Gupta –Advanced Accounting – Sultan Chand – New Delhi
2. T.S. Reddy & a. Murthy –Financial Accounting – Margham Publications – Chennai
3. Shukla & Grewal – Advanced Accounting – S. Chand – New Delhi
4. Jain & Narang – Financial Accounting
5. P.C. Tulsian – Financial Accounting
6. S. Parthasarathy and A. Jaffarulla (Kalyan Publishers) – Financial Accounting
7. R.L. Gupta & Radhaswamy – Advanced Accounting – Volume 1

COURSE CODE	COURSE TITLE	L	T	P	C
16M411B	BUSINESS ECONOMICS	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Introduction to Economics – Wealth, Welfare and Scarcity – Views in Economics – Positives and Normative Economics – Definition – Scope and Importance of Business Economics. Concept – Production Possibility Frontiers – Opportunity Cost – Accounting Profit And Economics – Profit Incremental and Marginal Concepts, Time & Discounting Principle – concept of Efficiency.
UNIT 2	Demand and Supply Functions – Meaning Of Demand – Determinants and Distinctions of Demand – Law of Demand – Elasticity of Demand – Demand Forecasting – Supply Concept and Equilibrium.
UNIT 3	Consumer Behaviours Theory – Marshallian and Hicksian Interpretation.
UNIT 4	Theory of Production – Law of Variable Proportion – Law of Returns to Scale.
UNIT 5	Market Structure – Role of Time Elements in Price Theory – Competition and Price Determination.

Recommended Books:

1. Stonier & Hague : Text books of Economic theory.
2. H.L. Ahuja : Principles of Micro Economics
3. S.Sankaran : Economics analysis
4. HS Agarwall : Micro economics
5. M.L Seeth : Principles of Economics
6. Watson D.S : Price Theory and its uses

COURSE CODE	COURSE TITLE	L	T	P	C
16C411A	BUSINESS STATISTICS	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Introduction – Meaning and Definition of Statistics – Collection and Tabulation of Statistical data – Diagrammatic and Graphical representation of data.
UNIT 2	Measures of Central Tendency – Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean.
UNIT 3	Measures of Dispersion – Range – Standard deviation – Mean deviation – Quartile deviation.
UNIT 4	Correlation Analysis – Types of Correlation – Karl Pearson's coefficient of correlation – Rank Correlation.
UNIT 5	Regression Analysis – Uses of Regression Analysis – Regression Lines.

BOOK:

1. Contents and Treatment as in Statistical Methods by S.P.Gupta Published by Sultan Chand & Sons, New Delhi.

RECOMMENDED BOOKS:

1. Statistical Methods – S.P. GUPTA
2. Business Statics – P.R. VITAL
3. Basic Statics – B.AGARWAL
4. Business Statistics- J.K. SHARMA.

COURSE CODE	COURSE TITLE	L	T	P	C
14N61ZA	BASIS OF RETAIL MARKETING	1	-	-	2

UNIT	SYLLABUS
UNIT 1	Retailing – Definition – Retail Marketing – Growth of Organized Retailing in India Importance of Retailing
UNIT 2	Functions of Retailing – Characteristics of Retailing – Types of Retailing – Store Retailing – Non-Store Retailing
UNIT 3	Retail Location Factors – Branding in Retailing – Private Labeling – Franchising Concept
UNIT 4	Communication Tools used in Retailing – Sales Promotion, E-Tailing – Window Display
UNIT 5	Supply Chain Management – Definition – Importance – Role of Information Technology in Retailing.

RECOMMENDED BOOKS:

1. Gilbert Pearson, Retail Marketing Education Asia, 2001
2. Vedamani Gibson, Retail Marketing, Jaici Publishing House, New Delhi, 2000
3. Berman & Evans, Retail Management, Phi, New Delhi, 2001
4. Michael Levy and Barton A Weitz, Retailing Management, Tata Mc Graw Hill, New Delhi, 2001
5. Dr. L. Natarajan, Retail Marketing, Margham Publication, Chennai

COURSE CODE	COURSE TITLE	L	T	P	C
14S61AA	Soft skill – I ESSENTIALS OF LANGUAGE AND COMMUNICATION-II	1	-	-	2

UNIT	SYLLABUS
UNIT 1	Recap of language skills – vocabulary, phrase, clause, sentence.
UNIT 2	Fluency building.
UNIT 3	Principles of Communication
UNIT 4	Types of Communication.
UNIT 5	LSRW in Communication.

Recommended Texts

- Monippally, Matthukutty. M. 2001. *Business Communication Strategies*. 11th Reprint. Tata McGraw-Hill. New Delhi.
- Sasikumar. V and P.V. Dhamija. 1993. *Spoken English: A Self-Learning Guide to Conversation Practice*. 34th Reprint. Tata McGraw-Hill. New Delhi.
- Swets, Paul. W. 1983. *The Art of Talking So That People Will Listen: Getting Through to Family, Friends and Business Associates*. Prentice Hall Press. New York.
- Hewings, Martin. 1999. *Advanced English Grammar: A Self-Study Reference and Practice Book for South Asian Students*. Reprint 2003. Cambridge University Press. New Delhi.
- Lewis, Norman. 1991. *Word Power Made Easy*. Pocket Books.
- Hall and Shepherd. *The Anti-Grammar Grammar Book: Discovery Activities for Grammar Teaching*. Longman

COURSE CODE	COURSE TITLE	L	T	P	C
16M412C	PRODUCTION AND MATERIALS MANAGEMENT	6			4

UNIT	SYLLABUS
UNIT 1	Meaning, Nature and Scope of Production Management, Production Planning and control, Selection of sites for locating plants, Layout Planning
UNIT 2	Routing, Scheduling, Dispatch and Follow up Operations for Jobbing, batch and mass production, New product design and product planning.
UNIT 3	Quality Assurance: Application of statistical quality control, Total quality Management - Role, scope and importance of material management - Make-or-buy Decisions.
UNIT 4	Concept and scope of purchasing management, Principles and objectives of purchasing, purchasing procedure: requisitioning, selecting source of supply, Ordering, Delivery, Scientific Purchasing.
UNIT 5	Inventory Management: Meaning and functions, Inventory Planning and Control, E.O.Q. Minimum and maximum Level, Re-order level, ABC analysis.

REFERENCES:

1. Buffa, A.E.S: Modern Production Management
 2. Chase,R.B., Acquilano N.Jr.Production and Operation Management
 3. Laufer A.C.: Operations Management
 4. O.P. Khanna: Industrial Engineering Management
 5. S.K.Hajra & Choudhary & Nihar Roy: Production management
 6. Hicks, P.E.: Introduction to Industrial Engineering & Management Science
 7. S.K.Dutta: Materials Management
 8. Larner & Donald: Purchasing and Material Management
- Dean S.Ammer: Material Management

COURSE CODE	COURSE TITLE	L	T	P	C
14M412D	MANAGEMENT INFORMATION SYSTEMS	6			4

UNIT	SYLLABUS
UNIT 1	Definition of Management Information System – MIS support for planning, Organizing and controlling – Structure of MIS – Information for decision – making.
UNIT 2	Concept of System – Characteristics of System – Systems classification – Categories of Information Systems – Strategic information system and competitive advantage
UNIT 3	Computers and Information Processing – Classification of computer – Input Devices – Output devices – Storage devices – Batch and online processing. Hardware – Software. Database management system.
UNIT 4	System Analysis and design – SDLC – Role of System Analyst – Functional Information system – Personnel, production, material, marketing.
UNIT 5	Decision Support Systems – Definition. Group Decision Support Systems – Business Process Outsourcing – Definition and function

REFERENCE BOOK:

1. “Management Information Systems”, Prentice Hall of India – Mudrick & Ross
2. “Management Information System”, - Gordan B. Davis
3. “Information Systems Analysis and Design” – James A Senn
4. “Mangement Information Systems” – Prentice – Hall of Undua – Sadagopan
5. “Management Information System” – CSV Murthy – Himalaya Publications

COURSE CODE	COURSE TITLE	L	T	P	C
16C412B	QUANTITATIVE ANALYSIS FOR MANAGEMENT	6			5

UNIT	SYLLABUS
UNIT 1	Origin and Development of OR – Introduction – Definitions – Scope of Operation Research – Phase of OR – Models in operations Research Advantages of a model.
UNIT 2	Linear Programming – Formulation of LP Problem – Graphical solution – Procedure of solving LPP by Graphical method.
UNIT 3	Transportation Problem – Introduction – definitions Finding Initial Solution – North West Corner Rule – Least Cost or Matrix Minima Method Vogel's Approximation method.
UNIT 4	Assignment Problem – Introduction – Definition – Difference between Transportation and Assignment Problem – Unbalanced Assignment problem.
UNIT 5	Network Analysis – PERT and CPM (No crashing).

RECOMMENDED BOOKS:

1. Operational Research – Hira and Gupta s. chand
2. Operational Research – Dr. P.R. Vital
3. Operational Research – Handy and A. Tata.
4. Statistical Methods and Operation Research – S.P. Gupta

COURSE CODE	COURSE TITLE	L	T	P	C
14N62ZB	FUNDAMENTALS OF INSURANCE	1			2

UNIT	SYLLABUS
UNIT 1	Origin and history of Insurance – Meaning and definition of Insurance – Features of Insurance – Principles of Insurance – Objectives and advantages of Insurance – Types of Insurance – Insurance organizations in India and their profile – Insurance Regulatory and Development Authority – its duties and functions
UNIT 2	Meaning and Definition of Life Insurance – its features – its fundamental principles – Types of policies in Life Insurance Meaning and definition of Fire Insurance – its features – its fundamental principles – Types of policies in Fire Insurance Meaning and definition of Marine Insurance – its features – its fundamental principles – Types of policies in Marine Insurance

REFERENCE BOOKS:

1. A Murthy – Elements of Insurance
2. M N Mish – Insurance Principle and Practice

COURSE CODE	COURSE TITLE	L	T	P	C
14S62AB	Soft skill – II ESSENTIALS OF SPOKEN AND PRESENTATION SKILLS-II	1			2

UNIT	SYLLABUS
UNIT 1	Thinking and Articulation – cognitive, affect, critical, creative aspects of articulation.
UNIT 2	Acquisition of Oral and Aural Skills.
UNIT 3	Communication Boosters – body language.
UNIT 4	Function of Cultural Codes in Presentation – etiquette.
UNIT 5	Models of Presentation.

Recommended Texts

- Powell. *In Company*. MacMillan.
- Cotton, et al. *Market Leader*. Longman.
- Pease, Allan. 1998. *Body Language: How to Read Others Thoughts by their Gestures*. Sudha Publications. New Delhi.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice: A Reader*. Basic Books. New York.
- De Bono, Edward. 2000. *Six Thinking Hats*. 2nd Edition. Penguin Books.
- De Bono, Edward. 1993. *Serious Creativity*. Reprint. Harper Business.

COURSE CODE	COURSE TITLE	L	T	P	C
16M413E	BUSINESS MANAGEMENT	6			3

UNIT	SYLLABUS
UNIT 1	Management : Importance – Definition – Nature and Scope of Management Process – Role and Functions of a Manager – Levels of Management – Development of Scientific Management and other Schools of thought and approaches.
UNIT 2	Planning: Nature – Importance – forms – Types – Steps in Planning – Objectives – Policies – Procedures and Methods – Natures and Types of Policies – Decision Making- Process of Decision-Making – Types.
UNIT 3	Organizing : Types of Organizations – Organization Structure – Span of Control– Departmentalization – Informal Organization.
UNIT 4	Authority – Delegation – decentralization – Difference between Authority and Power – Responsibility –Direction – Nature and Purpose.-- Leader ship and Kinds Motivation Kinds Of Motivation
UNIT 5	Co- Ordination – Need, Type and Techniques and Requisites for Excellent Co - Ordination – Controlling – Meeting and Importance – Control Process.

REFERENCE BOOKS:

1. P.C. Tripathi & P.N. Reddy	Principles of Management
2. L.M. Prasad	Principles of Management
3. Dinkar Pagare	Principles of Management
4. C.B. Gupta	Business Management
5. N. Premavathy	Business Management
6. J. Jayasankar	Principles of Management

COURSE CODE	COURSE TITLE	L	T	P	C
16M413G	INTERNATIONAL BUSINESS	6	-	-	3

UNIT	SYLLABUS
UNIT 1	Difference between Internal and International trade – Importance of International Trade in the Global Context
UNIT 2	Theories of Foreign Trade – Absolute, Comparative, Equal cost differences (Adam Smith, Ricardo, haberler's hecksher – ohlin theories only)
UNIT 3	Balance of Trade, Balance of Payment: Concepts, causes of disequilibrium methods of correct disequilibrium: Fixed and floating exchange rates
UNIT 4	International Monetary System: - IMF – International Liquidity – IBRD
UNIT 5	WTO : and its implications with Special reference to India

REFERENCE BOOK:

1. International Economics – K.R. Gupta
2. International Trade: M.L. Jingan

COURSE CODE	COURSE TITLE	L	T	P	C
16M413H	COST ACCOUNTING	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Nature and scope of cost accounting - Cost analysis - Concepts and classifications – Installation of costing systems, cost centers and profit centers.
UNIT 2	Preparation of statement of cost sheet – Meaning – Prime cost – Works cost – Cost of Production – Cost of sales – Profit.
UNIT 3	Material Costing – Issue of Material – FIFO, LIFO, HIFO, STORES control – EOQ – Material purchase control – Levels, Aspects, Need and Essentials of Material control – Inventory Control - Re-order Levels – Minimum, Maximum, and Average Stock Levels.
UNIT 4	Labour Cost – Computation and Treatment – Methods of wage payment – Time rate and Piece rate system(Taylor's, Merrick's, Gantt's task) – Labour turnover.
UNIT 5	Overheads – Classifications – Apportionment and Allocation – Accounting and control of Overheads – Manufacturing, Administration, Selling and Distribution – Primary and Secondary – Direct, Repeated Distribution Method, Step Ladder Method.

REFERENCE BOOKS:

1. Jain S.P And Narang K.L – Cost Accounting – Kalyani Publishers
2. Reddy And Murthy – Cost Accounting – Margham Publications
3. S.N. Maheswari – Cost Accounting – Sultan Chand & Sons

COURSE CODE	COURSE TITLE	L	T	P	C
16M413J	INTRODUCTION TO INFORMATION TECHNOLOGY	6	-	-	4

UNIT	SYLLABUS
UNIT 1	- The Computer system-their uses and components-CPU: control & logic unit - Generation of computers-Classification of Computers - PC-Laptop - Memory: Volatile, non-volatile & virtual memory-Types of Bus.
UNIT 2	- Input devices: Keyboard, mouse, joystick, scanner, light pen, and touch screen - Output devices: printers, dot-matrix printer, ink-jet printer, laser printer-monitor. - Storage devices: Magnetic tape, Hard disks, CD-ROM, Speakers
UNIT 3	- Software concepts: Types of software - System software: Operation System and its types, Assembler, Compiler, Interpreter. - Application software: Word processing, Presentation tools, Electronic Spreadsheets Database system, DTP Packages, Graphic packages, Business system.
UNIT 4	- Principles and Techniques of Programming: Program definition-Program lifestyle. - Flow-Chart: Definition, Symbols, Benefits, Limitations and examples. - Characteristics, Benefits, Drawbacks and Examples of Algorithms.
UNIT 5	- Databases: Structure of a data table. - Internet features– E-mail

TEXT BOOKS:

1. C.S.V.Murthy, 2001, *Fundamentals of Computers*, 1st Edition, Himalaya publishing House.
2. LPEditorial Board, *Fundamentals of Computer*, 1st Edition, Law Point Publishers.

REFERENCES

1. V.RAJARAMAN, 2002, *Fundamentals of Computers*, 3rd Edition, Prentice Hall of India.
2. Marilyn W. Meyer and Roberta L. Baber, *Computers in your future*, 2nd Edition Prentice Hall of India.
3. www.itmagz.com
4. En.wikipedia.org

COURSE CODE	COURSE TITLE	L	T	P	C
16C413C	BUSINESS MATHEMATICS	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Sets – Introduction – Definition – Sets Operation – Laws of Sets
UNIT 2	Matrices – Introduction – Fundamental Idea about Matrices – Matrix Operation – Types of Matrix
UNIT 3	Time Series Analysis – Introduction – Uses of Analysis of Time Series – Components of Time Series – Measurement of Secular Trend – Method of Semi Averages – Methods of Moving Averages – Methods of Least Squares
UNIT 4	Index Numbers – Introduction – Classification of Index Numbers – Uses of Index Numbers – Laspeyre's – Paasche's – Fisher's Index Numbers – Time Reversal Test – Factor Reversal Test
UNIT 5	Vital Statistics – Introduction – Uses of Vital Statistics – Methods of obtaining Vital Statistics – Measurement of Mortality – Crude Death Rate – Specific Death Rates – Standardized Death Rates – Infant Mortality Rate

REFERENCE BOOKS:

1. Statistical Methods by S.P.Gupta Published by Sultan Chand & Sons, New Delhi.
2. Business Mathematics & Statistics – P.R. Vittal
3. Business Mathematics – Sunderasen & Jayaselan.
4. Elements of Mathematics – Prem Narain.
5. Business Mathematics – P.P. Gupta & G.S. Malik

COURSE CODE	COURSE TITLE	L	T	P	C
14S63AC	PERSONALITY ENRICHMENT	1	-	-	3

PERSONALITY ENRICHMENT

UNIT	SYLLABUS
UNIT 1	Introduction Definition of Personality Components of Personality – Structural and Functional aspects Determinants of Personality – Biological, Psychological and Socio-Cultural factors Assessment of Personality – Observation, Interview and Psychological Tests Misconceptions and Classifications Need for Personality Development
UNIT 2	Self Awareness and Self Motivation Self Analysis through SWOT and Johari window Elements of Motivation Seven rules of Motivation Techniques and Strategies for Self Motivation Motivation Checklist and Goal Setting based on the principles of SMART Self Motivation and Life
UNIT 3	General Knowledge and Current Affairs Regional, National and International events Geographical, Political and Historical facts Information on sports and other recreational activities Basic knowledge with regard to health and health promotion
UNIT 4	Memory, Decision Making and Study Skills Definition and Importance of Memory Causes of Forgetting How to forget (thought stopping), how to remember (techniques for improving memory) The technique of passing exams The rational decision making process Improving creativity in decision making and components of creativity
UNIT 5	Power of Positive Thinking Thinking power – seven steps for dealing with doubt Traits of positive thinkers and high achievers Goals and techniques for positive thinking Enhancement of concentration through positive thinking Practicing a positive life style

PRACTICAL TRAINING – The course would include the following practical exercises

- Ice Breaking
- Brainstorming
- Stimulation Exercises
- Thought Stopping
- Memory
- Study Skills Training

REFERENCES

1. Mile, D J (2004), Power of Positive Thinking, Delhi, Rohan Book Company.
2. Pravesh Kumar (2005), All about Self-Motivation, New Delhi, Goodwill Publishing House
3. Dudley, G A (2004), Double your Learning Power, Delhi, Konark Press, Thomas Publishing Group Ltd.,
4. Lorayne, H (2004), How to develop a super power memory, Delhi, Konark Press, Thomas Publishing Group Ltd.,
5. Hurlock, E B (2006), Personality Development, 28th Reprint, New Delhi, Tata MCGraw Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
16M414K	COMPANY LAW	5	-	-	3

UNIT	SYLLABUS
UNIT 1	- Meaning, Definition & Salient Features of Companies Act, 2013 - Kinds of Companies - Promotion, Role of Promoters-Incorporation of a Company
UNIT 2	- Memorandum of Association, Contents & Alteration - Articles of Association, Contents & Alteration - Prospectus, Contents & Consequences of misstatement - Doctrine of Ultra Virus & Indoor Management.
UNIT 3	- Directors-Appointment, Qualification-Disqualification - Membership in a Company, Modes of acquiring Membership - Rights and Liabilities of Members, Termination of Membership - Corporate Governance- Meaning, benefits of good governance, factors influencing corporate governance.
UNIT 4	- General and Statutory Meeting, Extraordinary Meetings - Resolutions, Meaning and Kinds - Role of Company Secretary with respect to meetings
UNIT 5	- Meaning and modes of winding up - Powers of court in winding up - Consequences and procedures for winding up - Powers, Liabilities and Duties of Liquidators

TEXT BOOK

N.D.Kapoor, 2003, *Elements of Company Law*, 27th Ed., Sultan Chand & Sons, New Delhi.

REFERENCES

1. S.Kathireasan & Dr.V.Radha, 2006, *Company Law*, 6th Ed., Prasanna Publishers, Chennai.
2. P.C.Tulsian, 2005, *Business & Corporate Laws*, 1st Ed., Tata McGraw Hill, New Delhi.
3. Majumdar & G.K.Kapoor, 2005, *Company Law*, 9th Ed., S.Chand & Sons, New Delhi.

COURSE CODE	COURSE TITLE	L	T	P	C
16M414L	SERVICES MARKETING	5	-	-	3

UNIT	SYLLABUS
UNIT 1	Marketing Services : Introduction growth of the service sector. The concept of service, Characteristics of service – classification of service – designing of the service, blueprinting using technology, developing human resources, building service aspirations
UNIT 2	Marketing Mix in Service Marketing: The seven Ps: product decision, pricing strategies and tactics, promotion of service and distribution methods for services. Additional dimension in services marketing – people, physical evidence and process.
UNIT 3	Effective Management of Service Marketing: Marketing demand and supply through capacity planning and segmentation –internal marketing of services – external versus internal orientation of service strategy.
UNIT 4	Delivering Quality Service: Causes of Service – quality gaps. The customer expectations versus perceived service gap. Factors and techniques to resolve this gap. Customer relationship management. Gaps in services – quality standards, factors and solutions – the service performance gap – key factors and strategies for closing the gap. External communication to the customers – the promise versus delivery gap – developing appropriate and effective communication about service quality.
UNIT 5	Marketing of Service With Special Reference To: 1. Financial services, 2. Health services, 3. Hospitality services including travel, hotels and tourism, 4. Professional service, 5. Public utility service, 6. Educational services.

REFERENCE BOOKS:

1. Adrhian Payne, The Essence of Marketing, New Delhi, Prentice Hall of India Pvt Ltd., 2001.
2. Christopher Lovelock, Services Marketing, 4th Ed, Pearson Education Asia, 2001.
3. K. Douglas, Hoffman, John E G Bate son, Essentials of Service Marketing, 2nd Ed,
4. Thomas southwestern year 2002.
5. Helen Woodroffe – Services Marketing, Mcmillan India Ltd, year 1997.
6. S M Jha, Services Marketing, New Delhi, Himalaya Publishing House.

COURSE CODE	COURSE TITLE	L	T	P	C
16M414M	MANAGEMENT ACCOUNTING	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Management Accounting – Meaning, Scope, Importance and Limitations – Management Accounting vs. Cost Accounting – Management Accounting vs. Financial Accounting.
UNIT 2	Analysis and interpretation of financial statements – Nature, Objective, Tools – Methods – Comparative statements, Common size statement and Trend Analysis – Ratio Analysis – Classification of ratios – Profitability, Turnover & Solvency Ratio
UNIT 3	Funds Flow and Cash Flow Statements (Simple Problems only)
UNIT 4	Budgets and Budgetary control – Meaning, Objectives, merits and demerits – Types of Budgets – Production, Cash and Flexible Budgets.
UNIT 5	Marginal Costing (excluding decision making) – Break Event Analysis – Break Even chart.

REFERENCE BOOKS:

1. Dr. Maheswari S.N – Management Accounting – Sultan Chand & Sons
2. Reddy and Murthy - Management Accounting – Margham Publications

COURSE CODE	COURSE TITLE	L	T	P	C
16M414N	BUSINESS COMMUNICATION	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Definition – Methods – Types – Principles of effective Communication – Barriers to Communication – Business Letter – Layout.
UNIT 2	Kinds of Business Letter: Interview – Appointment – Acknowledgement – Promotion – Enquiries – Replies – Orders – Sales – Circular – Complaints.
UNIT 3	Bank Correspondence – Insurance Correspondence – Agency Correspondence – Correspondence with Shareholders, Directors.
UNIT 4	Report Writing – Agenda, Minutes of Meeting – Memorandum – Office Order – Circular – Notes.
UNIT 5	Modern Forms of Communication : Fax – e-mail – Video Conferencing – Internet – Websites and their use in Business.

REFERENCE BOOK:

1. Essentials of Business Communication – Rajendra Pal & J.S. Korlahalli
2. Communication for Business – Shirley Taylor.
3. Business Communication Today – Bovee, Thill, Schatzman
4. Advanced Business Communication – Penrose, Rasbery, Myers

COURSE CODE	COURSE TITLE	L	T	P	C
16C414D	BUSINESS ENVIRONMENT	5			5

UNIT	SYLLABUS
UNIT 1	The concept of Business Environment – its nature and significance – Brief overview of political – Cultural – legal – economic and social and environments and their impact on business and strategic decisions.
UNIT 2	Political Environment – Government and Business relationship in India – Provisions of Indian Constitution pertaining to business.
UNIT 3	Social environment – Cultural heritage – social attitudes – impact of foreign culture – castes and communities – joint family system – linguistic and religious groups – Types of social organization –social responsibilities of business.
UNIT 4	Economics Environment – Economic systems and their impact on business – Macroeconomic parameters like GDP – growth rate of population – Urbanisation – Fiscal deficit – Plan investment – Per capita income and their impact on business decisions – Five Year Planning.
UNIT 5	Financial and Technological environment– Financial system – Commercial banks – Financial Institutions – RBI Stock Exchange – IDBI – Non Banking Financial Companies NBFCs

REFERENCE BOOKS:

1. Sankaran S – Business Environment
2. Francis Cherunilam - Business Environment
3. Aswathappa - Business Environment
4. Dasgupta & Sengupta – Government and Business in India
5. Srinivisan K. – Productivity and social Environment.

COURSE CODE	COURSE TITLE	L	T	P	C
14E64AA	ENVIRONMENTAL STUDIES	2			2

UNIT	SYLLABUS
UNIT 1	The Multi disciplinary Nature of Environmental Studies Definition, scope and importance, Need for public awareness
UNIT 2	Natural Resources Renewable and non-renewable resources: Natural resources and associated problems • Forest Resources: Use and over-exploitation, deforestation case studies, timber extraction, mining, dams and their effects on forests and tribal people. • Water Resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams – benefits and problems. • Mineral Resources: Use and exploitation, environmental effects of extracting using mineral resources case studies. • Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging salinity, case studies. • Energy Resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources – Case Studies. • Land Resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual and conservation of natural resources – Equitable use of resources for sustainable life styles.
UNIT 3	Ecosystems Concept of an Ecosystem – Structure and Function – Producers, consumers and decomposers – Energy flow in the ecosystem – Ecological succession – Food chains, food webs and ecological pyramids – Introduction, types, characteristics, features, structures and function of Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem and Aquatic Ecosystem (ponds, streams, lakes, rivers, oceans, estuaries)
UNIT 4	Biodiversity and its Conservation Introduction – Definition genetic species and eco-system diversity – Bio-geographical classification of India – Value of the biodiversity – consumptive use, productive use, social, ethical. Aesthetic and option values – Biodiversity at Global, National and Local levels – India as a mega – diversity nation – Hot-Spots of biodiversity – Threats to biodiversity habitat loss, poaching of wildlife, man wildlife conflicts – Endangered and endemic species of India – Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.

UNIT 5	Environmental Pollution Definition Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards – Solid waste management causes, effects and control measures of urban and industrial wastes – Role of an individual in prevention of pollution – Pollution of case studies – Disaster management, floods, earthquake, cyclone and landslides.
UNIT 6	Social Issues and the Environment Unsustainable to Sustainable development – Urban problems related to energy – Water conservation, rain water harvesting, watershed management – Resettlement and rehabilitation of people; its problems and concerns & Case Studies – Environmental ethics issues and possible solutions – Climate change, global warming, Acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies, Wasteland reclamation – Consumerism and waste products – Environmental Protection Act – Air (Prevention and Control of Pollution) Act – Water (Prevention and Control of Pollution) Act – Wildlife Protection Act – Forest Conservation Act – Issues involved in enforcement of environmental legislation – Public awareness.
UNIT 7	Human Population and the Environment Population growth, variation among nations – Population explosion – Family Welfare Programme – Environment and human health – Human Rights – Value Education – HIV / AIDS – Women and Child welfare – Role of Information Technology in Environment and human health – Case Studies
UNIT 8	Field Work Visit to a local area to document environmental assets – river / forest / grassland / hill mountain – Visit to a local polluted site – Urban / Rural / Industrial / Agricultural – Study of common plants, insects, birds – Study of simple ecosystems – pond, river, hill slopes, etc. (Field work equal to 5 lecture hours)

COURSE CODE	COURSE TITLE	L	T	P	C
14S64AD	COMPUTING SKILL	2			3

UNIT	SYLLABUS
UNIT 1	<i>Introduction to Computers</i> – Classification of Computers; Role of Computer in society; Inside the Computers – Hardware (processing, memory, i/o, storage), Software (systems, application), CPU, OS, (DOS, Windows, Unix, Linux), Storage Devices; Programming – Overview, need for programming languages, structured programming; Networking Basics; Virus; Hacking.
UNIT 2	<i>Word Processing</i> – Open, Save and close word document; Editing text – text formatting, bullets; Spell Checker; Navigating in word – keyword, Macro; document formatting – paragraph alignment, indentation, headers and footers; numbering; printing – preview, options.
UNIT 3	<i>File Management</i> – Understanding the importance of file management; background of files, navigating thru My Computer and Windows Explorer; Files and Folders – editing, retrieving, deleting, renaming, subfolders – manipulating windows – maximize, minimize; Power point basics – terminology, template viewing.
UNIT 4	<i>Spreadsheets</i> – MS Excel – opening, entering text and data, formatting, navigating; Formulas – entering, handling and copying; Charts – creating, formatting and printing, header and footer, centering data, printing.
UNIT 5	<i>Networks</i> – Internet Explorer – components; www – working, browsing, searching, saving – Bookmark – favorite, create, delete – Printing a web page, email – creating, receiving, reading and sending messages.

References:

1. Introduction to Computers – Peter Norton, Tata McGraw-Hill.
2. Microsoft 2003 – Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, Tata McGraw-Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
16M415P	HUMAN RESOURCES MANAGEMENT	6			4

UNIT	SYLLABUS
UNIT 1	Human Resource Management (HRM) Definition – Objectives – Functions – nature and scope of HRM – Difference between personnel management and HRM – Qualities of good HR manager – changing roles of a HR manager – problems and challenges of HR manager.
UNIT 2	Human Resource Planning (Man power planning) Definition of HR planning – objectives – Steps in HR Planning – Types of Planning – Need and importance – Tools and Techniques - Job analysis – Job analysis – Job Description Job Specification - Job evaluation.
UNIT 3	Recruitment & Selection Recruitment and Selection – objectives of Recruitment Recruitment – Sources – internal and external recruitment – application blank – Testing – Interviews – Techniques in selection – Placement & Induction.
UNIT 4	Training & Development Training and Development – Principles of Training – Assessment of Training needs – methods – evolution of effectiveness of training programme.
UNIT 5	Performance Appraisal Performance Appraisal – Process – Methods of Performance appraisal – appraisal counseling – Motivation Process – Theories of motivation – compensation – Incentives – Monetary & Non-Monetary – Promotion & Transfers

REFERENCE BOOKS:

1. Aswathappa - HRM Tata me grow hill Publishing co. New Delhi.
2. LM Prasad, HRM – Sultan Chand & Sons, New Delhi.
3. Jayashankar – HRM – Margham Publications, Chennai.
4. Chitra Atmaran Naik – Hen – Ane books Pvt.Ltd.
5. Dr. Radha – HRM

COURSE CODE	COURSE TITLE	L	T	P	C
16M415Q	CORPORATE FINANCIAL MANAGEMENT	6			4

UNIT	SYLLABUS
UNIT 1	Meaning, objective and scope – Relationship between management accounting, Cost accounting and financial accounting – Financial statements – Tools for analysis and interpretation
UNIT 2	Financial planning and control – Break – even analysis – Operation leverage – Cost – volume – Profit analysis
UNIT 3	Cost of capital – Basic concepts, rational and assumptions – Cost of equity capital – Cost of debt –Cost of preference capital – Cost of retained earnings
UNIT 4	Capital structure decision of the firm – Composition and sources of long – term funds – financial leverage – Factors determining funds requirements.
UNIT 5	Financial Information systems

REFERENCE BOOK:

1. Financial Management – Prasanna Chandra
2. Khan and Jain – Financial Management
3. Pandey I M – Financial Management
4. Vanhorne – Fundamentals of Financial Management

COURSE CODE	COURSE TITLE	L	T	P	C
16M415R	STRATEGIC MANAGEMENT	6			4

UNIT	SYLLABUS
UNIT 1	An overview of strategic Management: Defining Strategy, levels at which strategy operates: Approaches to strategic decision making: Strategic intent, vision, Mission, Business definition, objectives and goals, Environmental analysis and Diagnosis: concept of environment and its components; Environment scanning and appraisal, Organization appraisal, Strategic advantage analysis and diagnosis.
UNIT 2	Corporate-level strategies: Grand, Stability, Expansion, Retrenchment, Combination strategies, corporate Restructuring, Business-level/strategies: Generic and tactics for business strategies.
UNIT 3	Strategic Analysis and choice: Process of strategic choice, corporate and business level strategic analysis, subjective factors in strategic choice, contingency strategies and strategic plan.
UNIT 4	Activating Strategies: Interrelationship between formulation and implementation. Aspects of strategy implementation, Project and Procedural Implementation. Resource allocation, Structural and Behavioural implementation.
UNIT 5	Functional and Operational implementation: Financial, Marketing, Operation/production Personnel plans and policies, information, integration of functional plans and policies, strategic evaluation and control: Techniques of strategic evaluation and control.

BOOKS RECOMMENDED

1. Azhar Kaxmi: Business Policy and Strategic Management, Tata McGraw Hill, New Delhi, 2005
2. Jain, P.C.L.,: Strategic management (Hindi), 2005
3. Bhattacharry, S.K. and N.VEnkataraman: Managing Business Enterprises.
4. Strategies, structure and Systems, Vikas publishing house, New Delhi, 2004

COURSE CODE	COURSE TITLE	L	T	P	C
16M415S	MARKETING MANAGEMENT	6			5

UNIT	SYLLABUS
UNIT 1	Marketing Management Definition of Marketing and Marketing Management Marketing Process – marketing management – orientation – marketing plan – marketing mix – functions of marketing management – MIS.
UNIT 2	Emerging Issues in Marketing Consumer orientation – Integrated marketing – Business Ethics in Marketing – Direct and online marketing (Cyber Marketing) – Green Marketing – Quantitative Techniques for marketing Decisions – Consumerism – Customer Relation Building.
UNIT 3	Product and Pricing Decisions Product – features – Product Mix – Product Policy – Product Planning – New Product Development – Product Life Cycle – Pricing – Importance – Objectives – Pricing Policies, Strategies and Techniques – Pricing Methods.
UNIT 4	Consumer / Business Market Segmentation Definition – Need for Segmentation – factors deciding the success of market segmentation – Bases for Segmentation – Process of market segmentation – Niche Marketing – Characteristics of Niche Market.
UNIT 5	Sales Promotion and Advertising Sales Promotion Techniques and Methods – Advertising – Objectives Benefits – Selection of Media, Advertising copy – Ethics in Advertising Salesmanship – Objectives, qualities and types of salesman – E-marketing.

REFERENCE BOOKS:

1. Kotler, Philip and Gary Armstrong: Principles of Marketing, Prentice Hall, New Delhi
2. Kotler Philip Marketing Management Analysis, Planning, Implementation and Control, Prentice Hall, new Delhi
3. Majumdar, Ramanuj: Product Management in India, Prentice Hall, New Delhi
4. Mc Garchy, E. Nenome and William D Perrault, Jr. Basic Marketing management Approach, Richard D. Irwin, Homewood, Illinois.
5. Ramaswamy, V.S, and Namakumari, S: Marketing Management, macmillan India, New Delhi
6. Srinivasan R: Case Studies in Marketing: The Indian Context, Prentice Hall, New Delhi
7. Santon, William, J and Charles Futrell: Fundamentals of Marketing: McGraw Hill Publishing co, New York
8. Still, Richard R, Edward W, Clundiff and Norman A.P

COURSE CODE	COURSE TITLE	L	T	P	C
16A415A	ENTREPRENEURIAL DEVELOPMENT	6			5

UNIT	SYLLABUS
UNIT 1	Concept of Entrepreneurship – Definition – Meaning – Types – Qualities of an Entrepreneur – Classification of Entrepreneurs – Factors influencing Entrepreneurship – Functions of Entrepreneurs
UNIT 2	Entrepreneurial Development – Agencies – Commercial Banks – District Industries Centre – National Small Industries Corporation – Small Industries Development Organisation – Small Industries Service Institute. All India Financial Institutions – IDBI – IFCI – ICICI – IRDBI.
UNIT 3	Project Management - Business idea generation techniques – identification of Business Opportunities – Feasibility study – Marketing, Finance, Technology & Legal Formalities- Preparation of Project Report Tools of Appraisal.
UNIT 4	Entrepreneurial Development programmes (EDP) – their role, relevance, and achievements – Role of Government in organizing EDPs – critical evaluation
UNIT 5	Economic development and entrepreneurial growth Role of Entrepreneur in economic growth – Strategic approaches in the changing economic scenario for small scale Entrepreneurs – Networking – Niche play, Geographic Concentration, Franchising/dealership – Development of Women Entrepreneurship.

REFERENCE BOOKS:

1. Srinivasan N.P. – Entrepreneurial Development
2. Saravanavel – Entrepreneurial Development
3. Vasant Desai – Project Management
4. Jayashree Suresh – Entrepreneurial Development
5. Holt – Entrepreneurship – New Venture Creation

COURSE CODE	COURSE TITLE	L	T	P	C
16M416T	MARKETING RESEARCH	6			4

UNIT	SYLLABUS
UNIT 1	Introduction – Definition of Marketing Research – Nature and Scope – Marketing Research as aid rational decision making.
UNIT 2	Sampling techniques – Random – Stratified – Area – Quota – Questionnaire – Interview techniques – Interviewing skills on the part of investigator.
UNIT 3	Motivation Research – Product Research
UNIT 4	Consumer Survey – Sales Control Research
UNIT 5	Media Research – Various Techniques – Measuring advertising effectiveness – Analysis and reporting research finding to the management.

REFERENCE BOOKS:

1. Majumdar – Marketing Research
2. Green and Tull - Marketing Research
3. Donal H. McBurn, Research Mathics – Thomson.
4. M. Basher Ahmed Khan - Marketing Research : Text and Cases, PHI, New Delhi
5. Sharma DD - Marketing Research
6. Tull and Hawkins : Marketing Research

COURSE CODE	COURSE TITLE	L	T	P	C
16M416W	ORGANIZATIONAL BEHAVIOUR	5			5

UNIT	SYLLABUS
UNIT 1	The concept of organization, meaning of organization theory. Organization goals, determinants of goals, goal displacement, goal distortion, organizational and industrial goals, integration of goals. Concept and determinants of organization structure. Different types and importance of organizational structure. Environment and structure, designing and organizing structure, planning for the structure.
UNIT 2	Group Dynamics: The concept of groups, kinds and functions of groups, formal and informal groups, group cohesiveness, group thinking, transactional analysis.
UNIT 3	Attitudes and perception : Concept of attitude; attitude, opinions and beliefs; attitudes and behaviour, formation of attitude, factors determine formation of attitude, attitude measurement; attitude change. Definition and meaning of perception; perceptual process; factors influencing perception.
UNIT 4	Conflict and change: Meaning and Process of conflict; causes, sources, consequences of conflict; conflict resolution strategies. Kind of change; Identification of the problem and implementation of change; resistance to change, overcoming resistance to change.
UNIT 5	Organizational Effectiveness : The concept of organizational effectiveness; efficiency, effectiveness and productivity; approaches of organizational effectiveness; contributing factors of organizational effectiveness.

REFERENCES:

1. Fred Luthans: Organizational Behaviour
2. Keith Davis: Human Behaviour at work
3. Stephen Robbins: Organization Behaviour
4. V.S.P. Rao & P.S.Narayan: Organization Theory and Behaviour
5. LM Prasad: Organizational Theory and Behaviour
6. R.A.Sharma: Organization Theory and Behaviour
7. Paul Hersey & Keith: Management of Organizational Behaviour Blanchard
8. Edgar H Schien: Organizational Psychology
9. Udai Pareek, T.V.Rao & Pestonjee, D.M: Behavioural process in Organisation

COURSE CODE	COURSE TITLE	L	T	P	C
16M416U	RESEARCH METHODOLOGY	6			5

UNIT	SYLLABUS
UNIT 1	Research – Meaning, Objectives and Purpose - Types of Research - Pure and applied, survey, case study experimental, exploratory – Research Process - Criteria of good research.
UNIT 2	Research Design – Meaning, Significance and Features - Research Problem - Steps in selection and formulation of research problem - Review of Literature - Formulation of Hypothesis
UNIT 3	Methods of data collection - Primary and secondary data - observation - interview -questionnaire - construction of tools for data collection
UNIT 4	Data Analysis and Interpretation – Types of Analysis – Chi-Square Test - Multivariate Analysis – t-Test – ANOVA (Only Theory)
UNIT 5	Report Writing – Significance – Steps in writing Report – Layout of the Research Report – Types of Reports.

REFERENCE BOOKS:

1. William C Emory, Business Research Methods, Richard D Irwin, NJ,
2. Donald R Cooper, Business Research Methods 7th Ed, McGraw Hill, 2001
3. Krishnaswami OR, Methodology of Research for Social Science, Himalaya, Mumbai, 2001.
4. Anderson J. et.al, Thesis and Assignment writing, Wiley Eastern
5. C R Kothari & Gaurav Garg, Research Methodology Methods and Techniques, New Age International Publishers

COURSE CODE	COURSE TITLE	L	T	P	C
16M416V	COMPUTER APPLICATIONS – TALLY	6			4

UNIT	SYLLABUS
UNIT 1	Computer - Environment usage - Tally loading - Setting the directory.
UNIT 2	Tally - Starting - Creating Company - Altering company operations - General environment configuration – Functional keys and shortcut keys.
UNIT 3	Voucher entry - delivery note - Payment voucher - Receipt voucher debit note - Credit note.
UNIT 4	Creations of various accounts - Indexing - Creation of ledgers - Multiple ledgers - Cost categories - cost centers, Budget - Bank reconciliation - Inventory maintenance - Inventory valuation - Interest calculation.
UNIT 5	Consolidation of accounts - Import / export data - Final accounts - Reporting - Fund flow statements, cash flow statements - Inventory analysis report - Printing of Report – ERP

Reference Books:

1. Vishnu Priya Singh – Tally 9
2. Kogent Solutions Inc – Tally 9
3. Ramaiah Publications – Tally 9

COURSE CODE	COURSE TITLE	L	T	P	C
16A416B	APPLICATION ORIENTED SUBJECT II	6			5

PROJECT WORK

UNIT	SYLLABUS
UNIT 1	A group of 3 students will be assigned a project in the beginning of the final year. The project work shall be submitted to the college 20 days before the end of the final year and the college has to certify the same. The project shall be evaluated externally. The external examiner shall be from the panel of examiners suggested by the board of studies from time to time. Project report shall carry 75 marks and Viva – Voce examinations 25 marks. Those who fail in the project work will have to redo the project work and submit to the college for external examination.

COURSE CODE	COURSE TITLE	L	T	P	C
14V66AG	VALUE EDUCATION	1			2

UNIT	SYLLABUS
UNIT 1	Introduction: Value Education and its relevance to present day – Meaning of Value Education – The meaning of the word value – Significance of Thirukkural about ‘Value Education’ – Personal Values: Meaning – Different personal values – Love – Compassion – Gratitude – Courage – Optimism – Friendship
UNIT 2	Family Values: Meaning – Social Attitude to Women, Children and Elders – Familal Responsibilities – Dos and Don’ts for Stronger Family bonding – Significance of Thirukkural about ‘Family Values’.
UNIT 3	Self Esteem: Fear of failure – Approval seeking – Self Esteem is not selfishness / Ego – Self Esteem / Arrogance – Qualities of a person with Self Esteem – Significance of Thirukkural about ‘Self Esteem’ – Anger: Common situations where people fly into rage – Anger at services – Some practical methods of handling anger – techniques to handle our anger – Handling anger in others – methods to replace anger.

REFERENCE BOOKS:

1. Value Education - N S Raghunathan, Margham Publication

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COMPUTER SCIENCE
B.C.A. (Computer Application)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

SCHEME OF EXAMINATIONS FIRST SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
1	Part – I	Tamil	3	3	20	80
2	Part – II	English	3	3	20	80
3	Core – I	Computing Fundamentals and C Programming	4	3	20	80
4	Core Lab – I	Practical-I: Programming in C Lab	4	3	20	80
5	Allied – 1	Mathematics-I	4	3	20	80
6	Non-Major Elective – I	Office Automation	2	3	20	80
7	Soft skill – I	Language and Communication Level - II	3	3	20	80

IA- Internal Assessment ; EA- External Assessment

B.C.A. - SECOND SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
8	Part – I	Tamil	3	3	20	80
9	Part – II	English	3	3	20	80
10	Core – II	Object Oriented Programming with C++	4	3	20	80
11	Core Lab – II	Practical-II: OOPS with C++ Lab	4	3	20	80
12	Allied – II	Mathematics-II	4	3	20	80
13	Non-Major Elective – II	Office Automation Lab	2	3	20	80
14	Soft skill – II	Spoken and Presentation Skills Level – II	3	3	20	80

B.C.A. - THIRD SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
15	Core-III	Digital Logic Fundamentals	4	3	20	80
16	Allied –III	Financial Accounting	4	3	20	80
17	Core - IV	Multimedia	4	3	20	80
18	Core-V	Programming in Java	4	3	20	80
19	Core Lab-III	Practical III – Multimedia Lab	2	3	20	80
20	Core Lab-IV	Practical IV– Programming in Java Lab	2	3	20	80
21	*	Environmental Studies	-	-	-	-
22	Soft Skill –III	Personality Enrichment	3	3	20	80

IA- Internal Assessment ; EA- External Assessment

*Examination will be held in IV Semester

B.C.A. - FOURTH SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
23	Core –VI	Computer Graphics	4	3	20	80
24	Core –VII	Operating System	4	3	20	80
25	Core-VIII	Data Structure & Algorithm	4	3	20	80
26	Allied -IV	Cost and Management Accounting	4	3	20	80
27	Core Lab-V	Practical V - Data Structure using C++	2	3	20	80
28	Core Lab-VI	Practical VI– Operating System Lab	2	3	20	80
29	Soft Skill –IV	Foreign Language	3	3	20	80
30		Environmental Studies	2	3	20	80

B.C.A. - FIFTH SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
31	Core-IX	Web Technology	4	3	20	80
32	Core-X	Database Management System	4	3	20	80
33	Core-XI	Visual Programming	4	3	20	80
34	Allied -V	Numerical methods	4	3	20	80
35	Core Lab-VII	Practical VII– Visual Programming with RDBMS	2	3	20	80
36	Core Lab-VIII	Practical VIII– Web Application Lab	2	3	20	80
37	Soft Skill V	Value Education	2	3	20	80

IA- Internal Assessment ; EA- External Assessment

B.C.A. - SIXTH SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
38	Core-XII	Computer Networks	4	3	20	80
39	Core-XIII	PHP	4	3	20	80
40	Core-XIV	Software Engineering	4	3	20	80
41	Core-XV	Elective-I	4	3	20	80
42	Core Lab-IX	Practical IX –PHP Lab	2	3	20	80
43	Core Lab-X	Practical X– Mini Project	4	3	20	80

List of Electives

1. Component Based Technologies
2. Client Server Architecture
3. Distributed Computing
4. Design and Analysis of Algorithms
5. Web Services and XML
6. C# Programming
7. E-commerce

COURSE CODE	COURSE TITLE	L	T	P	C
14M211A	Computing Fundamentals and C Programming	5			5

UNIT	SYLLABUS
UNIT 1	Fundamentals of Computers
UNIT 2	Overview of C
UNIT 3	Decision Making and Branching
UNIT 4	User-Defined Functions
UNIT 5	Pointers

TEXT BOOK:

1. E Balagurusamy: "COMPUTING FUNDAMENTALS & C PROGRAMMING" – Tata McGraw-Hill, Second Reprint 2008, ISBN 978-0-07-066909-3.

REFERENCE BOOKS:

1. Ashok N Kamthane: Programming with ANSI and Turbo C, Pearson Edition Pub, 2002.
2. Henry Mullish & Huubert L.Cooper: The Sprit of C, Jaico Pub. House, 1996.

COURSE CODE	COURSE TITLE	L	T	P	C
14M2111	Practical I- Programming in C Lab	5			5

1. Write a C program to find the sum, average, standard deviation for a given set of numbers.
2. Write a C program to generate “n” prime numbers.
3. Write a C program to generate Fibonacci series.
4. Write a C program to print magic square of order n where $n > 3$ and n is odd.
5. Write a C program to sort the given set of numbers in ascending order.
6. Write a C program to check whether the given string is a palindrome or not.
7. Write a C Program to find Maximum & Minimum of the given numbers.
8. Write a C Program to find GCD of the given numbers.
9. Write a C program to count the number of Vowels, consonants, words and white spaces in the given sentence.
10. Write a C program to find the factorial of a given number using recursive function.
11. Write a C Program to find nPr and nCr values using function.
12. Write a C program to print the student's Mark sheet assuming roll no, name, and marks in 5 subjects in a structure. Create an array of structures and print the mark sheet in the university pattern.
13. Write a C program to add two matrices.
14. Write a C program to subtract two matrices.
15. Write a C program to multiply two matrices.

COURSE CODE	COURSE TITLE	L	T	P	C
14N621A	OFFICE AUTOMATION	5			3

UNIT	SYLLABUS
UNIT 1	UNIT -I : DOS commands: (internal (DIR, DATE, TIME, CLS, CD, RD, MD, PATH, TYPE, DEL, ECHO, COPY, REN, PROMPT, VOL, VER), external (ATTRIB, CHKDSK, DISKCOPY, DISKCOMP, XCOPY, TREE, DELTREE, DOSKEY, FORMAT, FIND, SORT, FDISK, MORE, SYS)), Concept of files & directories, Wild card characters, Redirection operators. Windows 7: Definition, Benefits, Features & uses of Windows 7, Control panel, Accessories, Task bar, My computer uses, Recycle bin.
UNIT 2	UNIT -II : Office 2007: Elements, Introduction to Office 2007, Customizing the Office Environment, Managing Files in Office, Text Tools, Drawing and Graphics Tools. Word Processing; Definition, Benefits, Features & uses of Word 2007, Menus, Toolbars, Cursor control keys, Short cut keys, Hot keys, Editing Text, Document Formatting, Reusable formatting with Styles and Templates, File handling (opening, creating, saving, printing, editing), Formatting text, Find and replace, Tables and Columns, Advanced Page Layout in Word, Automating Information with Fields, Managing Long Documents, Spell check, Thesaurus, File protection, Mail Merge, Labels, and Envelopes, Macros.
UNIT 3	UNIT –III :Spreadsheets: Definition, Benefits, Features & Uses of MS Excel 2007, Menus, Toolbars, Worksheets, Formatting Worksheets and Restricting Data, Calculating with Formulas and Functions, Ranges, Auto fill, Data (sort, filter, validation, subtotal), Viewing and Manipulating Data with charts and PivotTables, Print, Goal seek, Scenario, Macros, Creating Excel Databases.
UNIT 4	UNIT –IV : Presentations: Definition, Benefits, Features & Uses of PowerPoint, Menus, Toolbars, Creating and Editing Slides, Adding graphics, Multimedia, and Special Effects to Slides, Insert (picture, slide, text), Master slide, Views, Animation, Action buttons, Macros.
UNIT 5	UNIT V : Introduction -Database concepts - Opening & Saving Database files - Creating Tables – Data Types-Properties-Table Design - Entering data -Importing data -Normalization- Creating Queries-Creating Forms-Creating Reports.

Text & Reference Books:

1. Jennifer Ackerman Kettell, Guy Hart-Davis, Curt Simmons, “Microsoft Office 2007: The Complete Reference”, Tata McGraw Hill.
2. Step by Step 2007 Microsoft Office System (W/CD) by Curtis Frye, Joyce Cox, Steve Lambert.
3. Microsoft Office Access 2007 Inside Out Microsoft Press Publication.

COURSE CODE	COURSE TITLE	L	T	P	C
14S61AA	Soft skill – I ESSENTIALS LANGUAGE COMMUNICATION-II	5			1

Objectives

- *enable* students to build a repertoire of functional vocabulary and to move from the lexical level to the syntactic level.
- *train* students to summon words, phrases relevant to the immediate communication tasks.
- *enable* students to comprehend the concept of communication.
- *teach* students the four basic communication skills- Listening, Speaking, Reading and Writing.

UNIT 1: Recap of language skills – vocabulary, phrase, clause, sentence.

UNIT 2: Fluency building.

UNIT 3: Principles of Communication.

UNIT 4: Types of Communication.

UNIT 5: LSRW in Communication.

Recommended Texts

- Monippally, Matthukutty. M. 2001. *Business Communication Strategies*. 11th Reprint. Tata McGraw-Hill. New Delhi.
- Sasikumar. V and P.V. Dhamija. 1993. *Spoken English: A Self-Learning Guide to Conversation Practice*. 34th Reprint. Tata McGraw-Hill. New Delhi.
- Swets, Paul. W. 1983. *The Art of Talking So That People Will Listen: Getting Through to Family, Friends and Business Associates*. Prentice Hall Press. New York.
- Hewings, Martin. 1999. *Advanced English Grammar: A Self-Study Reference and Practice Book for South Asian Students*. Reprint 2003. Cambridge University Press. New Delhi.
- Lewis, Norman. 1991. *Word Power Made Easy*. Pocket Books.
- Hall and Shepherd. *The Anti-Grammar Grammar Book: Discovery Activities for Grammar Teaching*. Longman

Websites

- www.tatamcgrawhill.com/digital_solutions/monippally
- www.dictionary.cambridge.org
- www.wordsmith.org

COURSE CODE	COURSE TITLE	L	T	P	C
14M212B	OBJECT ORIENTED PROGRAMMING WITH C++	5			4

UNIT	SYLLABUS
UNIT 1	UNIT I: Principles of Object Oriented Programming (OOP) – Software Evaluation – OOP Paradigm – Basic Concepts of OOP – Benefits of OOP – Application of OOP.
UNIT 2	Introduction to C++ - Tokens – Keywords – Identifiers – Variables – Operators – Manipulators – Expressions and Control Structures – Pointers – Function Prototyping Parameters Passing in function – values Return by Functions – Inline Functions – Friend and Virtual Functions.
UNIT 3	Classes and Objects – Constructors and Destructors – Operator overloading – type conversion – Type of Constructors – Function Overloading.
UNIT 4	Inheritance – Types of Inheritance – Virtual Functions and Polymorphism Constructors to Inheritance – Mapping Console I/O operations.
UNIT 5	File – File Streams – File operations – File pointer – Error Handling during file operations Command line Arguments.

Text Books:

1. E. Balagurwamy – Object Oriented Programming with C++. TMH.
2. Robert Lafore - Object Oriented Programming in Microsoft C++- Galgotia.

COURSE CODE	COURSE TITLE	L	T	P	C
14M2122	PRACTICAL II– OOPS WITH C++ LAB	5			4

1. Write a Program using relational, logical and Bit wise operators
2. Write a program using control statements
3. Write a program using special operators
4. Write a program using user define function to compare two strings
5. Write a program based on Multidimensional Arrays
6. Write a program by using Inline function.
7. Write a program using class and objects
8. Write a program using friend function
9. Write a program by using nested class
10. Write a program using function overloading
11. Write a program based on type conversions
12. Write a program to demonstrate all forms of Inheritance
13. Write a program to overload unary and binary operators.
14. Write a program using pure virtual functions
15. Write a program using error handling during file operations
16. Write a program using stream classes
17. Write a program using command line arguments to print the given numbers in descending and ascending order.
18. Write a program using manipulators
19. Write a program using abstract classes.
20. Write a program to create own manipulators

COURSE CODE	COURSE TITLE	L	T	P	C
14N6223	OFFICE AUTOMATION LAB	5			4

I. WORD PROCESSING

1. Text manipulation

Change the font size and type

Aligning and justification of text

Underlining the Text

Indenting the Text

i. Prepare a Bio-Data

ii. Prepare a letter

2. Usage of Numbering, Bullets, Footers and Headers

Usage of Spell checks and Find and Replace

i. Prepare a document in news paper format

ii. Prepare a document with bullets and footers and headers.

3. Tables and Manipulations

Creations, Insertion, Deletion (Columns & Rows) and usage of Auto Format

i. Create a mark sheet using table and find out the total marks.

ii. Create a calendar and Auto format it

4. Picture Insertion and alignment

i. Prepare a greeting card

ii. Prepare a handout

5. Creation of documents using templates Creation of Templates

i. Prepare a letter using any template

ii. Prepare two data using various kinds of templates

6. Mail Merge concepts

i. Prepare a business letter for more than one company using mail merge

ii. Prepare an invitation to be sent to specific addresses in the data source.

7. Copying text and pictures from Excel

i. Draw a chart in Excel and paste it on word

ii. Import a picture from Excel and edit the picture.

II. MS-EXCEL

1. Prepare a Mark List for students (use Conditional Formatting).

2. Arrange data in Ascending and Descending order.

3. Pay bill Preparation.

4. Prepare a Calendar - Auto formatting

5. EB bill Preparation.

6. Creating a chart.

7. Prepare an Inventory bill for a company (use Freeze Panes, Track Changes).

8. Insertion, Deletion, Merging and Formatting of cells

III-MS POWERPOINT

1. Design presentation slides for a product of your choice. The slides must include name, brand name, type of product, characteristics, special features, price, special offer etc. Add voice if possible to explain the features of the product. The presentation should work in manual mode. (Apply Animation schemes and Slide Transition)
2. Design slides for the headlines News of a popular TV Channel. The Presentation Should contain the following transactions:
Top down, Bottom up, Zoom in and Zoom out.
The presentation should work in custom mode.
3. Animate a Smile Face (Cry,Normal,Smile).

IV-MS ACCESS

1. Prepare a payroll for employee database of an organization with the following Details:
Employee id, Employee name, Date of Birth, Department and Designation, Date of appointment, Basic pay, Dearness Allowance, House Rent Allowance and other deductions if any. Perform queries for different categories.

COURSE CODE	COURSE TITLE	L	T	P	C
14S62AB	Soft skill – II ESSENTIALS SPOKEN AND PRESENTATION SKILLS-II	5			4

Objectives

- *train* students to become aware of their thinking style and to enable them to convert thinking into performance.
- *prepare* students to evolve mental models for intra-personal and inter-personal transactions.
- *make* students reflect and improve their use of body language – posture, gesture, facial expression, tone.

UNIT	SYLLABUS
UNIT 1	Thinking and Articulation – cognitive, affect, critical, creative aspects of articulation. of OOP.
UNIT 2	Acquisition of Oral and Aural Skills.
UNIT 3	Communication Boosters – body language.
UNIT 4	Function of Cultural Codes in Presentation – etiquette.
UNIT 5	Models of Presentation.

Recommended Texts

- Powell. *In Company*. MacMillan.
- Cotton, et al. *Market Leader*. Longman.
- Pease, Allan. 1998. *Body Language: How to Read Others Thoughts by their Gestures*. Sudha Publications. New Delhi.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice: A Reader*. Basic Books. New York.
- De Bono, Edward. 2000. *Six Thinking Hats*. 2nd Edition. Penguin Books.
- De Bono, Edward. 1993. *Serious Creativity*. Reprint. Harper Business.

COURSE CODE	COURSE TITLE	L	T	P	C
14M213C	DIGITAL LOGIC FUNDAMENTALS	5			4

UNIT	SYLLABUS
UNIT 1	Number systems – conversion form one number system to another – compliments – binary Codes– Binary logic – Logic gates – truth tables.
UNIT 2	Boolean Algebra – Axioms – Truth table simplification of Boolean function – K-Map method (Up to 5variables) – Mc-Clausky tabulation method
UNIT 3	Sequential logic – RS, JK, D and T Flip flops – Registers – Shift Registers - Counters – Ripple counters – Synchronous Counter – Design of Counters
UNIT 4	Encoders – Multiplexer – Demultiplexer - Design of Circuits using decoders/Multiplexers – ROM – PLA – Designing circuits using ROM/PLA.
UNIT 5	Design of ALU – Design of Status Register – Design of Accumulator – Introducing to Computer Design

BOOKS FOR STUDY

1. M. M. Mano, Digital Logic and computer design, Prentice Hall of India.
2. T. C. Bartee, Computer Architecture, McGraw Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
14M213D	MULTIMEDIA SYSTEMS	5			4

UNIT	SYLLABUS
UNIT 1	Introductory Concepts: Multimedia – Definitions, CD-ROM and the Multimedia Highway, Uses of Multimedia, Introduction to making multimedia – The Stages of project, the requirements to make good multimedia, Multimedia skills and training, Training opportunities in Multimedia. Motivation for multimedia usage, Frequency domain analysis, Application Domain
UNIT 2	Multimedia-Hardware and Software: Multimedia Hardware – Macintosh and Windows production Platforms, Hardware peripherals – Connections, Memory and storage devices, Media software – Basic tools, making instant multimedia, Multimedia software and Authoring tools, Production Standards.
UNIT 3	Multimedia – making it work – multimedia building blocks – Text, Sound, Images, Animation and Video, Digitization of Audio and Video objects, Data Compression: Different algorithms concern to text, audio, video and images etc., Working Exposure on Tools like Dream Weaver, Flash, Photoshop Etc.,
UNIT 4	Multimedia and the Internet: History, Internet working, Connections, Internet Services, The World Wide Web, Tools for the WWW – Web Servers, Web Browsers, Web page makers and editors, Plug-Ins and Delivery Vehicles, HTML, VRML, Designing for the WWW – Working on the Web, Multimedia Applications – Media Communication, Media Consumption, Media Entertainment, Media games.
UNIT 5	Multimedia-looking towards Future: Digital Communication and New Media, Interactive Television, Digital Broadcasting, Digital Radio, Multimedia Conferencing, Assembling and delivering a project-planning and costing, Designing and Producing, content and talent, Delivering, CD-ROM technology.

Recommended Text:

1. S. Heath, Multimedia & Communication Systems, Focal Press, UK.
2. T. Vaughan, Multimedia: Making it work, 4th Edition, Tata McGraw Hill, New Delhi.
3. K. Andleigh and K. Thakkar, Multimedia System Design, PHI, New Delhi.

Reference Books

1. Keyes, “Multimedia Handbook”, TMH.
2. R. Steinmetz and K. Naharstedt, Multimedia: Computing, Communications & Applications, Pearson, Delhi.
3. S. Rimmer, Advanced Multimedia Programming, PHI, New Delhi.

COURSE CODE	COURSE TITLE	L	T	P	C
14M2134	PRACTICAL MULTIMEDIA LAB – III-	5			4

PHOTOSHOP

1. Create Sun Flower using Photoshop.
2. Create Water Drops using Photoshop.
3. Animate Plane Flying the Clouds using Photoshop.
4. Create Plastic Surgery for Nose using Photoshop.
5. Create Mouse using Photoshop.
6. Create See thru text using Photoshop.
7. Create Military Clothe using Photoshop.
8. Create Stone Texture using Photoshop.
9. Create Rollover Buttons using Photoshop.
10. Create Realistic Stone Structure using Photoshop.
11. Create Web Page using Photoshop.
12. Convert Black and White to Color Photo using Photoshop.

COURSE CODE	COURSE TITLE	L	T	P	C
114M3136	PRACTICAL IV- PROGRAMMING IN JAVA LAB	5			4

Application

1. Finding area and perimeter of a circle. Use buffered reader class
2. Substring removal from a string. Use string buffer class.
3. Determining the order of numbers generated randomly using random class
4. Implementation of point class for image manipulation
5. Usage of calendar class and manipulation
6. String manipulation using char Array.
7. Database Creation for storing e-mail address and manipulation
8. Usage of vector classes.
9. Implementation Thread based applications & Exception Handling
10. Application using synchronization such as Thread based, class based and synchronized statements.

Applets

11. Working with frames and various controls
12. Working with dialogs and menus
13. Working panel and layout
14. Importing Graphics
15. Working with colors and fonts

COURSE CODE	COURSE TITLE	L	T	P	C
14E64AA	ENVIRONMENTAL STUDIES	5			4

UNIT	SYLLABUS
UNIT 1	Definition – Scope – Public Awareness
UNIT 2	NATURAL RESOURCES Forest Resources – water resources – Mineral resources – Food resources – Energy resources – Land resources
UNIT 3	ECOSYSTEM Concept – Structure – Ecological Succession – Food chain – Food web – Pyramids
UNIT 4	BIODIVERSITY Introduction – Value of biodiversity – Threats of biodiversity – Conservation of biodiversity
UNIT 5	Definition – Causes – Effects – control measures – Solid waste management – Disaster management : Flood, Earthquake, Cyclone, Landslides
UNIT 6	Sustainable & Unsustainable – Water conservation – Resettlement and rehabilitation of people – environmental ethics – Wasteland reclamation – Environment protection Act – Public Awareness.
UNIT 7	Population growth – population explosion – human rights – Value education – HIV /AIDS – Women and Child welfare.
UNIT 8	FIELD WORK

Reference Books:

Anubha Kaushik, “Perspective in Environmental Studies”, New age international Pub.

“Environmental Studies for Under Graduates”, C.P.R. Environmental education Centre.

COURSE CODE	COURSE TITLE	L	T	P	C
14E64AA	Soft skill –III PERSONALITY ENRICHMENT	5			4

Soft skill –III PERSONALITY ENRICHMENT

Objectives

1. To make students understand the concepts and components of personality, thereby to apply the acquired knowledge to themselves and to march towards excellence in their respective academic careers.
2. To enable students to keep themselves abreast of general knowledge and current information.
3. To bring out creativity and other latent talents with proper goal setting so that self-esteem gets enhanced.
4. To sharpen memory skills and other study skills which are vital for academic excellence.
5. To give training for positive thinking which will keep the students in a good stead at the time of crisis.

Unit I- Introduction

- Definition of Personality
- Components of Personality – structural and functional aspects.
- Determinants of Personality- biological, psychological and socio-cultural factors.
- Assessment of Personality – observation, interview and psychological tests.
- Misconceptions and Classifications.
- Need for personality development.

Unit II- Self-Awareness and Self Motivation

- Self analysis through SWOT and Johari window.
- Elements of motivation.
- Seven rules of motivation.
- Techniques and strategies for self motivation.
- Motivation checklist and Goal setting based on the principle of SMART.
- Self motivation and life.

Unit III- General Knowledge and current affairs

- Regional, National and International events.
- Geographical, political and historical facts.
- Information on sports and other recreational activities.
- Basic knowledge with regard to health and health promotion.

Unit IV- Memory, decision making and study skills

- Definition and importance of memory.
- Causes of forgetting.

- How to forget (thought stopping), how to remember (techniques for improving memory)
- The technique of passing exams.
- The rational decision making process.
- Improving creativity in decision making and components of creativity.

Unit V- Power of positive thinking

- Thinking power- seven steps for dealing with doubt.
- Traits of positive thinkers and high achievers,\
- Goals and techniques for positive thinking.
- Enhancement of concentration through positive thinking.
- Practicing a positive life style.

PRACTICAL TRAINING

The course would include the following practical exercises.

Ice-breaking, Brainstorming and stimulation exercises. Thought stopping. Memory and study skills training.

REFERENCES

1. Mile, D.J. (2004). Power of positive thinking. Delhi: Rohan Book Company.
2. Pravesh Kumar. (2005). All about self-motivation. New Delhi: Goodwill Publishing House.
3. Dudley, G.A. (2004). Double your learning power. Delhi: Konark Press. Thomas publishing Group Ltd.
4. Lorayne, H. (2004). How to develop a super power memory. Delhi: Konark Press. Thomas publishing Group Ltd.
5. Hurlock, E.B. (2006). Personality Development, 28th Reprint. New Delhi: Tata McGraw Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
14M214G	COMPUTER GRAPHICS	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to computer Graphics – Video display devices – Raster Scan Systems – Random Scan Systems - Interactive input devices – Hard Copy devices - Graphics software – Output primitives – line drawing algorithms – initializing lines – line function – Circle Generating algorithms - Attributes of output primitives – line attributes
UNIT 2	Area fill attributes – Character attributes inquiry function – Two dimensional transformations – Basic transformation – Matrix representation and Homogeneous co-ordinates - Composite transformation – Matrix representation – other transformations – two dimensional viewing – window – to- viewport co-ordinate transformation.
UNIT 3	Clipping algorithms – Point clipping -line clipping - polygon clipping – Curve clipping - text clipping – Interactive input methods – Physical input devices – logical classification of input devices – Input functions - Interactive picture construction methods – Three dimensional concepts – Three dimensional display methods – parallel projection – perspective projection – Depth cueing – Visible line and surface identification.
UNIT 4	Three dimensional transformation – Three dimensional viewing – Projection – Viewing transformations – Implementation of viewing operations
UNIT 5	Three dimensional transformation – Three dimensional viewing – Projection – Viewing transformations – Implementation of viewing operations

Recommended Text

1. D. Hearn and M.P. Baker, 2006 – Computer Graphics 2nd Edition, Pearson Education

Reference Books

1. W.M. Neumann and R. F. Sproull, Principles of Interactive Computer Graphics, Tata McGraw-Hill, New Delhi.
2. S. Harrington, Fundamentals of Computer Graphics, Tata McGraw-Hill, New Delhi.
3. D. F. Rogers, J. A. Adams, Mathematical elements for Computer Graphics, 2nd Edition, Tata McGraw-Hill, New Delhi.
4. Foley, Van Dan, Feiner, Hughes, Computer Graphics, Addison Wesley, Boston

COURSE CODE	COURSE TITLE	L	T	P	C
14M214H	OPERATING SYSTEMS	5			4

UNIT	SYLLABUS
UNIT 1	Introduction Views – Goals – Types of system – OS Structure – Components – Service Structure – Layered Approach – Virtual Machines – Systems Design and Implementation Management: Process – Process Scheduling – Cooperating Process – InterProcess Communication CPU Scheduling: CPU Schedulers – Scheduling Criteria – Scheduling Algorithms.
UNIT 2	Process Synchronization Critical Section Problem – Synchronization Hardware – Classical Problems of Synchronization – Critical Region – Monitor. Deadlocks: Characterization method for Handling Deadlock Prevention – Avoidance – Detection – Recovery.
UNIT 3	Memory management: Address Binding – Dynamic Loading and Linking – Overlays and physical Address space – Contiguous Allocation – Internal & External Fragmentation. Non-Contiguous Allocation: Paging and Segmentation Schemes – Implementation – Hardware-protection – Fragmentation.
UNIT 4	Virtual Memory: Demand Paging – Page Replacement – Page Replacement Algorithm Thrashing. File System: File Concepts – Access Methods – Directory Structures – Protection Semantics – File System Structures – Allocation Methods – Free Space Management.
UNIT 5	I/O System: Overview – I/O Hardware – Application I/O Interface – Kernel I/O Transforming I/O Requests to hardware operations – Performance. Secondary Storage Protection – Goals – Domain – Access Matrix – The Security Problem – Authentication – Threats Monitoring – Encryption

BOOKS FOR STUDY:

A. Silberschatz P.B. Galvin, Gange, “Operating System Concepts”, 6th Edn. Addison Pub., Co.

.Reference BOOK

H. M. Deitel, An Introduction to operating system, Second Edition, Addison Wesley

COURSE CODE	COURSE TITLE	L	T	P	C
14M214J	DATA STRUCTURES AND ALOGRITHMS	5			4

UNIT	SYLLABUS
UNIT 1	Definition of a Data structure – primitive and composite Data Types, Asymptotic notations Arrays, Operations on arrays, Order Lists
UNIT 2	Stacks – Applications of Stack – Infix to Postfix Conversions, Recursion, and Maze Problems: Queues – Operations on Queues, Queue Applications, And Circular Queue.
UNIT 3	Singly Linked List – Operations, Application – Representation of a Polynomial Addition, Doubly Linked List – Operations, Applications
UNIT 4	Trees and Graphs: Binary Trees – Conversion of Forest to Binary Tree, Operations – Tree Traversals, Graph – Definition, Types of Graphs, Hashing Functions, Traversal – Shortest Path; Dijkstra's Algorithm
UNIT 5	Algorithm – Definition – Examples – Complexity – Divide and Conquer – Binary Search – Maximum and Minimum – Merge Sort.

REFERENCES:

1. E.Horowitz and S.Shani Fundamentals of Data Structures in C++, Galgotia Pub.
2. Horowitz, S.Shani, and S.Rajasekaran, Computer Algorithms,, Galgotia pub.Pvt.Ltd.,
3. R.Kruse C.L. Tondo and B.Leung, Data Structure and Program design in C, PHI,

COURSE CODE	COURSE TITLE	L	T	P	C
14M2146	PRACTICAL V: DATA STRUCTURES USING C++ LAB	5			2

1. Implement PUSH, POP operations of stack using Arrays.
2. Implement PUSH, POP operations of stack using Pointers
3. Implement add, delete operations of queue using Arrays.
4. Implement add, delete operations of queue using Pointers.
5. Conversion of infix to postfix using stack operations
6. Postfix Expression Evaluation.
7. Addition of two polynomials using Arrays and Pointers.
8. Creation, Insertion, and deletion in doubly linked list.
9. Binary First Search and Breath First Search for Graphs using Recursion.
10. Depth First Search and Breath first search for Graphs using Recursion.

COURSE CODE	COURSE TITLE	L	T	P	C
14M2147	PRACTICAL V: OPERATING SYSTEM LAB	5			2

Students can refer the following book for further details.

Charles Crowley – Operating Systems (A Design Oriented Approach) – TMH – 1998.

1. Inter Process Communication (IPC) using Message Queues.
2. IPC using pipes
3. Implementations of wait and signal using counting semaphores
4. Atomic Counter update problem
5. Signaling Processes
6. Deadlock detection (for processes passing messages)
7. Process Scheduling: FCFS
8. Process Scheduling: Least Frequently Used.
9. Process Scheduling: Round Robin
10. Producer – Consumer problem with limited buffers
11. Dining – Philosopher Problem
12. Reader – Writer problem
13. Two Process Mutual Exclusion

COURSE CODE	COURSE TITLE	L	T	P	C
14M215K	WEB TECHNOLOGY	5			4

UNIT	SYLLABUS
UNIT 1	Internet Basic – Introduction to HTML – List – Creating Table – Linking document – Frame Graphics to HTML Doc – Style sheet basic – Add style to document - Creating style sheet rules – Style sheet properties – Font – Text – List – Color and background color – box – displaying properties.
UNIT 2	Introduction to JavaScript – Advantage of JavaScript – JavaScript Syntax – Datatype -variable – Array – Operator and Expression – Looping Constructor – Functions – Dialog box.
UNIT 3	JavaScript document object model – Introduction – Object in HTML – Events Handling - Windows Object – Document object – Browser Object – Form Object – Screen object - Navigator object – Build in Object – User defined object – Cookies.
UNIT 4	I ASP.NET Language Structure – Page Structure – Page event, Compiler Directives. HTML server controls – Anchor, Tables, Forms, File server Controls – Label, Textbox, Button, Image, Links, Check & Radio button, Hyper link, Data List Web Server Controls – Check – Check box list, Radio button list, Drop down list, Data grid, Repeater.
UNIT 5	Request and Response Object, Cookies, Working with Data – OLEDB connection class command class, transaction class, data adaptor class, data set class.

BOOKS FOR STUDY AND REFERENCE:

1. Bayross, Web Enable Commercial Application Development Using HTML, DHTML, Javascript, Perl CGI, BPB Publications,2000
2. J.Jaworski, Mastering Javascript, BPB Publications. 1999
3. T.A.Powell, Complete Reference HTML (Third Edition) TMH,2002
4. G.Buczek, ASP.NET Developers Guide, TMH, 2002.

COURSE CODE	COURSE TITLE	L	T	P	C
14M215L	DATABASE MANAGEMENT SYSTEMS	5			4

UNIT	SYLLABUS
UNIT 1	DBMS Definition – Characteristics of DBMS – Application and advantages of DBMS– Instances – Schemas and Database States – Three Levels of Architecture – Data Independence – DBMS languages– Data Dictionary– Database Users– Data Administrators.
UNIT 2	Data Models– types and their comparison– Entity Relationship Model– Entity Types– Entity Sets– Attributes and its types– Keys– E-R Diagram– Data Integrity– RDBMS :Concept– Components and Codd’s rules.
UNIT 3	Relational Algebra (selection, projection, union, intersection, Cartesian product, Different types of join like theta join–equi-join, natural join, outer join) Functional Dependencies– Good & Bad Decomposition– Anomalies as a database: A consequences of bad design– Normalization: 1NF, 2NF, 3NF, BCNF, 4NF 5NF.
UNIT 4	Introduction to SQL, DDL, DML, and DCL statements– Creating Tables– Adding Constraints– Altering Tables, Update, Insert, Delete Tables & various Form of SELECT- Simple, Using Special Operators for Data Access– Aggregate functions– Joining Multiple Tables (Equi Joins) – Joining a Table to itself (self Joins) Functions.
UNIT 5	Introduction to PL/SQL (blocks of PL/SQL, Variables, constants) – Control Structure – Introduction to Stored Procedures–Functions–Cursor and Triggers

Text Books:

1. Elmasri & Navathe, Fundamentals of Database systems, Addison & Weisely, New Delhi.

References:

1. H. F. Korth & A. Silverschatz, Database Concepts, Tata McGraw Hill, New Delhi
2. C. J. Date, Database Systems, Prentice Hall of India, New Delhi.
3. Ivan Bayross, SQL, PL/SQL, The programming language of Oracle.

COURSE CODE	COURSE TITLE	L	T	P	C
14M215M	VISUAL PROGRAMMING	5			4

UNIT	SYLLABUS
UNIT 1	Customizing a Form – writing Simple Programs – Toolbox – Creating Controls – Name Property – Command Button – Access keys – Image Controls – Text Boxes – Labels – Message Boxes – Grid - Tools – Variables – Data Types – String – Numbers
UNIT 2	Displaying Information – Determinate Loops – Indeterminate Loops – Conditionals – Built in functions and Procedures.
UNIT 3	Lists – Arrays – Sorting and Searching – Records – Control Arrays – Combo Boxes – Grid Control Projects with Multiple forms – Do Events and Sub Main – Error Trapping.
UNIT 4	VB Objects – Dialog Boxes – Common Controls – Menus – MDI Forms – Testing, Debugging and optimization – working with Graphics.
UNIT 5	Monitoring Mouse Activity – File Handling – File System controls – File System Objects – COM/OLE automation – DLL Servers – OLE Drag and Drop.

BOOKS FOR STUDY:

1. Gary Cornell – Visual Basic 6 from the Ground up – Tata McGraw Hill
2. Noel Jerke – Visual Basic 6 (The Complete Reference) – Tata McGraw Hill

COURSE CODE	COURSE TITLE	L	T	P	C
14M215A	RESOURCE MANAGEMENT TECHNIQUES	5			4

UNIT	SYLLABUS
UNIT 1	Basics of Operations Research (OR): Characteristics of O R – Necessity of O.R in Industry – OR and Decision making – Role of Computers in O.R. Linear programming and Graphical solution of 2 variables) canonical & standard terms of Linear programming problem. Algebraic solution-Simplex method
UNIT 2	Algebraic solution: Charnes method of penalties – two phase simplex method – concept of Duality – Properties of duality – Dual simplex method.
UNIT 3	Transportation model: Definition – formulation and solution of transportation models – the row minima, column minima and Vogel's approximation methods. Assignment model: definition of Assignment model – comparison with transportation model – formulation and solution of Assignment model – variations of Assignment problem.
UNIT 4	Sequencing problem; Processing each of n jobs through m machines – processing n jobs through machines – processing n jobs through 3 machines – processing the through m machines – traveling salesman problem Game Theory : Characteristics of games . Maxima, Minima criteria of optimality – Dominance property – algebraic and graphical method of solution of solving 2 games.
UNIT 5	Pert - CPM: Networks – Flukerson's Rule – measure of activity – PERT computation – CPM computation – resource scheduling. Simulation: Various methods of obtaining of obtaining random number for use in computer simulation – Additive, multiplicative and mixed types of congruence random number generators – Monte Carlo method of simulation – its advantages and disadvantages.

BOOKS FOR STUDY:

1. Harndy A. Taha: Operation Research – An Introduction, 5th ed., Prentice Hall of India, Pvt. Ltd., New Delhi, 1996.
2. Ackoff. R.L. and Sasien M.W. Fundamentals of Operations Research, Jhon wilely and sons, New York , 1968.
3. Charness A Cooper W. and Hendersen A: Introduction to linear programming, wiley and sona New York, 1973
4. Srinath L.S.: PERT and CPM Principles and applications, Affiliated East West Press Pvt. Ltd. New York.1973

COURSE CODE	COURSE TITLE	L	T	P	C
14M2158	PRACTICAL VII- VISUAL BASIC WITH RDBMS	5			2

1. Working with Intrinsic Controls and ActiveX Controls
2. Application with multiple forms
3. Application with Dialogs
4. Application with Menus
5. Application using Data Controls
6. Application using Common Dialogs
7. Creation of Database and performing the given using a Menu Driven Program.
 - a) Insertion b) Deletion c) modification d) Generating a Simple report for the Payroll management system
8. Creation of Database and performing the given using a Menu Driven Program.
 - a) Insertion b) Deletion c) modification d) Generating a Simple report for Mark sheet processing
9. Creation of Database and performing the given using a Menu Driven Program.
 - a) Insertion b) Deletion c) modification d) Generating a Simple report for Student information system
10. Creation of Database and performing the given using a Menu Driven Program.
 - a) Insertion b) Deletion c) modification d) Generating a Simple report for Electricity Bill system

COURSE CODE	COURSE TITLE	L	T	P	C
14M2159	PRACTICAL VIII- WEB APPLICATIONS LAB	5			2

1. Create a simple page introduction yourself, how old you are, what you do, what you do, what you do, what you like and dislike Modify the introduction to include a bullet list the 5 thing you like and dislike as numbered lists. Create another page about your favorite hobby, your main page. Center something and put a quote on one of your pages.
2. Put an existing image on a web page. Create a table, use a heading and at least one use of row span/col span. Color a page and some text within the page. Linked to another site.
3. Create a new file called index.html
 - *Put the normal HTML document structure tags in the file.
 - *Give it a title.
 - *At the bottom of the page(i.e. the last thing between the tag); remember to put the link to your email address within address tags.
 - *A line break.
 - *The date. (I have this same structure at the bottom of this page).
4. Above this block (which is called the footer), put a title in heading tags.
5. Write a function to create an array 10 element and display its contents.
6. Create a simple calculator using form fields. Have two fields for number entry & one field for the result. Allow the user to be able plus, minus, multiply & divide.
7. Create a document and add a link to it. When the user moves the mouse over the link, it should load the linked document on its own. (User is not required to click on the link).
8. Create a document, which opens a new window without a toolbar, address bar, or a status bar that unloads itself after one minute.
9. Create a document that accepts the user's name in a text field form and displays the next time when the user visits the site informing him that he has accessed the site for the second time, and so on.
11. Create a web form for an online library. This form must be able to accept the Membership Id of the person borrowing a book, the name and ID of the book, and the name of the book's author. On submitting the form, the user (the person borrowing the book) must be thanked and informed of the date when the book is to be returned. You can enhance the look of the page by using various ASP.NET controls.

11. Display an advertisement at the bottom of the web form that you created in question 10.
12. Create an array containing the titles of five new movies. Use this array as a data source for a dropdown list control. The page must be capable of displaying the selected movie title to the user when the user clicks on the submit button.
13. Create a virtual directory in IIS. Create a global. A sax file includes the “Session Start” and “Session End” and “Application_BeginRequest” and “Application_EndRequest” events. Write a simple ASP.NET page and execute it in the browser.

COURSE CODE	COURSE TITLE	L	T	P	C
14M216M	COMPUTER NETWORKS	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to data communication, network protocols & standards and standard organization line configuration – topology – Transmission mode – Classification of network – OSI model – layer of OSI model
UNIT 2	Parallel and serial Transmission – DTE/DCE/such as EIA-449, EIA-202 and X21 interface – Interface standards – Modems – Guided Media – Unguided Media – Performance – types of Error – Error Detection – Error corrections
UNIT 3	Multiplexing – Types of Multiplexing – Multiplexing Application – Telephone system – Project 802 – Ethernet – Token Bus – Token Ring – FDDI – IEEE 802.6 – SMDS – Circuit Switching – Packet Switching – Message switching – Connection Oriented and Connectionless services.
UNIT 4	History of Analog and Digital Network – Access to ISDN – ISDN Layers – Broadband ISDN – X.25 Layers – Packet Layer Protocol – ATM: Architecture-Applications.
UNIT 5	Repeaters – Bridges – Routers – Gateway – Routing algorithms – TCP/IP Network, Transport and Application Layers of TCP/IP – World Wide Web .

Text:

1. Behrouz and forouzan - Introduction to Data Communication and Networking – 2nd Edition – TMH

Reference

1. Jean Walrand – Communication Networks (A first Course) – Second Edition – WCB/McGraw Hill

COURSE CODE	COURSE TITLE	L	T	P	C
14A216B	PHP	5			4

UNIT	SYLLABUS
UNIT 1	What is PHP? History of web programming; how PHP fits into the web environment; installation and configuration; "Hello World"; syntax, variables, operators, flow control structures
UNIT 2	More language basics; using GET and POST input, working with HTML forms; built-in and user-defined functions; variable scope; using the PHP manual, getting help
UNIT 3	Input validation, string manipulation and regular expression functions; date and time functions
UNIT 4	Code re-use, require (), include (), and the include_path; file system functions and file input and output; file uploads; error handling and logging; sending mail
UNIT 5	HTTP headers and output control functions; HTTP cookies; maintaining state with HTTP Units; writing simple web clients - PHP 5-specific features

REFERENCE:

1. Programming PHP. Rasmus Lerdorf, Kevin Tatroe.,(O'Reilly, ISBN 1565926102)
2. Learning PHP 5. David Sklar, (O'Reilly, ISBN 0596005601)
3. Core PHP Programming. Leon Atkinson, (Prentice Hall, ISBN 0130463469)

COURSE CODE	COURSE TITLE	L	T	P	C
14M216N	SOFTWARE ENGINEERING	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to Software Engineering: Definition – Size Factor – Quality and Productivity of Factors – Managerial Issues – Planning a software project: Defining the problem – Developing the problem – Developing a solution Strategy – Planning the Development Process – planning an Organization structure – Other Planning Activities.
UNIT 2	Software Cost Estimation: Software cost factors – Software Cost Estimation Staffing level Estimation – Estimating Software Maintenance Costs – The Software Specification – Formal Specification Techniques
UNIT 3	Software design: Fundamentals Design Concepts – Modules and Modularization cost Design Notations – Design Techniques – Detailed Design Considerations – Real-Time and Distributors -System Design – Test Plans – Milestones, walkthrough, and Inspections.
UNIT 4	Implementation issues: Structured Coding Techniques – Coding Style – Standards and Guidelines – Documentation guidelines – Type checking – Scoping Rules – Concurrency Mechanisms.
UNIT 5	Quality Assurance – Walkthroughs and Inspection – Static Analysis – Symbolic Executions Unit Testing and Debugging – System Testing – Formal Verification:

BOOKS FOR STUDY:

1. R.Failey, Software Engineering Concepts, Tata McGraw Hill Edn.
2. R.S. Pressman Software Engineering, Fourth Ed., McGraw Hill Edn

COURSE CODE	COURSE TITLE	L	T	P	C
14M2162	PRACTICAL -IX- PHP LAB	5			2

1. Create a PHP program to demonstrate the get and post method.
2. Create a PHP program to validate the user form.
3. Create a PHP program to demonstrate the different predefined function in array.
4. Create a PHP program to demonstrate the different predefined function in Math.
5. Create a PHP program to demonstrate the different predefined function in Date
6. Write a PHP program to store current date-time in a COOKIE and display the “Last visited on” date-time on the web page upon reopening of the same page.
7. Write a PHP program to store current date-time in a COOKIE and display the “Last visited on” date-time on the web page upon reopening of the same page.
8. Assume four users user1, user2, user3 and user4 having the passwords pwd1, pwd2, pwd3 and pwd4 respectively.
Write a PHP for doing the following.
 - i). Create a Cookie and add these four user ID’s and passwords to this Cookie.
 - ii). Read the user id and passwords entered in the Login form (week1) and authenticate with the values (user id and passwords) available in the cookies.
If he is a valid user (i.e., user-name and password match) you should welcome him by name (user-name) else you should display “You are not an authenticated user ”.
9. Create a PHP program to demonstrate the different file handling methods.
10. Create a PHP program to demonstrate the database connectivity

COURSE CODE	COURSE TITLE	L	T	P	C
14M2161	PRACTICAL X- MINI PROJECT	5			4

Each student has develop and implement individually application software based on any emerging latest technologies.

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COMMERCE
B.Com. (AF)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

SCHEME OF EXAMINATIONS

COURSE COMPONENTS	COURSE TITLE	Credit	Ins. Hrs/ Week	Exam Hrs	Total
	Tamil or any Language	3	6	3	100
	English	3	6	3	100
Core –VI	Core Subject – Financial Accounting I	4	5	3	100
Core-VII	Core Subject – Business Economics	4	5	3	100
Core –VIII	Allied – Business Statistics	5	6	3	100
	Skill based subject	2	-	3	100
	Non-Tamil Students : Tamil (VI Std) Tamil Students: Non – Major Basics of Retail marketing	2	2	3	100

SECOND SEMESTER

COURSE COMPONENTS	COURSE TITLE	Credit	Ins. Hrs/ Week	Exam Hrs	Total
	Language	3	6	3	100
	English	3	6	3	100
	Core Subject – Financial Accounting II	4	5	3	100
	Core Subject – Indian Economy	4	5	3	100
	Allied – Quantitative Analysis for Management	5	6	3	100
	Skill based subject	2	-	3	100
	Non-Tamil Students : Tamil (VI Std) Tamil Students Non – Major Fundamentals of insurance	2	2	3	100

THIRD SEMESTER

COURSE COMPONENTS	COURSE TITLE	Credit	Ins. Hrs/ Week	Exam Hrs	Total
Core – V	Corporate Accounting I	4	6	3	100
Core –VI	Business Law	4	5	3	100
Core-VII	Business Management	4	5	3	100
Core –VIII	Banking Theory Law & Practice	4	5	3	100
	Principles of E- commerce	5	5	3	100
	Personality enrichment	3	2	3	100

FOURTH SEMESTER

COURSE COMPONENTS	COURSE TITLE	Credit	Ins. Hrs/ Week	Exam Hrs	Total
Core –IX	Corporate Accounting II	4	6	3	100
Core –X	Company Law	4	5	3	100
Core –XI	Financial Management	3	5	3	100
Core –XII	Office Automation Packages	4	5	3	100
Allied –IV	Business Communication	5	6	3	100
	Computing skill	3	2	3	
	Environmental Studies	2	1	3	100

FIFTH SEMESTER

COURSE COMPONENTS	COURSE TITLE	Credit	Ins. Hrs/ Week	Exam Hrs	Total
Core – XIII	Human Resources Management	4	6	3	100
Core – XIV	Cost Accounting	5	5	3	100
Core – XV	Income Tax Law & Practice – I	5	6	3	100
Core – XVI	Marketing Management	4	6	3	100
	Entrepreneurial Development	4	6	3	100

SIXTH SEMESTER

COURSE COMPONENTS	COURSE TITLE	Credit	Ins. Hrs/ Week	Exam Hrs	Total
Core – XVII	Accounting for Managerial Decision	4	6	3	100
Core –XVIII	Financial Services	4	6	3	100
Core –XIX	Income Tax Law & Practice – II	5	5	3	100
Elective – II :	Computer Applications - Tally	3	6	3	100
Elective – III :	Practical Auditing	4	6	3	100
	Extension activities	1			
	Value education	2			

COURSE CODE	COURSE TITLE	L	T	P	C
17E11AA	FOUNDATION ENGLISH	6			3

UNIT	SYLLABUS
UNIT 1	Unit 1: My Vision for India – Dr. A.P.J. Abdul Kalam Night of the Scorpion – Nissim Ezekiel
UNIT 2	Unit 2: Science, Humanities and Religion – Dr. Radhakrishnan The Road not Taken – Robert Frost
UNIT 3	Unit 3: My Stupid Suicide Plan – Chetan Baghat Hawk Roosting – Ted Hughes
UNIT 4	Unit 4: Silent Valley – (Source: The State of India's Environment, 1982) Coromandel Fishes – Sarojini Naidu
UNIT 5	Unit 5: My Greatest Olympic Prize – Jesse Owens Woman Work – Maya Angelou

COURSE CODE	COURSE TITLE	L	T	P	C
16M461A	FINANCIAL ACCOUNTING – I	5			4

UNIT	SYLLABUS
UNIT 1	Basic accounting concepts & conventions: Meaning and scope of Accounting, Basic Accounting concepts and conventions – Objectives of Accounting – Preparation of Final Accounts of a Sole Trading concern – With necessary adjustments.
UNIT 2	Insurance claims: Average Clause Policy Excluding Loss of Profit – Average due date
UNIT 3	Rectification of errors: Rectification of errors – Preparation of Suspense Account – Bank Reconciliation Statement (BRS).
UNIT 4	Depreciation: Straight line & Diminishing Balance including change in method of Depreciation.
UNIT 5	Single entry system: Meaning, Features , Defects – Difference between single entry and Double entry system – Statement of Affairs method – Conversion method.

REFERENCE BOOKS:

1. R.L. Gupta & V.K. Gupta _ Financial Accounting – Sultan Chand Publishing – New Delhi.
2. Jain & Narang – Financial Accounting – Kalyani Publishers Patiala
3. Tulsian – Financial Accounting – Tata MC Graw will New Delhi.
4. T.S. Reddy & A. Murthy – Financial Accounting – Margham Publishers T. Nagar – 17.
5. Rajasekar – Financial Accounting – Pearson Publications

COURSE CODE	COURSE TITLE	L	T	P	C
16M461A	BUSINESS ECONOMICS	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to economics: Wealth, Welfare and Scarcity – Views in Economics – Positives and Normative Economics – Definition – Scope and Importance of Business Economics. Concept – Production Possibility Frontiers – Opportunity Cost – Accounting Profit And Economics – Profit Incremental and Marginal Concepts, Time & Discounting Principle – concept of Efficiency.
UNIT 2	Demand and supply: Demand and supply Functions – Meaning Of Demand – Determinants and Distinctions of Demand – Law of Demand – Elasticity of Demand – Demand Forecasting – Supply Concept and Equilibrium.
UNIT 3	Consumer Behaviour theory: – Marshallian and Hicksian Interpretation.
UNIT 4	Theory of production, Law of variable proportion, Law of returns to scale.
UNIT 5	Market structure, Competition and price Theory – Competition and Price Determination.

Recommended Books:

1. Stonier & Hague : Text books of Economic theory.
2. H.L. Ahuja : Principles of Micro Economics
3. S.Sankaran : Economics analysis
4. HS Agarwall : Micro economics
5. M.L Seeth : Principles of Economics
6. Watson D.S : Price Theory and its uses

COURSE CODE	COURSE TITLE	L	T	P	C
16C461A	BUSINESS STATISTICS	6			5

UNIT	SYLLABUS
UNIT 1	Statistics - Introduction Meaning and Definition of Statistics – Collection and Tabulation of Statistical data – Diagrammatic and Graphical representation of data.
UNIT 2	Measures of Central tendency Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean.
UNIT 3	Measures of dispersion Range – Standard deviation – Mean deviation – Quartile deviation.
UNIT 4	Correlation analysis Types of Correlation – Karl Pearson’s coefficient of correlation – Rank Correlation.
UNIT 5	Regression analysis: uses of Regression Analysis – Regression Lines.

BOOK:

1. Contents and Treatment as in Statistical Methods by S.P.Gupta Published by Sultan Chand & Sons, New Delhi.

REFERENCE BOOKS:

- 1 Business Mathematics & Statistics – P.A. Navanitham
- 2 Business Mathematics & Statistics – P.R. Vittal
- 3 Fundamental of Mathematical Statistics – S.C. Gupta & V.K. Kapoor

COURSE CODE	COURSE TITLE	L	T	P	C
16N61ZA	BASIC OF RETAIL MARKETING (NON – MAJOR)	2			2

UNIT	SYLLABUS
UNIT 1	Retailing – Definition – Retail Marketing – Growth Of Organized Retailing In India – Importance Of Retailing
UNIT 2	Function of Retailing – Characteristics Of Retailing – Types Of Retailing – Store Retailing – Non Store Retailing.
UNIT 3	Retail Location Factors – Branding In Retailing – Private Labeling – Franchising Concept
UNIT 4	Communication Tools Used In Retailing – Sales Promotion, E –Tailing – Window Display.
UNIT 5	Supply Chain Management – Definition – Importance – Role Of Information Technology In Retailing.

Recommended Books :

1. Gilbert Pearson , Retail Marketing Education Asia , 2001
2. Vedamani Gibson , Retail Marketing Jaici Publishing House New Delhi – 2000
3. Berman & Evans Retail Management Phi , New Delhi 2001
4. Michael Levy And Barton A Weitz, Retailing Management Tata Mc , Graw Hill, New Delhi 2001
5. Dr. L. Natarajan Retail Marketing Margham Publication Chennai

COURSE CODE	COURSE TITLE	L	T	P	C
14S61AA	Soft skill – I ESSENTIALS OF LANGUAGE AND COMMUNICATION-II	3			2

Objectives

- Enable students to build a repertoire of functional vocabulary and to move from the lexical level to the syntactic level.
- Train students to summon words, phrases relevant to the immediate communication tasks.
- Enable students to comprehend the concept of communication.
- Teach students the four basic communication skills- Listening, Speaking, Reading and Writing.

UNIT	SYLLABUS
UNIT 1	Recap of language skills – vocabulary, phrase, clause, sentence.
UNIT 2	Fluency building.
UNIT 3	Principles of Communication
UNIT 4	Types of Communication
UNIT 5	LSRW in Communication

Recommended Texts

- Monippally, Matthukutty. M. 2001. *Business Communication Strategies*. 11th Reprint. Tata McGraw-Hill. New Delhi.
- Sasikumar. V and P.V. Dhamija. 1993. *Spoken English: A Self-Learning Guide to Conversation Practice*. 34th Reprint. Tata McGraw-Hill. New Delhi.
- Swets, Paul. W. 1983. *The Art of Talking So That People Will Listen: Getting Through to Family, Friends and Business Associates*. Prentice Hall Press. New York.
- Hewings, Martin. 1999. *Advanced English Grammar: A Self-Study Reference and Practice Book for South Asian Students*. Reprint 2003. Cambridge University Press. New Delhi.
- Lewis, Norman. 1991. *Word Power Made Easy*. Pocket Books.
- Hall and Shepherd. *The Anti-Grammar Grammar Book: Discovery Activities for Grammar Teaching*. Longman

COURSE CODE	COURSE TITLE	L	T	P	C
17E11AA	FOUNDATION ENGLISH	6			3

UNIT	SYLLABUS
UNIT 1	Unit 1: The Three Questions – Leo Tolstoy If – Rudyard Kipling
UNIT 2	Unit 2: Education for India – C. Rajagopalachari Where the mind is without fear – Rabindranath Tagore
UNIT 3	Unit 3: Technological Engine – Alvin Toffler Once Upon a Time – Gabriel Okara
UNIT 4	Unit 4: How Children Learn – John Holt Yussouf – James Russell Lowell
UNIT 5	Unit 5: The Power of Prayer – Dr. A.P.J. Abdul Kalam The Solitary Reaper – William Wordsworth

COURSE CODE	COURSE TITLE	L	T	P	C
16M462B	FINANCIAL ACCOUNTING – II	6	-	-	3

UNIT	SYLLABUS
UNIT 1	Branch Accounts – Dependent Branches – Stock and Debtors System – Branch Trading Accounts – Distinction between whole sale profit and Retail Profit
UNIT 2	Departmental Accounts – Basis for allocation of expense – Inter departmental -Transfer of cost (or) Selling price – Treatment of expenses which cannot be allocated.
UNIT 3	Hire Purchase Accounting – Treatment of Default and Repossession – Complete and Partial – Installment Purchase System.
UNIT 4	Partnership Accounts – Concepts - Treatment of Goodwill – Admission – Retirement Retirement cum Admission – Simple Problems only.
UNIT 5	Partnership Dissolution – Insolvency of a partner – All Partners – Distribution – Simple Problems only.

REFERENCE BOOKS:

1. R.L. Gupta & V.K. Gupta _ Financial Accounting – Sultan Chand Publishing – New Delhi.
2. Jain & Narang – Financial Accounting – Kalyani Publishers Patiala
3. Tulsian – Financial Accounting – Tata MC Graw will New Delhi.
4. T.S. Reddy & A. Murthy – Financial Accounting – Margham Publishers T. Nagar – 17.
5. Rajasekar – Financial Accounting – Pearson Publications

COURSE CODE	COURSE TITLE	L	T	P	C
16M462D	INDIAN ECONOMY	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Features of Less Developed and Developing Economics – Economics and Non Economic Factors Impeding Economic Growth and Development – Factor Determining Economic Development.
UNIT 2	Human Resources – Population Growth as a Regarding Factor – Population Policy.
UNIT 3	Agriculture – Its Contribution to Economic Development – Food Problem – Methods of Solving it – Measure to Increase Agricultural Productivity – Land Reforms – Green Revolution – Agricultural Credit.
UNIT 4	Role of Industries in Economic Development – Cottage and Small Scale Industries – Large Scale Industries – Iron and Steel Cement and Sugar, Public Sector – Trade Unions.
UNIT 5	Transport (Road, Railway and Civil aviation) Transport Co – Operation – Poverty In India – Poverty Eradication Programmes – Planning in India – Objectives – Achievement of Five Year Plan.

Recommended Books:

1. Dhingara I.C	:	Indian Economy
2. Dutt and Sundaram	:	Indian Economy
3. S. Sankaran	:	Indian Economy
4. Five year plan	:	Govt. of India Publication
5. The economic & Political weekly:	:	Govt. of India Publication
6. Economic Survey	:	Govt. of India Publication

COURSE CODE	COURSE TITLE	L	T	P	C
16C462B	QUANTITATIVE ANALYSIS FOR MANAGEMENT	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Origin and Development of OR – Introduction – Definitions – Scope of Operation Research – Phase of OR – Models in operations Research Advantages of a model.
UNIT 2	Linear Programming – Formulation of LP Problem – Graphical solution – Procedure of solving LPP by Graphical method
UNIT 3	Transportation Problem – Introduction – definitions Finding Initial Solution – North West Corner Rule – Least Cost or Matrix Minima Method Vogel's Approximation method.
UNIT 4	Assignment Problem – Introduction – Definition – Difference between Transportation and Assignment Problem – Unbalanced Assignment problem.
UNIT 5	Network Analysis – PERT and CPM (No crashing).

RECOMMENDED BOOKS:

1. Operational Research – Hira and Gupta s. chand
2. Operational Research – Dr. P.R. Vital
3. Operational Research – Handy and A. Tata.
4. Statistical methods and operation Research – S.P. Gupta

COURSE CODE	COURSE TITLE	L	T	P	C
14N62ZB	FUNDAMENTAL OF INSURANCE (NON MAJOR)	2	-	-	2

UNIT	SYLLABUS
UNIT 1	Origin And History Of Insurance – Meaning And Definition Of Insurance - Features Of Insurance – Principle Of Insurance – Objective And Advantage Of Insurance – Types Of Insurance – Insurance – Insurance Organization In India And Their Profile – Insurance Regulatory And Development Authority – Its Duties And Functions.
UNIT 2	Meaning And Definition Of Life Insurance – Its Features – Its Fundamental Principles – Types Of Policies In Life Insurance - Meaning And Definition Of Fire Insurance – Its Features – Its Fundamental Principles – Types Of Policies In Fire Insurance – Meaning And Definition Of Marine Insurance – Its Features – Its Fundamental Principles – Types Of Policies In Marine Insurance.

Recommended Books:

1. A. Murthy : Elements Of Insurance
2. M.N.Mish : Insurance – Principles And Practice

COURSE CODE	COURSE TITLE	L	T	P	C
14S62AB	Soft skill – II ESSENTIALS OF SPOKEN AND PRESENTATION SKILLS-II	-	-	-	2

Objectives

- *train* students to become aware of their thinking style and to enable them to convert thinking into performance.
- *prepare* students to evolve mental models for intra-personal and inter-personal transactions.
- *make* students reflect and improve their use of body language – posture, gesture, facial expression, tone.

UNIT	SYLLABUS
UNIT 1	Thinking and Articulation – cognitive, affect, critical, creative aspects of articulation.
UNIT 2	Acquisition of Oral and Aural Skills.
UNIT 3	Communication Boosters – body language.
UNIT 4	Function of Cultural Codes in Presentation – etiquette.
UNIT 5	Models of Presentation.

Recommended Texts

- Powell. *In Company*. MacMillan.
- Cotton, et al. *Market Leader*. Longman.
- Pease, Allan. 1998. *Body Language: How to Read Others Thoughts by their Gestures*. Sudha Publications. New Delhi.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice: A Reader*. Basic Books. New York.
- De Bono, Edward. 2000. *Six Thinking Hats*. 2nd Edition. Penguin Books.
- De Bono, Edward. 1993. *Serious Creativity*. Reprint. Harper Business.

COURSE CODE	COURSE TITLE	L	T	P	C
14E12AB	FOUNDATION ENGLISH	6	-	-	3

UNIT	SYLLABUS
UNIT 1	Unit 1: Julius Caesar (Selected Scenes from Shakespeare - Act III Scene II) Lines 1 - 140 Subha – Rabindranath Tagore (Part – I)
UNIT 2	Unit 2: Julius Caesar (Selected Scenes from Shakespeare - Act III Scene II) Lines 141 – 270 Subha – Rabindranath Tagore (Part – II)
UNIT 3	Unit 3: Tempest The Happy Prince – Oscar Wilde (Part – I)
UNIT 4	Unit 4: Tempest The Happy Prince – Oscar Wilde (Part – II)
UNIT 5	Unit 5: The Merchant of Venice – The Quality of Mercy A Cup of Tea – Catherine Mansfield

COURSE CODE	COURSE TITLE	L	T	P	C
16M463E	CORPORATE ACCOUNTING – I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Company – Definition - kinds of companies, types of shares – Issue of shares and debentures – Issue at par, premium and discount – Forfeiture and reissue- underwriting of shares and debentures – Liability of under writers – partial, complete and firm.
UNIT 2	Redemption of Preference shares and debentures – purchase of business – Profit prior to incorporation
UNIT 3	ation of Company’s final accounts – Company Balance sheet preparation – computation of Managerial Remuneration.
UNIT 4	Valuation of goodwill and shares.
UNIT 5	Internal Reconstruction – Alteration of share capital and Reduction of capital.

Reference Books :

1. Shukla and Grewal – Advanced Accounts, S.Chand
2. T.S. Reddy and A.Murthy – Corporate Accounting, Margam
3. Jain and Narrang - Company Accounts, Kalyani.
4. R.L.Gupta – Corporate Accounting, Sultan chand.
5. Chakraborti- Advanced Accountancy.

COURSE CODE	COURSE TITLE	L	T	P	C
16M463G	BUSINESS LAW	5	-	-	4

UNIT	SYLLABUS
UNIT 1	dian contract act 1872 – Definition of contract - Essential elements of a valid contract – clarification of contracts – offer and acceptance and Communication of offer and Acceptance and Revocation. Consideration – Capacity to contract – Free consent - Legality of object –void agreement.
UNIT 2	Performance of contract – offer to perform contracts which need not be performed – by whom contract must be performed who can demand performance. Discharge of Contract – meaning – methods – by performance –by agreement – impossibility of performance
UNIT 3	Remedies for Breach of Contract – Introduction Recession – Damages – Specific Performance – injunction - Quasi contracts.
UNIT 4	ct of Indemnity and guarantee – Contract of bailment and pledge – Contract of Agency – Creation of agency – Rights, duties and liabilities of an agent - Termination of agency.
UNIT 5	tion of contract of Sale - caveat emptor - Express and implied conditions and warranties – Performance of Contract of Sale – Rights of an unpaid Seller.

Books Recommended

1. N.D.Kapoor- “Business Law” Sulthanchand Publishers
2. Srinivasan Business Law Margham Publishers Chennai – 2004
3. Kuchcal, Mercantile Law, Vikas Publishing house New Delhi – 2003
4. Commercial / Business Law – N.D. Kapoor

COURSE CODE	COURSE TITLE	L	T	P	C
16M463H	BUSINESS MANAGEMENT	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Management : Importance – Definition – Nature and Scope of Management Process – Role and Functions of a Manager – Levels of Management – Development of Scientific Management and other Schools of thought and approaches.
UNIT 2	Planning: Nature – Importance – forms – Types – Steps in Planning – Objectives – Policies – Procedures and Methods – Natures and Types of Policies – Decision Making- Process of Decision-Making – Types
UNIT 3	Organizing : Types of Organizations – Organization Structure – Span of Control– Departmentalization – Informal Organization.
UNIT 4	Authority – Delegation – decentralization – Difference between Authority and Power – Responsibility –Direction – Nature and Purpose.-- Leader ship and Kinds Motivation Kinds Of Motivation
UNIT 5	Co- Ordination – Need, Type and Techniques and Requisites for Excellent Co - Ordination – Controlling – Meeting and Importance – Control Process.

REFERENCE BOOKS:

1. P.C. Tripathi & P.N. Reddy	Principles of Management
2. L.M. Prasad	Principles of Management
3. Dinkar Pagare	Principles of Management
4. C.B. Gupta	Business Management
5. N. Premavathy	Business Management
6. J. Jayasankar	Principles of Management

COURSE CODE	COURSE TITLE	L	T	P	C
16M463J	BANKING THEORY LAW AND PRACTICE	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Definition of banking-Classification of banks-Role of banks in economic development Banking Regulation Act: Importance, Provisions regarding capital structure, Core Capital I &II – Capital Adequacy Ratio-Appropriation of funds, Licensing, Opening of new branches, Management and control over banks.
UNIT 2	Characteristics of a Central Bank Administration and management of Reserve Bank Functions of Reserve Bank of India, methods of issue, credit control, qualitative and quantitative techniques of credit control
UNIT 3	Commercial Banks, Various functions Credit creation, Loans and Advances, E-Banking, Credit cards, Debit cards, ATM cards, Electronic clearing system, Electronic Fund transfer-Real Time Gross settlement System and Internet Banking
UNIT 4	Opening of an account, Types of deposit account Types of customers, Relationship between banker and a customer Importance of customer relations, Customer grievances and redressal, role of banking ombudsman.
UNIT 5	Negotiable Instruments-Meaning and Characteristics Promissory notes, bills of exchange Cheques including e-cheques, Feature, Material alteration, Crossing-Meaning, Kinds, Endorsement-Meaning and Types, Payment and Collection of Cheques, Rights, Duties, Statutory protection to the paying banker and collecting banker

TEXT BOOK

1. Sundharam & Varshney, 2005, *Banking Theory &Practice*, 17thEd., Sultan Chand & Sons, New Delhi
2. Dr.S.N.Maheswari, 2004, *banking Theory Law & Practice*, 10thEd., Sultan Chand & Sons, New Delhi.

REFERENCE BOOKS

1. B.Santhanam, 2005, *Banking theory Law & Practice*, 4thEd., Margham Publications, Chennai.

COURSE CODE	COURSE TITLE	L	T	P	C
16C463C	PRINCIPLES OF E- COMMERCE	5	-	-	5

UNIT	SYLLABUS
UNIT 1	E-Commerce – Introduction, Advantages and Disadvantages of E-Commerce, Role of E-Commerce, Basis of IT and Business.
UNIT 2	Internet and Networking Concept – Definitions, www, network concept, types of networks (LAN, MAN, WAN), Internet Protocol, TCP/IP, IP Addressing, HTML, HTML tags, Intranet and Extranet.
UNIT 3	Web Marketing Strategies – Introduction, Defferent types of Marketing strategies (product Based and Customer Based), Communicating with different Market segments, Advertising on the web
UNIT 4	Electronic Data Interchange – Introduction on EDI, EDI on internet Supply Chain Management, its software, Online payment, payment cards, advantages and disadvantages of Payment cards.
UNIT 5	Internet Security – Introduction, Computer Security its types , threats, Hackers, Classification of Computer security (Security, Integrity, Necessity), Security Policy and Integrated Security.

Text Books:

1. Electronics Commerce by Gary P. Schnider, fourth annual edition.

Reference:

1. Electronic Commerce by Marily n Greenstein and ToddM Feinman.
2. E-commerce by Kamlesh K. Bajaj and Debjani nag.

COURSE CODE	COURSE TITLE	L	T	P	C
14S63AC	PERSONALITY ENRICHMENT	2	-	-	3

Course objective: To understand the importance of personality and methods to enrich the same.

UNIT	SYLLABUS
UNIT 1	Introduction •Definition of Personality - Components of Personality – Structural and Functional aspects- Determinants of Personality – Biological, Psychological and Socio-Cultural factors- Assessment of Personality – Observation, Interview and Psychological Tests- Misconceptions and Classifications Need for Personality Development.
UNIT 2	Self Awareness and Self Motivation- Self Analysis through SWOT and Johari window- Elements of Motivation- Seven rules of Motivation Techniques and Strategies for Self Motivation Motivation Checklist and Goal Setting based on the principles of SMART Self Motivation and Life
UNIT 3	Regional, National and International events - Geographical, Political and Historical facts - Information on sports and other recreational activities - Basic knowledge with regard to health and health promotion
UNIT 4	Memory, Decision Making and Study Skills Definition and Importance of Memory - Causes of Forgetting - How to forget (thought stopping), how to remember (techniques for improving memory) - The technique of passing exams - The rational decision making process - Improving creativity in decision making and components of creativity
UNIT 5	Power of Positive Thinking Thinking power – seven steps for dealing with doubt- Traits of positive thinkers and high achievers- • Goals and techniques for positive thinking •Enhancement of concentration through positive thinking - Practicing a positive life style

PRACTICAL TRAINING – The course would include the following practical exercises

- Ice Breaking
- Brainstorming
- Stimulation Exercises
- Thought Stopping
- Memory
- Study Skills Training

REFERENCES

1. Mile, D J (2004), Power of Positive Thinking, Delhi, Rohan Book Company.
 2. Pravesh Kumar (2005), All about Self-Motivation, New Delhi, Goodwill Publishing House
 3. Dudley, G A (2004), Double your Learning Power, Delhi, Konark Press, Thomas Publishing Group Ltd.,
 4. Lorayne, H (2004), How to develop a super power memory, Delhi, Konark Press, Thomas Publishing Group Ltd.,
- Hurlock, E B (2006), Personality Development, 28th Reprint, New Delhi, Tata McGraw Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
17E11AA	FOUNDATION ENGLISH	6	-	-	3

UNIT	SYLLABUS
UNIT 1	Unit 1: Ethics & Values a) Ethics – Swami Vivekananda b) Adam & Eve Teasing – A. K. Raju
UNIT 2	Unit 2: Nature and Environment a) Tree Speaks – Dr. C. Rajagopalachari b) Polluting the world – An extract
UNIT 3	Unit 3: Great Speeches a) I have a dream – Martin Luther King b) Goal Setting – Shiv Khera
UNIT 4	Unit 4: One Act Play a) The Refund – Fritz Karinthy b) Goals must be balanced – Shiv Khera
UNIT 5	Unit 5: One Act Play The Refund – Fritz Karinthy

Reference Books:

1. *An Anthology of Prose , Prose for Communication* , Manimekala Publishing House
Edited - Dr. A. Shanmugakani
2. *Petal of Prose and Poetry* , Edited – Dr.P. C. James Daniel , Horrows Publication
3. *English Grammar , Composition and Usage* G. Radha krishnapillai Emerald Publishers
4. *English Conversation Practice* – Gram Taylor Tata McGraw Hill, Publishers.

COURSE CODE	COURSE TITLE	L	T	P	C
16M464k	CORPORATE ACCOUNTING – II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Human Resource Accounting – Accounting Standards – Financial Reporting Practices – Accounting for price level changes
UNIT 2	Amalgamation – Absorption and external reconstruction of a company – (inter company investments excluded)
UNIT 3	Preparation of profit and loss account and balance sheet of banking companies and insurance companies
UNIT 4	Holding Companies and preparation of Consolidated Balance Sheet.(simple problems only)
UNIT 5	Liquidation – meaning – order of payment liquidator’s remuneration – Liquidator’s final statement of accounts.

Reference Books :

1. Shukla and Grewal – Advance Accounts, S.Chand
2. T.S. Reddy and A. Murthy – Corporate Accounting, Margam
3. Jainand Narang – Company Accounts, Kalyani
4. R.L. Gupta – Corporate Accounting, Sultan chand

COURSE CODE	COURSE TITLE	L	T	P	C
16M464L	COMPANY LAW	5	-	-	4

UNIT	SYLLABUS
UNIT 1	▪ Meaning, Definition & Salient Features of Companies Act, 2013 ▪ Kinds of Companies ▪ Promotion, Role of Promoters-Incorporation of a Company
UNIT 2	▪ Memorandum of Association, Contents & Alteration ▪ Articles of Association, Contents & Alteration ▪ Prospectus, Contents & Consequences of misstatement ▪ Doctrine of Ultra Virus & Indoor Management.
UNIT 3	▪ Directors-Appointment, Qualification-Disqualification ▪ Membership in a Company, Modes of acquiring Membership ▪ Rights and Liabilities of Members, Termination of Membership ▪ Corporate Governance- Meaning, benefits of good governance, factors influencing corporate governance.
UNIT 4	• General and Statutory Meeting, Extraordinary Meetings • Resolutions, Meaning and Kinds • Role of Company Secretary with respect to meetings
UNIT 5	▪ Meaning and modes of winding up ▪ Powers of court in winding up ▪ Consequences and procedures for winding up ▪ Powers, Liabilities and Duties of Liquidators

TEXT BOOK

N.D.Kapoor, 2003, *Elements of Company Law*, 27th Ed., Sultan Chand & Sons, New Delhi.

REFERENCES

1. S.Kathireasan & Dr.V.Radha, 2006, *Company Law*, 6th Ed., Prasanna Publishers, Chennai.
2. P.C.Tulsian, 2005, *Business & Corporate Laws*, 1st Ed., Tata McGraw Hill, New Delhi.
3. Majumdar & G.K.Kapoor, 2005, *Company Law*, 9th Ed., S.Chand & Sons, New Delhi.

COURSE CODE	COURSE TITLE	L	T	P	C
16M464M	FINANCIAL MANAGEMENT	5	-	-	3

UNIT	SYLLABUS
UNIT 1	Meaning, objectives and Importance of Finance – Sources of finance – Functions of financial management – Role of financial manager in Financial Management.
UNIT 2	Capital structures planning - Factors affecting capital structures – Determining Debt and equity proportion – Theories of capital structures – Leverage concept
UNIT 3	Cost of capital – Cost of equity – cost of preference capital – Cost of debt – Cost of retained earnings – weighted Average (or) composite cost of capital (WACC) (Simple Problems)
UNIT 4	Dividend policies – Factors affecting dividend payment - Company Law provision on dividend payment – Bonus Issues – Rights Share
UNIT 5	Working capital – components of working capital – types - working capital operating cycle – Factors influencing working capital – Determining (or) Forecasting of working capital requirements. (Simple Problems)

REFERENCE BOOKS :

1. Financial Management - I.M. Pandey
2. Financial Management – Prasanna Chandra
3. Financial Management – S.N. Maheswari
4. Financial Management – Y. Khan and Jain

COURSE CODE	COURSE TITLE	L	T	P	C
16M464N	OFFICE AUTOMATION PACKAGES	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Overview of Desktop-Creation, Copying, Moving, Deletion and Maintenance of files and folders
UNIT 2	Text manipulations-sage of numbering, bullets, footer and header Usage of spell check and find & replace-Text formatting-Picture Insertion and alignment. Creation of documents, using templates-Creation of templates. Mail Merge Concepts. Copying text and picture from Excel and PowerPoint.
UNIT 3	Introduction to MS EXCEL – Work book and Work sheet-Basics of Work book Referencing a cell-Relative Vs. Absolute-Mixed Mode Referencing Logical functions-Mathematical and Trigonometric functions-Text functions-Financial functions-Statistical functions Charts, Data Forms, Sort, Filter, Validation, Subtotal, and Goal Seek.
UNIT 4	Presentation, types, Styles & options Inserting clip arts & picture-Frame movements of above-Insertion of new slides. Preparation of organizing charts-Presentation using wizards
UNIT 5	How to use a browser, including loading URLs-moving to other pages, saving pages, graphics, using e-mail and search engines.

TEXT BOOK

1. R K TAXALI, 2000, *PC Software for windows made simple*, 1st Edition, Tata McGraw Hill Publications, New Delhi.

REFERENCES

2. Jones Graham, 1997, *How to use Internet*, 1st Edition, Jaico: Madras.

COURSE CODE	COURSE TITLE	L	T	P	C
16C464D	BUSINESS COMMUNICATION	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Definition – Methods – Types – Principles of effective Communication – Barriers to Communication – Business Letter – Layout.
UNIT 2	Kinds of Business Letter: Interview – Appointment – Acknowledgement – Promotion – Enquiries – Replies – Orders – Sales – Circular – Complaints.
UNIT 3	Bank Correspondence – Insurance Correspondence – Agency Correspondence – Correspondence with Shareholders, Directors
UNIT 4	Reports Writing – Agenda, Minutes of Meeting – Memorandum – Office Order – Circular – Notes.
UNIT 5	Modern Forms of Communication : Fax – e-mail – Video Conferencing – Internet – Websites and their use in Business.

REFERENCE BOOK:

1. Essentials of Business Communication – Rajendra Pal & J.S. Korlahalli
2. Communication for Business – Shirley Taylor.
3. Business Communication Today – Bovee, Thill, Schatzman
4. Advanced Business Communication – Penrose, Rasbery, Myers]

COURSE CODE	COURSE TITLE	L	T	P	C
16S64AD	COMPUTING SKILL	2	-	-	3

UNIT	SYLLABUS
UNIT 1	<i>Introduction to Computers</i> – Classification of Computers; Role of Computers in society; Inside the Computers – Hardware (processor, memory, i/o, storage), Software (systems, application), CPU, OS, (DOS, Windows, Unix, Linux), Storage Devices; Programming – Overview, need for languages, skills; Networking Basics; Virus; Hacking.
UNIT 2	<i>Word Processing</i> – Open, Save and close word document; Editing text – tools, formatting, bullets; Spell Checker; Navigating in word – keyword, Mouse; document formatting – paragraph alignment, indentation, headers and footers, numbering; printing – preview, options.
UNIT 3	<i>File Management</i> – Understanding the importance of file management; backing of files, navigating thru My Computer and Windows Explorer; Files and Folders – editing, retrieving, deleting, renaming, subfolders; manipulate windows – maximize, minimize; Power point basic terminology, templates, viewing.
UNIT 4	<i>Spreadsheets</i> – MS Excel – opening, entering text and data, formatting, navigating; Formulas – entering, handling and copying; Charts – creating, formatting and printing, header and footer, centering data, printing
UNIT 5	<i>Networks</i> – Internet Explorer – components; www – working, browsing, searching, saving – Bookmark – favorite, create, delete – Printing a page; email – creating, receiving, reading and sending messages.

References:

1. Introduction to Computers – Peter Norton, Tata McGraw-Hill.
2. Microsoft 2003 – Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, Tata McGraw-Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
14E64AA	ENVIRONMENTAL STUDIES	1	-	-	2

UNIT	SYLLABUS
UNIT 1	Definition, scope and importance, Need for public awareness
UNIT 2	Renewable and non-renewable resources: Natural resources and associated problems • Forest Resources: Use and over-exploitation, deforestation case studies, timber extraction, mining, dams and their effects on forests and tribal people. • Water Resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams – benefits and problems. • Mineral Resources: Use and exploitation, environmental effects of extracting using mineral resources case studies. • Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging salinity, case studies. • Energy Resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources – Case Studies. • Land Resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual and conservation of natural resources – Equitable use of resources for sustainable life styles.
UNIT 3	Concept of an Ecosystem – Structure and Function – Producers, consumers and decomposers – Energy flow in the ecosystem – Ecological succession – Food chains, food webs and ecological pyramids – Introduction, types, characteristics, features, structures and function of Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem and Aquatic Ecosystem (ponds, streams, lakes, rivers, oceans, estuaries)
UNIT 4	Introduction – Definition genetic species and eco-system diversity – Bio-geographical classification of India – Value of the biodiversity – consumptive use, productive use, social, ethical. Aesthetic and option values – Biodiversity at Global, National and Local levels – India as a mega – diversity nation – Hot-Spots of biodiversity – Threats to biodiversity habitat loss, poaching of wildlife, man wildlife conflicts – Endangered and endemic species

	of India – Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity
UNIT 5	Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards – Solid waste management causes, effects and control measures of urban and industrial wastes – Role of an individual in prevention of pollution – Pollution of case studies – Disaster management, floods, earthquake, cyclone and landslides.
UNIT 6	Unsustainable to Sustainable development – Urban problems related to energy – Water conservation, rain water harvesting, watershed management – Resettlement and rehabilitation of people; its problems and concerns & Case Studies – Environmental ethics issues and possible solutions – Climate change, global warming, Acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies, Wasteland reclamation – Consumerism and waste products – Environmental Protection Act – Air (Prevention and Control of Pollution) Act – Water (Prevention and Control of Pollution) Act – Wildlife Protection Act – Forest Conservation Act – Issues involved in enforcement of environmental legislation – Public awareness.
UNIT 7	Population growth, variation among nations – Population explosion – Family Welfare Programme – Environment and human health – Human Rights – Value Education – HIV / AIDS – Women and Child welfare – Role of Information Technology in Environment and human health – Case Studies
UNIT 8	Visit to a local area to document environmental assets – river / forest / grassland / hill mountain – Visit to a local polluted site – Urban / Rural / Industrial / Agricultural – Study of common plants, insects, birds – Study of simple ecosystems – pond, river, hill slopes, etc. (Field work equal to 5 lecture hours)

COURSE CODE	COURSE TITLE	L	T	P	C
16M465P	HUMAN RESOURCES MANAGEMENT	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Definition – Objectives – Functions – nature and scope of HRM – Difference between personnel management and HRM – Qualities of good HR manager – changing roles of a HR manager – problems and challenges of HR manager.
UNIT 2	Definition of HR planning – objectives – Steps in HR Planning – Types of Planning – Need and importance – Tools and Techniques - Job analysis – Job analysis – Job Description Job Specification - Job evaluation
UNIT 3	Recruitment and Selection – objectives of Recruitment Recruitment – Sources – internal and external recruitment – application blank – Testing – Interviews – Techniques in selection – Placement & Induction.
UNIT 4	Training and Development – Principles of Training – Assessment of Training needs – methods – evolution of effectiveness of training programme.
UNIT 5	Performance Appraisal – Process – Methods of Performance appraisal – appraisal counseling – Motivation Process – Theories of motivation – compensation – Incentives – Monetary & Non-Monetary – Promotion & Transfers

REFERENCE BOOKS:

1. Aswathappa - HRM Tata me grow hill Publishing co. New Delhi.
2. LM Prasad, HRM – Sultan chand & Sons, New Delhi.
3. Jayashankar – HRM – Margham Publications, Chennai.
4. Chitra Atmaran Naik – Hen – Ane books Pvt.Ltd.
5. Dr. Radha - HRM

COURSE CODE	COURSE TITLE	L	T	P	C
16M465Q	COST ACCOUNTING	5	-	-	5

UNIT	SYLLABUS
UNIT 1	Introduction of cost accounting – Meaning, definition, scope and objectives of cost accounting, cost accounting Vs financial accounting – Difference between cost accounting and Management accounting – Requisites of good costing system – Steps necessary to install a cost system – General principles – Classification methods and techniques of cost accounting
UNIT 2	Elements of cost – Classification of overheads – Cost sheet– cost sheet vs production statement – Stock of Raw materials – specimen cost sheet with inventories – Tenders and quotations.
UNIT 3	Meaning of material control – Essentials, objectives, advantages – Store keeping and inventory control – Economic Ordering Quantity(EOQ) – pricing of material issues (LIFO, FIFO, HIFO, Simple Average, weighted average, Standard Price method, inflated price method) material losses. Computation and control of Labour – Labour turnover – Time keeping department – payroll department – Remuneration and incentives – time rate system, piece rate system – premium and Bonus plan.
UNIT 4	Meaning and definition – Importance- Classification – Primary Distribution of overheads, Secondary distribution of overheads – Absorption of overheads – calculation of Machine hour rate.
UNIT 5	Process Costing – with loss, Normal and Abnormal Loss – Abnormal gain – Inter process profit.

Books for Reference :

1. Cost Accounting : T.S. Reddy Y.Hari Prasad Reddy
2. Cost Accounting : Jain And Narang
3. Cost Accounting : S.P. Iyengar
4. Advanced Problems and Solutions in cost accounting- Dr.S.N. Maheswari.

COURSE CODE	COURSE TITLE	L	T	P	C
16M465R	INCOME TAX LAW & PRACTICE – I	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Meaning of Income – Canons of Taxation and Income Tax Act – Important definitions under the Income Tax Act – Scope of total income – Residential Status – Incomes exempt from Tax.
UNIT 2	Heads of Income – Salaries – Allowances – perquisites and their valuations – Deductions from Salary – Other related provisions – Gratuity – pension – commutation of pension – Provident Fund.
UNIT 3	Income from house property – Definition of annual value deductions from annual value – computation under different circumstances
UNIT 4	Income from business or profession – Allowable and not allowable expenses – General deductions – Principles – Provisions relating to depreciation – deemed business profits chargeable to profits to tax – compulsory maintenance of books of account – audit of accounts of certain persons – special provision for computing incomes on estimated basis under section 44 AD and 45 AE – Computation of income from business or profession
UNIT 5	Filing of return of Income – Assessment procedure in brief – Due date of filling of return – Defective return -Belated Return form – Revised return – Self assessment – Best Judgment assessment - various Income Tax Authorities. & Their powers and duties

Reference Books :

1. Income Tax Law & Accounts – H.C.M.ehrotrc
2. Income Tax Law & Practice – Bhagavathi Prasad
3. Outline of Income Tax - Rupram Gupta
4. Income Tax Law & Accounts – Vinod Singhanian
5. Income Tax Law & Practice – Gaurand Narang

COURSE CODE	COURSE TITLE	L	T	P	C
16M465S	MARKETING MANAGEMENT	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Definition of Marketing and Marketing Management Marketing Process – marketing management – orientation – marketing plan – marketing mix – functions of marketing management – MIS.
UNIT 2	Consumer orientation – Integrated marketing – Business Ethics in Marketing – Direct and online marketing (Cyber Marketing) – Green Marketing – Quantative Techniques for marketing Decisions – Consumerism – Customer Relation Building
UNIT 3	Product – features – Product Mix – Product Policy – Product Planning – New Product Development – Product Life Cycle – Pricing – Importance – Objectives – Pricing Policies, Strategies and Techniques – Pricing Methods.
UNIT 4	Business segmentation – factors- process Definition – Need for Segmentation – factors deciding the success of market segmentation – Bases for Segmentation – Process of market segmentation – Niche Marketing – Characteristics of Niche Market
UNIT 5	Sales promotion techniques – Advertising Sales Promotion Techniques and Methods – Advertising – Objectives Benefits – Selection of Media, Advertising copy – Ethics in Advertising Salesmanship – Objectives, qualities and types of salesman – E. marketing.

Reference Books:

1. Rajan Nair - Marketing – Sultan chand & sons New Delhi
2. Philip Kotler - Marketing Management Prentice Hill
3. R.S.N. Pillai - Modern Marketing S. Chand & Co. Ltd. New Delhi
4. Cundiff - Fundamentals of Marketing
5. Dr. R.B. Rudani - Basics of marketing mgt. Theory & Practice, S. Chand & Co. Ltd.
6. Dr. D.L. Varshney & Dr. S.L. Gupta Marketing mgt. An Indian Perspective.

COURSE CODE	COURSE TITLE	L	T	P	C
16A465A	ENTREPRENEURIAL DEVELOPMENT	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Concept of Entrepreneurship – Definition – Meaning – Types – Qualities of an Entrepreneur – Classification of Entrepreneurs – Factors influencing Entrepreneurship – Functions of Entrepreneurs
UNIT 2	Entrepreneurial Development – Agencies – Commercial Banks – District Industries Centre – National Small Industries Corporation – Small Industries Development Organisation – Small Industries Service Institute. All India Financial Institutions – IDBI –IFCI – ICICI – IRDBI.
UNIT 3	Project Management - Business idea generation techniques – identification of Business Opportunities – Feasibility study – Marketing, Finance, Technology & Legal Formalities- Preparation of Project Report Tools of Appraisal.
UNIT 4	Entrepreneurial Development programmes (EDP) – their role, relevance, and achievements – Role of Government in organizing EDPs – critical evaluation
UNIT 5	Economic development and entrepreneurial growth Role of Entrepreneur in economic growth – Strategic approaches in the changing economic scenario for small scale Entrepreneurs – Networking – Niche play, Geographic Concentration, Franchising/dealership – Development of Women Entrepreneurship.

REFERENCE BOOKS:

1. Srinivasan N.P. – Entrepreneurial Development
2. Saravanavel – Entrepreneurial Development
3. Vasant Desai – Project Management
4. Jayashree Suresh – Entrepreneurial Development
5. Holt – Entrepreneurship – New Venture Creation

COURSE CODE	COURSE TITLE	L	T	P	C
16M466T	ACCOUNTING FOR MANAGERIAL DECISIONS	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Management Accounting – Definition, Functions, Scope, Management Accounting Vs Financial Accounting, Management Accounting Vs Cost Accounting.
UNIT 2	Ratio Analysis – Meaning, Types, Advantages and Limitations – Profitability ratios – Turnover Ratios – Financial Ratios.
UNIT 3	Funds flow analysis – Meaning, Importance, Difference between funds flow and Balance Sheet – Advantages and Limitations – Cash flow statement – Meaning – Importance – Difference between funds flow analysis and cash flow analysis – Advantages and Limitations.
UNIT 4	Budgets and Budgetary Control – Meaning, objectives, merits and demerits – Types of budgets – Production, Production cost budget, Cash budget, Flexible budget, Sales budget.
UNIT 5	Marginal Costing (excluding decision making) – CVP analysis – Break even analysis.

REFERENCE BOOKS:

1. Management Accounting – T.S. Reddy, Y. Hari Prasad Reddy, - Margham Publications.
2. Dr. S.N. Maheswari – Management Accounting, Sultan Chand & Sons
3. Jain & Narang – Management Accounting, Kalyani Publishers

COURSE CODE	COURSE TITLE	L	T	P	C
16M466U	FINANCIAL SERVICES	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Meaning and importance of Financial Service – Types of Financial Services – Financial services and economic environment – players in Financial Services Sector.
UNIT 2	Merchant Banking – Functions – Issue Management – Managing of new issues – underwriting - capital market - stock exchange - Rule & SEBI.
UNIT 3	Leasing and Hire purchase – concepts and features – Types of Lease.
UNIT 4	Factoring – Functions of factor – Consumer finance – Venture capital – Mutual funds – Credit rating.
UNIT 5	Insurance – Different Types – Life, marine, fire, motor, health, pension plan, annuity, rural insurance. Insurance Laws and Regulations (A brief introduction to IRDA Insurance Act 1938)

Reference Books:

1. Mahendra Raja – F.S. –Sultan chand Pub – New Delhi – 1998.
2. M.Y. Khan – FS – tata mchraw Hill – New Delhi – 2000.
3. D. Joseph Anbrasur, V.K. Boominathan, P. Manoharan, G. Gnanaraju.
4. FS. Sultan chand & sons – New Delhi – 2004.
5. Shasi K.Gupta & Nisha Aggarwar – F.S. Kalyani – Pub – 2010 New Delhi Chennai.
6. B. Santhanam – Financial Services – Margham Publication – 2010 – Chennai.

COURSE CODE	COURSE TITLE	L	T	P	C
16M466V	INCOME TAX LAW & PRACTICE – II	5	-	-	5

UNIT	SYLLABUS
UNIT 1	Income under capital gains – short term, long term capital gains – cost of acquisition – cost of improvement – indexation of cost – capital gains under different circumstances – Exempted capital gains – computation of capital gains
UNIT 2	Income from other sources – as a residing head of income – their computation – grossing up – deduction in computing income under the head and other related provisions.
UNIT 3	Clubbing of income – Transfer of income without the transfer of asset – circumstances under which the individual is assessable in respect of remuneration of spouse – assess ability of income from assets transferred to spouse , son's wife, another person for the benefit of spouse – Assessability in respect of income of minor child – setoff – carry forward and set off.
UNIT 4	Permissible deductions from gross total income – sec 80C to 80U.
UNIT 5	Assessment of individuals, Partnership firms and Association of persons. Simple problems Only

Reference Books :-

1. Income Tax Law & accounts - H.C. Mehrotra
2. Income Tax Law & Practice - Bhagavathi Prasad
3. Outline of Income Tax - Rupram Gupta
4. Income Tax Law & accounts - Vinod K.Singhania
5. Income Tax Law & Practice - Gaurand Narang

COURSE CODE	COURSE TITLE	L	T	P	C
16M466W	COMPUTER APPLICATIONS - TALLY	6	-	-	3

UNIT	SYLLABUS
UNIT 1	Computer - Environment usage - Tally loading - Setting the directory.
UNIT 2	Tally - Starting - Creating Company - Altering company operations - General environment configuration – Functional keys and shortcut keys
UNIT 3	Voucher entry - delivery note - Payment voucher - Receipt voucher debit note - Credit note.
UNIT 4	Creations of various accounts - Indexing - Creation of ledgers - Multiple ledgers - Cost categories - cost centers, Budget - Bank reconciliation - Inventory maintenance - Inventory valuation - Interest calculation
UNIT 5	Consolidation of accounts - Import / export data - Final accounts -Reporting - Fund flow statements, cash flow statements - Inventory analysis report - Printing of Report – ERP

Reference Books:

1. Vishnu Priya Singh – Tally 9
2. Kogent Solutions Inc – Tally 9
3. Ramaiah Publications – Tally 9

COURSE CODE	COURSE TITLE	L	T	P	C
16A466B	PRACTICAL AUDITING	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Auditing – Meaning – definition – objectives – kinds
UNIT 2	Internal control – internal check – Internal audit – audit Note book – Audit working paper - Audit programme
UNIT 3	Vouching – verification & valuation of assets & liabilities
UNIT 4	Company Auditor – appointment – qualification – disqualification – removal of auditor – Audit report – duties, powers and liabilities of auditors.
UNIT 5	EDP Audit

Reference Books:

1. B.N.Tandon – practical Auditing sultan chand publication – 2009 – New Delhi
2. Dinakarpagare – principles of Auditing sultan chand publication – 2009 – New Delhi
3. Spicer & Pegler – Auditing, MC million publications – 2000 – New Delhi

COURSE CODE	COURSE TITLE	L	T	P	C
14V66AG	VALUE EDUCATION	-	-	-	2

Course objective: To impart value system in the students minds.

UNIT	SYLLABUS
UNIT 1	Introduction: Value Education and its relevance to present day – Meaning of Value Education – The meaning of the word value – Significance of Thirukkural about ‘Value Education’ – Personal Values: Meaning – Different personal values – Love – Compassion – Gratitude – Courage – Optimism – Friendship
UNIT 2	Family Values: Meaning – Social Attitude to Women, Children and Elders – Familal Responsibilities – Dos and Don’ts for Stronger Family bonding – Significance of Thirukkural about ‘Family Values’
UNIT 3	Self Esteem: Fear of failure – Approval seeking – Self Esteem is not selfishness / Ego – Self Esteem / Arrogance – Qualities of a person with Self Esteem – Significance of Thirukkural about ‘Self Esteem’ – Anger: Common situations where people fly into rage – Anger at services – Some practical methods of handling anger – techniques to handle our anger – Handling anger in others – methods to replace anger.

REFERENCE BOOKS:

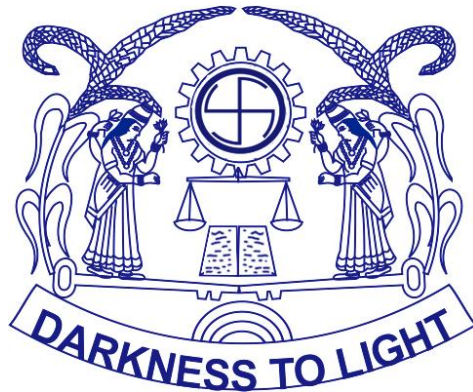
1. Value Education - N S Raghunathan, Margham Publication

DHANRAJ BAID JAIN COLLEGE
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Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COMMERCE
B.Com. (CA)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

SCHEME OF EXAMINATIONS

SEMESTER I

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Foundation Course: Tamil-I or any language	5	3	100	3
II	Foundation Course: English – I	5	3	100	3
Core I	Core Course: Financial Accounting – I	6	3	100	4
Core II	Core Course: Business statistics	6	3	100	4
Subject -I	Introduction to Information Technology	6	3	100	5
Non-Major	Basis of Retail Marketing	4	3	100	2
	Soft Skill	2	3	100	2

SEMESTER II

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Foundation Course: Tamil-II or any language	5	3	100	3
II	Foundation Course: English –II	5	3	100	3
Core I	Core Course: Financial Accounting – II	6	3	100	4
Core II	Core Course: Office Automation Packages	6	3	100	4
Subject -I	Indian Economy	6	3	100	5
Non-Major	Fundamental of Insurance	4	3	100	2
	Soft Skill	2	3	100	2

SEMESTER III

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Corporate Accounting – I	6	3	100	4
	Business Law	6	3	100	3
II	Business Management	6	3	100	4
Core II	Principles of E commerce	6	3	100	4
Subject -I	Banking Theory Law & Practice	5	3	100	5
Non-Major	Personality Enrichment	1	3	100	3

SEMESTER IV

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Corporate Accounting – II	6	3	100	4
	Company Law	5	3	100	4
II	Business Communication	5	3	100	3
Core I	Management Information System	5	3	100	3
Core II	Programming in C	4	3	60	3
	Application Lab-Programming in 'C'	2		40	2
Non-Major	Computing Skill	2	3	100	3
	Environmental Studies - Field Work	1	3	100	2

SEMESTER V

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Cost Accounting	6	3	100	5
II	Income Tax Law & Practice - I	6	3	100	4
Core I	Entrepreneurial Development	6	3	100	4
Core II	Visual Basic Programming & DBMS	3	3	60	2
	Application Lab-Visual Programming and DBMS	3		40	2
Subject -I	Web Design	6	3	100	5

SEMESTER VI

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Financial Services	6	3	100	4
II	Practical Auditing	6	3	100	4
Core I	Accounting for Managerial Decision	6	3	100	5
Core II	Computer Applications - Tally	6	3	100	5
Subject -I	Income Tax Law & Practice - II	5	3	100	4
Non-Major	Value Education	1			2
	Compulsory Extension				1

COURSE CODE	COURSE TITLE	L	T	P	C
16M451A	FINANCIAL ACCOUNTING – I	6	-		4

UNIT	SYLLABUS
UNIT 1	<u>Basic Accounting Concepts & Conventions Final Accounts:</u> Meaning and scope of Accounting, Basic Accounting concepts and conventions – Objectives of Accounting – Preparation of Final Accounts of a Sole Trading concern – With necessary adjustments.
UNIT 2	Insurance Claims – Average Clause Policy Excluding Loss of Profit – Average due date.
UNIT 3	Classification of Errors – Rectification of errors – Preparation of Suspense Account – Bank Reconciliation Statement (BRS).
UNIT 4	Depreciation accounting – Straight line & Diminishing Balance including change in method of Depreciation.
UNIT 5	Single Entry System – Meaning, Features , Defects – Difference between single entry and Double entry system – Statement of Affairs method – Conversion method.

REFERENCE BOOKS:

1. R.L. Gupta & V.K. Gupta _ Financial Accounting – Sultan Chand Publishing – New Delhi.
2. Jain & Narang – Financial Accounting – Kalyani Publishers Patiala
3. Tulsian – Financial Accounting – Tata MC Graw will New Delhi.
4. T.S. Reddy & A. Murthy – Financial Accounting – Margham Publishers T. Nagar – 17.
5. Rajasekar – Financial Accounting – Pearson Publications

COURSE CODE	COURSE TITLE	L	T	P	C
16M451B	BUSINESS STATISTICS	6	-		4

UNIT	SYLLABUS
UNIT 1	Introduction – Meaning and Definition of Statistics – Collection and Tabulation of Statistical data – Diagrammatic and Graphical representation of data.
UNIT 2	Measures of Central Tendency – Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean.
UNIT 3	Measures of Dispersion – Range – Standard deviation – Mean deviation – Quartile deviation.
UNIT 4	Correlation Analysis – Types of Correlation – Karl Pearson's coefficient of correlation – Rank Correlation.
UNIT 5	Regression Analysis – Uses of Regression Analysis – Regression Lines.

RECOMMENDED BOOKS:

1. Statistical Methods – S.P. GUPTA
2. Business Statics – P.R. VITAL
3. Basic Statics – B.AGARWAL
4. Business Statistics- J.K. SHARMA

COURSE CODE	COURSE TITLE	L	T	P	C
14C451A	INTRODUCTION TO INFORMATION TECHNOLOGY	6	-		5

UNIT	SYLLABUS
UNIT 1	▪ The Computer system-their uses and components-CPU: control & logic unit ▪ Generation of computers-Classification of Computers ▪ PC-Laptop ▪ Memory: Volatile, non-volatile & virtual memory-Types of Bus.
UNIT 2	▪ Input devices: Keyboard, mouse, joystick, scanner, light pen, and touch screen ▪ Output devices: printers, dot-matrix printer, ink-jet printer, laser printer-monitor. ▪ Storage devices: Magnetic tape, Hard disks, CD-ROM, Speakers
UNIT 3	▪ Software concepts: Types of software ▪ System software: Operation System and its types, Assembler, Compiler, Interpreter. ▪ Application software: Word processing, Presentation tools, Electronic Spreadsheets Database system, DTP Packages, Graphic packages, Business system.
UNIT 4	▪ Principles and Techniques of Programming: Program definition-Program lifestyle. ▪ Flow-Chart: Definition, Symbols, Benefits, Limitations and examples. ▪ Characteristics, Benefits, Drawbacks and Examples of Algorithms.
UNIT 5	▪ Databases: Structure of a data table. ▪ Internet features– E-mail

TEXT BOOKS:

1. C.S.V.Murthy, 2001, *Fundamentals of Computers*, 1st Edition, Himalaya publishing House.
2. LPEditorial Board, *Fundamentals of Computer*, 1st Edition, Law Point Publishers.

REFERENCES

1. V.RAJARAMAN, 2002, *Fundamentals of Computers*, 3rd Edition, Prentice Hall of India.
2. Marilyn W. Meyer and Roberta L. Baber, *Computers in your future*, 2nd Edition Prentice Hall of India.

Course Code	COURSE TITLE	L	T	P	C
14N61ZA	BASIS OF RETAIL MARKETING (NON – MAJOR)	4	-		2

UNIT	SYLLABUS
UNIT 1	Retailing – Definition – Retail Marketing – Growth Of Organized Retailing In India – Importance Of Retailing
UNIT 2	Function of Retailing – Characteristics Of Retailing – Types Of Retailing – Store Retailing – Non Store Retailing.
UNIT 3	Retail Location Factors – Branding In Retailing – Private Labeling – Franchising Concept
UNIT 4	Communication Tools Used In Retailing – Sales Promotion, E –Tailing – Window Display
UNIT 5	Supply Chain Management – Definition – Importance – Role Of Information Technology In Retailing.

Recommended Books :

1. Gilbert Pearson , Retail Marketing Education Asia , 2001
2. Vedamani Gibson , Retail Marketing Jaici Publishing House New Delhi – 2000
3. Berman & Evans Retail Management Phi , New Delhi 2001
4. Michael Levy And Barton A Weitz, Retailing Management Tata Mc , Graw Hill, New Delhi 2001
5. Dr. L. Natarajan Retail Marketing Margham Publication Chennai

COURSE CODE	COURSE TITLE	L	T	P	C
14S61AA	Soft skill – I ESSENTIALS OF LANGUAGE COMMUNICATION-II	2	-		4

UNIT	SYLLABUS
UNIT 1	: Recap of language skills – vocabulary, phrase, clause, sentence
UNIT 2	: Fluency building.
UNIT 3	Principles of Communication
UNIT 4	Types of Communication
UNIT 5	LSRW in Communication

Recommended Texts

- Monippally, Matthukutty. M. 2001. *Business Communication Strategies*. 11th Reprint. Tata McGraw-Hill. New Delhi.
- Sasikumar. V and P.V. Dhamija. 1993. *Spoken English: A Self-Learning Guide to Conversation Practice*. 34th Reprint. Tata McGraw-Hill. New Delhi.
- Swets, Paul. W. 1983. *The Art of Talking So That People Will Listen: Getting Through to Family, Friends and Business Associates*. Prentice Hall Press. New York.
- Hewings, Martin. 1999. *Advanced English Grammar: A Self-Study Reference and Practice Book for South Asian Students*. Reprint 2003. Cambridge University Press. New Delhi.
- Lewis, Norman. 1991. *Word Power Made Easy*. Pocket Books.
- Hall and Shepherd. *The Anti-Grammar Grammar Book: Discovery Activities for Grammar Teaching*. Longman

COURSE CODE	COURSE TITLE	L	T	P	C
16M52C	FINANCIAL ACCOUNTING – II	6	-		4

UNIT	SYLLABUS
UNIT 1	Branch Accounts – Dependent Branches – Stock and Debtors System – Branch Trading Accounts – Distinction between whole sale profit and Retail Profit
UNIT 2	Departmental Accounts – Basis for allocation of expense – Inter departmental -Transfer of cost (or) Selling price – Treatment of expenses which cannot be allocated
UNIT 3	Hire Purchase Accounting – Treatment of Default and Repossession – Complete and Partial – Installment Purchase System
UNIT 4	Partnership Accounts – Concepts - Treatment of Goodwill – Admission – Retirement cum Admission – Simple Problems only.
UNIT 5	Partnership Dissolution – Insolvency of a partner – All Partners – Distribution – Simple Problems only.

REFERENCE BOOKS:

1. R.L. Gupta & V.K. Gupta _ Financial Accounting – Sultan Chand Publishing – New Delhi.
2. Jain & Narang – Financial Accounting – Kalyani Publishers Patiala
3. Tulsian – Financial Accounting – Tata MC Graw will New Delhi.
4. T.S. Reddy & A. Murthy – Financial Accounting – Margham Publishers T. Nagar – 17.
5. Rajasekar – Financial Accounting – Pearson Publications

COURSE CODE	COURSE TITLE	L	T	P	C
14M452D	OFFICE AUTOMATION PACKAGES	6	-		4

UNIT	SYLLABUS
UNIT 1	Overview of Desktop-Creation, Copying, Moving, Deletion and Maintenance of files and folders
UNIT 2	- Text manipulations-sage of numbering, bullets, footer and header - Usage of spell check and find & replace-Text formatting-Picture Insertion and alignment. - Creation of documents, using templates-Creation of templates. - Mail Merge Concepts. - Copying text and picture from Excel and PowerPoint.
UNIT 3	- Introduction to MS EXCEL – Work book and Work sheet-Basics of Work book - Referencing a cell-Relative Vs. Absolute-Mixed Mode Referencing - Logical functions-Mathematical and Trigonometric functions-Text functions-Financial functions-Statistical functions - Charts, Data Forms, Sort, Filter, Validation, Subtotal, and Goal Seek.
UNIT 4	- Presentation, types, Styles & options - Inserting clip arts & picture-Frame movements of above-Insertion of new slides. - Preparation of organizing charts-Presentation using wizards
UNIT 5	How to use a browser, including loading URLs-moving to other pages, saving pages, graphics, using e-mail and search engines.

TEXT BOOK

1. R K TAXALI, 2000, *PC Software for windows made simple*, 1st Edition, Tata McGraw Hill Publications, New Delhi.

REFERENCES

1. Jones Graham, 1997, *How to use Internet*, 1st Edition, Jaico: Madras.

COURSE CODE	COURSE TITLE	L	T	P	C
16C452B	INDIAN ECONOMY	6	-		5

UNIT	SYLLABUS
UNIT 1	Features of Less Developed and Developing Economics – Economics and Non Economic Factors Impeding Economic Growth and Development – Factor Determining Economic Development
UNIT 2	Human Resources – Population Growth as a Regarding Factor – Population Policy
UNIT 3	Agriculture – Its Contribution to Economic Development – Food Problem – Methods of Solving it – Measure to Increase Agricultural Productivity – Land Reforms – Green Revolution – Agricultural Credit.
UNIT 4	Role of Industries in Economic Development – Cottage and Small Scale Industries – Large Scale Industries – Iron and Steel Cement and Sugar, Public Sector – Trade Unions.
UNIT 5	Transport (Road, Railway and Civil aviation) Transport Co – Operation – Poverty In India – Poverty Eradication Programmes – Planning in India – Objectives – Achievement of Five Year Plan.

Recommended Books:

1. Dhingara I.C	:	Indian Economy
2. Dutt and Sundaram	:	Indian Economy
3. S. Sankaran	:	Indian Economy
4. Five year plan	:	Govt. of India Publication
5. The economic & Political weekly:	:	Govt. of India Publication
6. Economic Survey	:	Govt. of India Publication

Course Code	COURSE TITLE	L	T	P	C
14N62ZB	FUNDAMENTAL OF INSURANCE (NON MAJOR)	4	-		2

UNIT	SYLLABUS
UNIT 1	Origin And History Of Insurance – Meaning And Definition Of Insurance – Features Of Insurance – Principle Of Insurance – Objective And Advantage Of Insurance – Types Of Insurance – Insurance – Insurance Organization In India And Their Profile – Insurance Regulatory And Development Authority – Its Duties And Functions
UNIT 2	Meaning And Definition Of Life Insurance – Its Features – Its Fundamental Principles – Types Of Policies In Life Insurance - Meaning And Definition Of Fire Insurance – Its Features – Its Fundamental Principles – Types Of Policies In Fire Insurance – Meaning And Definition Of Marine Insurance – Its Features – Its Fundamental Principles – Types Of Policies In Marine Insurance.

Recommended Books:

1. A. Murthy : Elements Of Insurance
2. M.N.Mish : Insurance – Principles And Practice

COURSE CODE	COURSE TITLE	L	T	P	C
14S62AB	Soft skill – II ESSENTIALS OF SPOKEN / PRESENTATION SKILLS-II	2	-		2

Objectives

- *train* students to become aware of their thinking style and to enable them to convert thinking into performance.
- *prepare* students to evolve mental models for intra-personal and inter-personal transactions.
- *make* students reflect and improve their use of body language – posture, gesture, facial expression, tone.

UNIT	SYLLABUS
UNIT 1	Thinking and Articulation – cognitive, affect, critical, creative aspects of articulation
UNIT 2	Acquisition of Oral and Aural Skills.
UNIT 3	Communication Boosters – body language
UNIT 4	Function of Cultural Codes in Presentation – etiquette.
UNIT 5	Models of Presentation.

Recommended Texts

- Powell. *In Company*. MacMillan.
- Cotton, et al. *Market Leader*. Longman.
- Pease, Allan. 1998. *Body Language: How to Read Others Thoughts by their Gestures*. Sudha Publications. New Delhi.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice: A Reader*. Basic Books. New York.
- De Bono, Edward. 2000. *Six Thinking Hats*. 2nd Edition. Penguin Books.
- De Bono, Edward. 1993. *Serious Creativity*. Reprint. Harper Business.

COURSE CODE	COURSE TITLE	L	T	P	C
16M453E	CORPORATE ACCOUNTING – I	6	-		4

UNIT	SYLLABUS
UNIT 1	Company – Definition - kinds of companies, types of shares – Issue of shares and debentures – Issue at par, premium and discount – Forfeiture and reissue- underwriting of shares and debentures – Liability of under writers – partial, complete and firm
UNIT 2	Redemption of Preference shares and debentures – purchase of business – Profit prior to incorporation.
UNIT 3	Preparation of Company’s final accounts – Company Balance sheet preparation – computation of Managerial Remuneration.
UNIT 4	Valuation of goodwill and shares
UNIT 5	Internal Reconstruction – Alteration of share capital and Reduction of capital.

Reference Books :

1. Shukla and Grewal – Advanced Accounts, S.Chand
2. T.S. Reddy and A.Murthy – Corporate Accounting, Margam
3. Jain and Narrang - Company Accounts, Kalyani.
4. R.L.Gupta – Corporate Accounting, Sultan chand.
5. Chakraborti- Advanced Accountancy.

COURSE CODE	COURSE TITLE	L	T	P	C
16M453G	BUSINESS LAW	6	-		3

UNIT	SYLLABUS
UNIT 1	<u>Nature of Contract : Object of Law of contract</u> The Indian contract act 1872 – Definition of contract - Essential elements of a valid contract – clarification of contracts – offer and acceptance and Communication of offer and Acceptance and Revocation. Consideration – Capacity to contract – Free consent - Legality of object – void agreement.
UNIT 2	Performance of contract – offer to perform contracts which need not be performed – by whom contract must be performed who can demand performance. Discharge of Contract – meaning – methods – by performance –by agreement – impossibility of performance.
UNIT 3	Remedies for Breach of Contract – Introduction Recession – Damages – Specific Performance – injunction - Quasi contracts.
UNIT 4	Contract of Indemnity and guarantee – Contract of bailment and pledge – Contract of Agency – Creation of agency – Rights, duties and liabilities of an agent - Termination of agency.
UNIT 5	Sale of goods act: Formation of contract of Sale - caveat emptor - Express and implied conditions and warranties – Performance of Contract of Sale – Rights of an unpaid Seller.

Books Recommended

1. N.D.Kapoor- “Business Law” Sulthanchand Publishers
2. Srinivasan Business Law Margham Publishers Chennai – 2004
3. Kuchcal, Mercantile Law, Vikas Publishing house New Delhi – 2003
4. Commercial / Business Law – N.D. Kapoor

COURSE CODE	COURSE TITLE	L	T	P	C
16M453H	BUSINESS MANAGEMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	Management : Importance – Definition – Nature and Scope of Management Process – Role and Functions of a Manager – Levels of Management – Development of Scientific Management and other Schools of thought and approaches.
UNIT 2	Planning: Nature – Importance – forms – Types – Steps in Planning – Objectives – Policies – Procedures and Methods – Natures and Types of Policies – Decision Making- Process of Decision-Making – Types.
UNIT 3	Organizing : Types of Organizations – Organization Structure – Span of Control– Departmentalization – Informal Organization.
UNIT 4	Authority – Delegation – decentralization – Difference between Authority and Power – Responsibility –Direction – Nature and Purpose.-- Leader ship and Kinds Motivation Kinds Of Motivation
UNIT 5	Co- Ordination – Need, Type and Techniques and Requisites for Excellent Co - Ordination – Controlling – Meeting and Importance – Control Process.

REFERENCE BOOKS:

1. P.C. Tripathi & P.N. Reddy
2. L.M. Prasad
3. Dinkar Pagare
4. C.B. Gupta
5. N. Premavathy
6. J. Jayasankar

Principles of Management
Principles of Management
Principles of Management
Business Management
Business Management
Principles of Management

COURSE CODE	COURSE TITLE	L	T	P	C
16M453J	PRINCIPLES OF E- COMMERCE	6	-		4

UNIT	SYLLABUS
UNIT 1	E-Commerce – Introduction, Advantages and Disadvantages of E-Commerce, Role of E-Commerce, Basis of IT and Business.
UNIT 2	Internet and Networking Concept – Definitions, www, network concept, types of networks (LAN, MAN, WAN), Internet Protocol, TCP/IP, IP Addressing, HTML, HTML tags, Intranet and Extranet.
UNIT 3	Web Marketing Strategies – Introduction, Defferent types of Marketing strategies (product Based and Customer Based), Communicating with different Market segments, Advertising on the web.
UNIT 4	Electronic Data Interchange – Introduction on EDI, EDI on internet Supply Chain Management, its software, Online payment, payment cards, advantages and disadvantages of Payment cards.
UNIT 5	Internet Security – Introduction, Computer Security its types , threats, Hackers, Classification of Computer security (Security, Integrity, Necessity), Security Policy and Integrated Security.

Text Books:

1. Electronics Commerce by Gary P. Schnider, fourth annual edition.

Reference:

1. Electronic Commerce by Marilyn Greenstein and ToddM Feinman.
2. E-commerce by Kamlesh K. Bajaj and Debjani nag.

COURSE CODE	COURSE TITLE	L	T	P	C
16C453C	BANKING THEORY LAW AND PRACTICE	5	-		5

UNIT	SYLLABUS
UNIT 1	- Definition of banking-Classification of banks-Role of banks in economic development - Banking Regulation Act: Importance, Provisions regarding capital structure, Core Capital I &II – Capital Adequacy Ratio-Appropriation of funds, Licensing, Opening of new branches, Management and control over banks.
UNIT 2	- Characteristics of a Central Bank - Administration and management of Reserve Bank - Functions of Reserve Bank of India, methods of issue, credit control, qualitative and quantitative techniques of credit control
UNIT 3	- Commercial Banks, Various functions - Credit creation, Loans and Advances, E-Banking, Credit cards, Debit cards, ATM cards, Electronic clearing system, Electronic Fund transfer-Real Time Gross settlement System and Internet Banking
UNIT 4	- Opening of an account, Types of deposit account - Types of customers, Relationship between banker and a customer - Importance of customer relations, Customer grievances and redressal, role of banking ombudsman.
UNIT 5	- Negotiable Instruments-Meaning and Characteristics - Promissory notes, bills of exchange - Cheques including e-cheques, Feature, Material alteration, Crossing-Meaning, Kinds, Endorsement-Meaning and Types, Payment and Collection of Cheques, Rights, Duties, Statutory protection to the paying banker

TEXT BOOK

1. Sundharam & Varshney, 2005, *Banking Theory &Practice*, 17thEd., Sultan Chand & Sons, New Delhi
2. Dr.S.N.Maheswari, 2004, *banking Theory Law & Practice*, 10thEd., Sultan Chand & Sons, New Delhi.

REFERENCE BOOKS

1. B.Santhanam, 2005, *Banking theory Law & Practice*, 4thEd., Margham Publications, Chennai.
2. Dr.K Nirmala Prasad & J Chandradass, 2005, *Banking theory Law & Practice*, 1st Ed., Himalaya Publishing House, Mumbai.
3. M.L.Tannan, 2005, *Banking Law & Practice*, 21st Ed., Wadheva Publishers, Mumbai.

COURSE CODE	COURSE TITLE	L	T	P	C
14S63AC	PERSONALITY ENRICHMENT	1	-		3

UNIT	SYLLABUS
UNIT 1	• Definition of Personality • Components of Personality – Structural and Functional aspects • Determinants of Personality – Biological, Psychological and Socio-Cultural factors • Assessment of Personality – Observation, Interview and Psychological Tests • Misconceptions and Classifications • Need for Personality Development
UNIT 2	Self Awareness and Self Motivation • Self Analysis through SWOT and Johari window • Elements of Motivation • Seven rules of Motivation • Techniques and Strategies for Self Motivation • Motivation Checklist and Goal Setting based on the principles of SMART • Self Motivation and Life
UNIT 3	General Knowledge and Current Affairs • Regional, National and International events • Geographical, Political and Historical facts • Information on sports and other recreational activities • Basic knowledge with regard to health and health promotion
UNIT 4	Memory, Decision Making and Study Skills • Definition and Importance of Memory • Causes of Forgetting • How to forget (thought stopping), how to remember (techniques for improving memory) • The technique of passing exams • The rational decision making process • Improving creativity in decision making and components of creativity

UNIT 5	Power of Positive Thinking • Thinking power – seven steps for dealing with doubt • Traits of positive thinkers and high achievers • Goals and techniques for positive thinking • Enhancement of concentration through positive thinking • Practicing a positive life style
PRACTICAL TRAINING	The course would include the following practical exercises • Ice Breaking • Brainstorming • Stimulation Exercises • Thought Stopping • Memory • Study Skills Training

Course objective: To understand the importance of personality and methods to enrich the same.

REFERENCES

1. Mile, D J (2004), Power of Positive Thinking, Delhi, Rohan Book Company.
2. Pravesh Kumar (2005), All about Self-Motivation, New Delhi, Goodwill Publishing House
3. Dudley, G A (2004), Double your Learning Power, Delhi, Konark Press, Thomas Publishing Group Ltd.,
4. Lorayne, H (2004), How to develop a super power memory, Delhi, Konark Press, Thomas Publishing Group Ltd.,
5. Hurlock, E B (2006), Personality Development, 28th Reprint, New Delhi, Tata McGraw Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
16M454k	CORPORATE ACCOUNTING – II	6	-		4

UNIT	SYLLABUS
UNIT 1	Human Resource Accounting – Accounting Standards – Financial Reporting Practices – Accounting for price level changes.
UNIT 2	Amalgamation – Absorption and external reconstruction of a company – (inter company investments excluded)
UNIT 3	Preparation of profit and loss account and balance sheet of banking companies and insurance companies
UNIT 4	Holding Companies and preparation of Consolidated Balance Sheet.(simple problems only)
UNIT 5	Liquidation – meaning – order of payment liquidator's remuneration – Liquidator's final statement of accounts.

Reference Books :

1. Shukla and Grewal – Advance Accounts, S.Chand
2. T.S. Reddy and A. Murthy – Corporate Accounting, Margam
3. Jain and Narang – Company Accounts, Kalyani
4. R.L. Gupta – Corporate Accounting, Sultan chand

COURSE CODE	COURSE TITLE	L	T	P	C
16M454L	COMPANY LAW	5	-		4

UNIT	SYLLABUS
UNIT 1	- Meaning, Definition & Salient Features of Companies Act, 2013 - Kinds of Companies - Promotion, Role of Promoters-Incorporation of a Company
UNIT 2	- Memorandum of Association, Contents & Alteration - Articles of Association, Contents & Alteration - Prospectus, Contents & Consequences of misstatement - Doctrine of Ultra Virus & Indoor Management.
UNIT 3	- Directors-Appointment, Qualification-Disqualification - Membership in a Company, Modes of acquiring Membership - Rights and Liabilities of Members, Termination of Membership - Corporate Governance- Meaning, benefits of good governance, factors influencing corporate governance.
UNIT 4	- General and Statutory Meeting, Extraordinary Meetings - Resolutions, Meaning and Kinds - Role of Company Secretary with respect to meetings
UNIT 5	- Meaning and modes of winding up - Powers of court in winding up - Consequences and procedures for winding up - Powers, Liabilities and Duties of Liquidators

TEXT BOOK

N.D.Kapoor, 2003, *Elements of Company Law*, 27th Ed., Sultan Chand & Sons, New Delhi.

REFERENCES

1. S.Kathiresan & Dr.V.Radha, 2006, *Company Law*, 6th Ed., Prasanna Publishers, Chennai.
2. P.C.Tulsian, 2005, *Business & Corporate Laws*, 1st Ed., Tata McGraw Hill, New Delhi.
Majumdar & G.K.Kapoor, 2005, *Company Law*, 9th Ed., S.Chand & Sons, New Delhi

COURSE CODE	COURSE TITLE	L	T	P	C
16M454M	BUSINESS COMMUNICATION	5	-		3

UNIT	SYLLABUS
UNIT 1	Definition – Methods – Types – Principles of effective Communication – Barriers to Communication – Business Letter – Layout.
UNIT 2	Kinds of Business Letter: Interview – Appointment – Acknowledgement – Promotion – Enquiries – Replies – Orders – Sales – Circular – Complaints.
UNIT 3	Bank Correspondence – Insurance Correspondence – Agency Correspondence – Correspondence with Shareholders, Directors.
UNIT 4	Reports Writing – Agenda, Minutes of Meeting – Memorandum – Office Order – Circular – Notes.
UNIT 5	Modern Forms of Communication : Fax – e-mail – Video Conferencing – Internet – Websites and their use in Business.

REFERENCE BOOK:

1. Essentials of Business Communication – Rajendra Pal & J.S. Korlahalli
2. Communication for Business – Shirley Taylor.
3. Business Communication Today – Bovee, Thill, Schatzman
4. Advanced Business Communication – Penrose, Rasbery, Myers]

COURSE CODE	COURSE TITLE	L	T	P	C
16M454N	MANAGEMENT INFORMATION SYSTEMS	5	-		3

UNIT	SYLLABUS
UNIT 1	Definition of Management Information System – MIS support for planning, Organizing and controlling – Structure of MIS – Information for decision – making.
UNIT 2	Concept of System – Characteristics of System – Systems classification – Categories of Information Systems – Strategic information system and competitive advantage
UNIT 3	Computers and Information Processing – Classification of computer – Input Devices – Output devices – Storage devices – Batch and online processing. Hardware – Software. Database management system.
UNIT 4	System Analysis and design – SDLC – Role of System Analyst – Functional Information system – Personnel, production, material, marketing.
UNIT 5	Decision Support Systems – Definition. Group Decision Support Systems – Business Process Outsourcing – Definition and function

REFERENCE BOOK:

1. “Management Information Systems”, Prentice Hall of India – Mudrick & Ross
2. “Management Information System”, - Gordan B. Davis
3. “Information Systems Analysis and Design” – James A Senn
4. “Management Information Systems” – Prentice – Hall of Undua – Sadagopan
5. “Management Information System” – CSV Murthy – Himalaya Publications

COURSE CODE	COURSE TITLE	L	T	P	C
16C454D	PROGRAMMING IN C	4	-		3

UNIT	SYLLABUS
UNIT 1	▪ C Fundamentals-Character set-Identifier and Keywords. ▪ Data types-Constants-Variable declarations. ▪ Expressions. ▪ Statements-Arithmetic, Unary, Relational, Logical, Assignment and Conditional operators-Library functions. ▪ Date input and output functions-Simple C Program
UNIT 2	▪ Flow of control –if, if-else,while, do-while, for loop, nested control structures. ▪ Switch, break and continue, go to statements-Comma operator.
UNIT 3	▪ Functions-definition-Prototype-Passing arguments. ▪ Storage Classes-Automatic, External, Static, Register Variables.
UNIT 4	▪ Arrays-Defining and Processing. ▪ Passing Arrays to functions-Multi-dimensional arrays.
UNIT 5	▪ File – Pointer – File – Operations – Functions – Sequential File Processing ▪ File Handling

TEXT BOOK

1. E.Balagurusamy, 2007, *Programming in ANSI C*, 4th Edition, Tata McGraw Hill Publishing Company Ltd, New Delhi.

REFERENCES

1. H.Schildt, 2000, *C: The Complete Reference*, 4th Edition, TMH PubCo Ltd, New Delhi.
2. B.W.Kernighan and D.M.Ritchie, 1998, *The C Programming language*, 2nd Edition, PHI.
3. Kanetkar Y, 1999, *Let us C*, 3rd Edition, BPB Publication, New Delhi.
4. Henry Mullish & Hubert L.Cooper, 2002, “The sprit of C”, An Introduction to *Modern Programming*, 1st Edition, Jaico Publishing House

COURSE CODE	COURSE TITLE	L	T	P	C
16C4541	APPLICATION LAB-PROGRAMMING IN C	2	-		2

Course objective: To develop the ability of programming using C language

UNIT	SYLLABUS
UNIT 1	1. Sin(x), 2. Cos(x), 3. Exp(x) (Comparison with built in functions)
UNIT 2	Counting the no. Of vowels, consonants, words, white spaces in a line of text and array of lines Reverse a string & check for palindrome.
UNIT 3	${}^n P_r$, ${}^n C_r$ GCD of two numbers Fibonacci sequence
UNIT 4	1.Addition & Subtraction 2.Multiplication
UNIT 5	Insertion Sort Linear Search
UNIT 6	1.Students Information file 2.Students Mark processing

COURSE CODE	COURSE TITLE	L	T	P	C
14E64AA	ENVIRONMENTAL STUDIES	1	-		2

UNIT	SYLLABUS
UNIT 1	The Multi disciplinary Nature of Environmental Studies Definition, scope and importance, Need for public awareness
UNIT 2	Natural Resources Renewable and non-renewable resources: Natural resources and associated problems • Forest Resources: Use and over-exploitation, deforestation case studies, timber extraction, mining, dams and their effects on forests and tribal people. • Water Resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams – benefits and problems. • Mineral Resources: Use and exploitation, environmental effects of extracting using mineral resources case studies. • Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging salinity, case studies. • Energy Resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources – Case Studies. • Land Resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual and conservation of natural resources – Equitable use of resources for sustainable life styles.
UNIT 3	Ecosystems Concept of an Ecosystem – Structure and Function – Producers, consumers and decomposers – Energy flow in the ecosystem – Ecological succession – Food chains, food webs and ecological pyramids – Introduction, types, characteristics, features, structures and function of Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem and Aquatic Ecosystem (ponds, streams, lakes, rivers, oceans, estuaries)

UNIT 4	Biodiversity and its Conservation Introduction – Definition genetic species and eco-system diversity – Bio-geographical classification of India – Value of the biodiversity consumptive use, productive use, social, ethical. Aesthetic and option values – Biodiversity at Global, National and Local levels – India as a mega – diversity nation – Hot-Spots of biodiversity – Threats to biodiversity habitat loss, poaching of wildlife, man wildlife conflicts – Endangered and endemic species of India – Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.
UNIT 5	Environmental Pollution Definition Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards – Solid water management causes, effects and control measures of urban and industrial wastes – Role of an individual in prevention of pollution – Pollution of case studies – Disaster management, floods, earthquake, cyclone and landslides.
UNIT 6	Social Issues and the Environment Unsustainable to Sustainable development – Urban problems related to energy – Water conservation, rain water harvesting, watershed management – Resettlement and rehabilitation of people; its problems and concerns & Case Studies – Environmental ethics issues and possible solutions – Climate change, global warming, Acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies, Wasteland reclamation – Consumerism and waste products – Environmental Protection Act – Air (Prevention and Control of Pollution) Act – Water (Prevention and Control of Pollution) Act – Wildlife Protection Act – Forest Conservation Act – Issues involved in enforcement of environmental legislation – Public awareness.
UNIT 7	Human Population and the Environment Population growth, variation among nations – Population explosion – Family Welfare Programme – Environment and human health – Human Rights – Value Education – HIV / AIDS – Women and Child welfare – Role of Information Technology in Environment and human health – Case Studies
UNIT 8	Field Work Visit to a local area to document environmental assets – river / forest / grassland / hill mountain – Visit to a local polluted site – Urban / Rural / Industrial / Agricultural – Study of common plants, insects, birds – Study of simple ecosystems – pond, river, hill slopes, etc. (Field work equal to 5 lecture hours)

COURSE CODE	COURSE TITLE	L	T	P	C
16S64AD	COMPUTING SKILL	2	-		3

UNIT	SYLLABUS
UNIT 1	<i>Introduction to Computers</i> – Classification of Computers; Role of Computers in society; Inside the Computers – Hardware (processing, memory, i/o, storage), Software (systems, application), CPU, OS, (DOS, Windows, Unix, Linux), Storage Devices; Programming – Overview, need for languages, skills; Networking Basics; Virus; Hacking.
UNIT 2	<i>Word Processing</i> – Open, Save and close word document; Editing text – tools, formatting, bullets; Spell Checker; Navigating in word – keyword, Mouse; document formatting – paragraph alignment, indentation, headers and footers, numbering; printing – preview, options.
UNIT 3	<i>File Management</i> – Understanding the importance of file management; backing of files, navigating thru My Computer and Windows Explorer; Files and Folders – editing, retrieving, deleting, renaming, subfolders – manipulate windows – maximize, minimize; Power point basics – terminology, templates, viewing.
UNIT 4	<i>Spreadsheets</i> – MS Excel – opening, entering text and data, format navigating; Formulas – entering, handling and copying; Charts – create, formatting and printing, header and footer, centering data, printing.
UNIT 5	<i>Networks</i> – Internet Explorer – components; www – working, browsing, searching, saving – Bookmark – favorite, create, delete – Printing a web page, email – creating, receiving, reading and sending messages.

References:

1. Introduction to Computers – Peter Norton, Tata McGraw-Hill.
2. Microsoft 2003 – Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, Tata McGraw-Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
16M455P	COST ACCOUNTING	6	-		5

UNIT	SYLLABUS
UNIT 1	Introduction of cost accounting – Meaning, definition, scope and objectives of cost accounting, cost accounting Vs financial accounting – Difference between cost accounting and Management accounting – Requisites of good costing system – Steps necessary to install a cost system – General principles – Classification methods and techniques of cost accounting
UNIT 2	<u>Cost sheet, Tender, Quotations</u> Elements of cost – Classification of overheads – Cost sheet– cost sheet vs production statement – Stock of Raw materials – specimen cost sheet with inventories – Tenders and quotations.
UNIT 3	<u>Materials</u> Meaning of material control – Essentials, objectives, advantages – Store keeping and inventory control – Economic Ordering Quantity(EOQ) – pricing of material issues (LIFO, FIFO, HIFO, Simple Average, weighted average, Standard Price method, inflated price method) material losses. <u>Labour :</u> Computation and control of Labour – Labour turnover – Time keeping department – payroll department – Remuneration and incentives – time rate system, piece rate system – premium and Bonus plan.
UNIT 4	<u>Overheads :</u> Meaning and definition – Importance- Classification – Primary Distribution of overheads, Secondary distribution of overheads – Absorption of overheads – calculation of Machine hour rate.
UNIT 5	Process Costing – with loss, Normal and Abnormal Loss – Abnormal gain – Inter process profit

Books for Reference :

1. Cost Accounting : T.S. Reddy Y.Hari Prasad Reddy
2. Cost Accounting : Jain And Narang
3. Cost Accounting : S.P. Iyengar
4. Advanced Problems and Solutions in cost accounting- Dr.S.N. Maheswari

COURSE CODE	COURSE TITLE	L	T	P	C
16M455Q	INCOME TAX LAW & PRACTICE – I	6	-		4

UNIT	SYLLABUS
UNIT 1	Meaning of Income – Canons of Taxation and Income Tax Act – Important definitions under the Income Tax Act – Scope of total income – Residential Status – Incomes exempt from Tax
UNIT 2	Heads of Income – Salaries – Allowances – perquisites and their valuations – Deductions from Salary – Other related provisions –Gratuity – pension – commutation of pension – Provident Fund.
UNIT 3	Income from house property – Definition of annual value deductions from annual value – computation under different circumstances.
UNIT 4	Income from business or profession – Allowable and not allowable expenses – General deductions – Principles – Provisions relating to depreciation – deemed business profits chargeable to profits to tax – compulsory maintenance of books of account – audit of accounts of certain persons – special provision for computing incomes on estimated basis under section 44 AD and 45 AE – Computation of income from business or profession.
UNIT 5	Filing of return of Income – Assessment procedure in brief – Due date of filling of return – Defective return -Belated Return form – Revised return – Self assessment – Best Judgment assessment -various Income Tax Authorities. & Their powers and duties.

Reference Books :

1. Income Tax Law & Accounts – H.C.M.ehrotrc
2. Income Tax Law & Practice – Bhagavathi Prasad
3. Outline of Income Tax - Rupram Gupta
4. Income Tax Law & Accounts – Vinod Singhanian
5. Income Tax Law & Practice – Gaurand Narang

COURSE CODE	COURSE TITLE	L	T	P	C
16M455R	ENTREPRENEURIAL DEVELOPMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	Concept of Entrepreneurship – Definition – Meaning – Types – Qualities of an Entrepreneur – Classification of Entrepreneurs – Factors influencing Entrepreneurship – Functions of Entrepreneurs
UNIT 2	Entrepreneurial Development – Agencies – Commercial Banks – District Industries Centre – National Small Industries Corporation – Small Industries Development Organisation – Small Industries Service Institute. All India Financial Institutions – IDBI – IFCI – ICICI – IRDBI.
UNIT 3	Project Management - Business idea generation techniques – identification of Business Opportunities – Feasibility study – Marketing, Finance, Technology & Legal Formalities-Preparation of Project Report Tools of Appraisal.
UNIT 4	Entrepreneurial Development programmes (EDP) – their role, relevance, and achievements – Role of Government in organizing EDPs – critical evaluation
UNIT 5	Economic development and entrepreneurial growth Role of Entrepreneur in economic growth – Strategic approaches in the changing economic scenario for small scale Entrepreneurs – Networking – Niche play, Geographic Concentration, Franchising/dealership – Development of Women Entrepreneurship.

1. Srinivasan N.P. – Entrepreneurial Development
2. Saravanel – Entrepreneurial Development
3. Vasant Desai – Project Management
4. Jayashree Suresh – Entrepreneurial Development
5. Holt – Entrepreneurship – New Venture Creation

COURSE CODE	COURSE TITLE	L	T	P	C
16M455S	VISUAL PROGRAMMING AND DBMS	3	-		2

UNIT	SYLLABUS
UNIT 1	Customizing a Form – writing Simple Programs – Toolbox – Creating Controls – Name Property – Command Button – Access keys – Image Controls – Text Boxes – Labels – Message Boxes – Grid - Tools – Variables – Data Types – String – Numbers.
UNIT 2	Displaying Information – Determinate Loops – Indeterminate Loops – Conditionals – Built in functions and Procedures
UNIT 3	Lists – Arrays – Control Arrays – Combo Boxes – VB Objects – Dialog Boxes –Menus – MDI Forms-Data control
UNIT 4	Advantage and Component of a Database Management Systems – Feasibility study – Data Types – Events – Normal Forms –Data Dictionary.
UNIT 5	Query Basis – Computation Using Queries – Subtotals and GROUP BY Command Queries with Multiple Tables – Subqueries – Join – DDL & DML – Testing Queries- Effective Design of Forms and Reports – Form Layout – Creating Forms – Reports

BOOKS FOR STUDY:

1. Gary Cornell – Visual Basic 6 from the Ground up – Tata McGraw Hill – 1999.
2. Noel Jerke – Visual Basic 6 (The Complete Reference) – Tata McGraw Hill –1999.
3. G.V.Post – Database Management Systems Designing and Building Business Application - McGraw Hill International edition – 1999.
4. Raghu Ramakrishnan – Database Management Systems – WCB/McGraw Hill – 1998.
5. C.J.Date – An Introducing to Database Systems – 7th Edition- Addison Wesley – 2000.

COURSE CODE	COURSE TITLE	L	T	P	C
16A465A	APPLICATION LAB- VISUAL PROGRAMMING AND DBMS	3	-		2

Course objective: To develop the ability of programming using VB and SQL.

1. Simple Arithmetic Calculator.
2. Create Menu options and working with Line and Circle methods.
3. Design application working with RichTextBox, PictureBox and Image using DragDrop and DragOver Events.
4. Working with List and combo boxes
5. Working with Grid control to display a students Mark sheets
6. Query Handling-DDL Statements-CREATE,ALTER,DROP TABLES
7. Query Handling-DML-INSERT,UPDATE AND DELETE STATEMENTS
8. Create a Menu driven program to create a ADO database and perform the operations of insertion, modification, deletion and viewing.

COURSE CODE	COURSE TITLE	L	T	P	C
16A455A	WEB DESIGN	6	-		5

Objective: *To enable students to learn the concepts of HTML and JavaScript.*

UNIT	SYLLABUS
UNIT 1	HTML-HTML Essentials-Tags-Creating your first HTML Document Links-Including images
UNIT 2	Creating tables-Developing HTML forms-creating frames
UNIT 3	Introducing JavaScript Operators, Statements and Functions.
UNIT 4	Handling Events: link, Document, Image & Form
UNIT 5	Working with objects: The JavaScript Object Model-Array, Boolean, Date and String objects

PRACTICAL

1. HTML-Simple Tags-Links-Images-Tables-Frames-Forms.
2. JavaScript-Simple Scripts-Link, Document, Form, Mouse events.

UNIT	SYLLABUS
UNIT 1	HTML - links
UNIT 2	Creating tables – frames
UNIT 3	Java script operators - functions
UNIT 4	Handling events – document, image & form
UNIT 5	Objects – Model – Array- Boolean

TEXT BOOKS

1. Deborah S.Ray, 2000, Eric J.Ray, Mastering HTML 4, 1st Edition, Bpb Publications.
2. James Joworski, 1999, Mastering JavaScript And Jscript, 1st Edition, Bpb Publications.

REFERENCES

1. Deitel and Deitel, 2000, Internet and WWW how to program, 1st Edition, Pearson Education; Asia.
2. Bread Love Bob, 1996, Web Programming, 1st Edition, Sams Publications: U.S.A.

COURSE CODE	COURSE TITLE	L	T	P	C
16M456T	FINANCIAL SERVICES	6	-		4

UNIT	SYLLABUS
UNIT 1	Meaning and importance of Financial Service – Types of Financial Services – Financial services and economic environment – players in Financial Services Sector.
UNIT 2	Merchant Banking – Functions – Issue Management – Managing of new issues – underwriting - capital market - stock exchange - Rule & SEBI.
UNIT 3	Leasing and Hire purchase – concepts and features – Types of Lease.
UNIT 4	Factoring – Functions of factor – Consumer finance – Venture capital – Mutual funds – Credit rating.
UNIT 5	Insurance – Different Types – Life, marine, fire, motor, health, pension plan, annuity, rural insurance. Insurance Laws and Regulations (A brief introduction to IRDA Insurance Act 1938)

Reference Books:

1. Mahendra Raja – F.S. –Sultan chand Pub – New Delhi – 1998.
2. M.Y. Khan – FS – tata mchraw Hill – New Delhi – 2000.
3. D. Joseph Anbrasur, V.K. Boominathan, P. Manoharan, G. Gnanaraju.
4. FS. Sultan chand & sons – New Delhi – 2004.
5. Shasi K.Gupta & Nisha Aggarwar – F.S. Kalyani – Pub – 2010 New Delhi Chennai.
6. B. Santhanam – Financial Services – Margham Publication – 2010 – Chennai.

COURSE CODE	COURSE TITLE	L	T	P	C
16A465U	PRACTICAL AUDITING	6	-		4

UNIT	SYLLABUS
UNIT 1	Auditing – Meaning – definition – objectives – kinds
UNIT 2	Internal control – internal check – Internal audit – audit Note book – Audit working paper - Audit programme
UNIT 3	Vouching – Verification & Valuation of Assets & Liabilities
UNIT 4	Company Auditor – appointment – qualification – disqualification – removal of auditor – Audit report – duties, powers and liabilities of auditors
UNIT 5	EDP – Audit

Reference Books:

1. B.N.Tandon – practical Auditing sultan chand publication – 2009 – New Delhi
2. Dinakarpagare – principles of Auditing sultan chand publication – 2009 – New Delhi
3. Spicer & Pegler – Auditing, MC million publications – 2000 – New Delhi

COURSE CODE	COURSE TITLE	L	T	P	C
16M456V	ACCOUNTING FOR MANAGERIAL DECISIONS	6	-		5

UNIT	SYLLABUS
UNIT 1	Management Accounting – Definition, Functions, Scope, Management Accounting Vs Financial Accounting, Management Accounting Vs Cost Accounting.
UNIT 2	Ratio Analysis – Meaning, Types, Advantages and Limitations – Profitability ratios – Turnover Ratios – Financial Ratios.
UNIT 3	Funds flow analysis – Meaning, Importance, Difference between funds flow and Balance Sheet – Advantages and Limitations – Cash flow statement – Meaning – Importance – Difference between funds flow analysis and cash flow analysis – Advantages and Limitations.
UNIT 4	Budgets and Budgetary Control – Meaning, objectives, merits and demerits – Types of budgets – Production, Production cost budget, Cash budget, Flexible budget, Sales budget.
UNIT 5	Marginal Costing (excluding decision making) – CVP analysis – Break even analysis.

REFERENCE BOOKS:

1. Management Accounting – T.S. Reddy, Y. Hari Prasad Reddy, - Margham Publications.
2. Dr. S.N. Maheswari – Management Accounting, Sultan Chand & Sons
3. Jain & Narang – Management Accounting, Kalyani Publishers

COURSE CODE	COURSE TITLE	L	T	P	C
16A456B	COMPUTER APPLICATIONS - TALLY	6	-		5

UNIT	SYLLABUS
UNIT 1	Computer - Environment usage - Tally loading - Setting the directory.
UNIT 2	Tally - Starting - Creating Company - Altering company operations - General environment configuration – Functional keys and shortcut keys.
UNIT 3	Voucher entry - delivery note - Payment voucher - Receipt voucher debit note - Credit note.
UNIT 4	Creations of various accounts - Indexing - Creation of ledgers - Multiple ledgers - Cost categories - cost centers, Budget - Bank reconciliation - Inventory maintenance - Inventory valuation - Interest calculation.
UNIT 5	Consolidation of accounts - Import / export data - Final accounts - Reporting - Fund flow statements, cash flow statements - Inventory analysis report - Printing of Report – ERP

Reference Books:

1. Vishnu Priya Singh – Tally 9
2. Kogent Solutions Inc – Tally 9
3. Ramaiah Publications – Tally 9

COURSE CODE	COURSE TITLE	L	T	P	C
16M456W	INCOME TAX LAW & PRACTICE – II	5	-		4

UNIT	SYLLABUS
UNIT 1	Income under capital gains – short term, long term capital gains – cost of acquisition – cost of improvement – indexation of cost – capital gains under different circumstances – Exempted capital gains – computation of capital gains.
UNIT 2	Income from other sources – as a residing head of income – their computation – grossing up – deduction in computing income under the head and other related provisions.
UNIT 3	Clubbing of income – Transfer of income without the transfer of asset – circumstances under which the individual is assessable in respect of remuneration of spouse – assess ability of income from assets transferred to spouse , son's wife, another person for the benefit of spouse – Assessability in respect of income of minor child – setoff – carry forward and set off.
UNIT 4	Permissible deductions from gross total income – sec 80 C to 80U.
UNIT 5	Assessment of individuals, Partnership firms and Association of persons.Simple problems only

Reference Books :-

1. Income Tax Law & accounts - H.C. Mehrotra
2. Income Tax Law & Practice - Bhagavathi Prasad
3. Outline of Income Tax - Rupram Gupta
4. Income Tax Law & accounts - Vinod K.Singhania
5. Income Tax Law & Practice - Gaurand Narang

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14V66AG</u>	VALUE EDUCATION	1	-		2

Course objective: To impart value system in the students minds.

UNIT	SYLLABUS
UNIT 1	Introduction: Value Education and its relevance to present day – Meaning of Value Education – The meaning of the word value – Significance of Thirukkural about ‘Value Education’ – Personal Values: Meaning – Different personal values – Love – Compassion – Gratitude – Courage – Optimism – Friendship
UNIT 2	Family Values: Meaning – Social Attitude to Women, Children and Elders – Familal Responsibilities – Dos and Don’ts for Stronger Family bonding – Significance of Thirukkural about ‘Family Values’
UNIT 3	Self Esteem: Fear of failure – Approval seeking – Self Esteem is not selfishness / Ego – Self Esteem / Arrogance – Qualities of a person with Self Esteem – Significance of Thirukkural about ‘Self Esteem’ – Anger: Common situations where people fly into rage – Anger at services – Some practical methods of handling anger – techniques to handle our anger – Handling anger in others – methods to replace anger.

REFERENCE BOOKS:

1. Value Education - N S Raghunathan, Margham Publication

DHANRAJ BAID JAIN COLLEGE

(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COOPERATION

B.Com (Cooperation)



SYLLABUS

(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

B.COM-COOPERATION

SCHEME OF EXAMINATIONS

PART	STUDY COMPONENTS / PAPER TITLE	Inst. Hours / Week	Examination				Credit
			Duration	CIA	External Exam	Total	
SEMESTER – I							
I	Language – I or any language	5	3	20	80	100	3
II	English – I	5	3	20	80	100	3
III	Core – I History, Theory & Practice of Cooperation	5	3	20	80	100	4
III	Core :II Financial Accounting	5	3	20	80	100	4
III	Allied: I Economic Analysis	6	3	20	80	100	5
IV	NME : I General Awareness /Basic Tamil - I	2	3	20	80	100	2
IV	Soft skill	2	3	-	100	100	2
SEMESTER – II							
I	Language – II or any Language	5	3	20	80	100	3
II	English – II	5	3	20	80	100	3
III	Core – III Cooperative Finance	5	3	20	80	100	4
III	Core: IV Management Accounting	5	3	20	80	100	4
III	Allied: II Business organization	6	3	20	80	100	5
IV	NME : II Insurance / Advance Tamil	2	3	20	80	100	2
IV	Soft Skill	2	3	-	100	100	2
SEMESTER – III							
I	Language – III or any Language	5	3	20	80	100	3
II	English – III	5	3	20	80	100	3
III	Core – V Non-Credit Cooperatives	5	3	20	80	100	4
III	Core – VI Cost Accounting	5	3	20	80	100	4
III	Allied: III Business Statistics	6	3	20	80	100	5
IV	NME :III Personality Enrichment	2	3	20	80	100	2

B.COM-COOPERATION

SEMESTER – IV							
I	Language – IV or any language	5	3	20	80	100	3
II	English – IV	5	3	20	80	100	3
III	Core – VII Cooperative Management	5	3	20	80	100	4
III	Core – VIII Income Tax Law and Practice	5	3	20	80	100	4
III	Allied: IV Computer Application	6	3	20	80	100	5
IV	NME : IV Computing Skills	2	3	20	80	100	2
IV	Environmental Studies	2	3	20	80	100	2
SEMESTER – V							
III	Core: IX Cooperative Law	6	3	20	80	100	4
III	Core: X Banking Law And Practices	6	3	20	80	100	4
III	Core: XI Entrepreneurship Development	6	3	20	80	100	4
III	Core: XII Application Oriented Paper – I: Practical Training Phase-I	6	-	20	80	100	6
III	Elective : I Computer Application – Tally	6	3	20	80	100	5
SEMESTER – VI							
III	Core: XIII Cooperative Administration & Audit	6	3	20	80	100	4
III	Core: XIV Business Law	6	3	20	80	100	4
III	Core: XV Office Management	6	3	20	80	100	4
III	Core: XVI Application Oriented Paper – II: Practical Training Phase- II	5	-	-	100	100	6
III	Elective :II Principles of Marketing	5	3	20	80	100	5
IV	Value Education	2	3	20	80	100	2
V	Extension Activities	-	-	-	-	-	2

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M421A	HISTORY, THEORY AND PRACTICE OF CO-OPERATION	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Meaning of Cooperation-Definitions, basic concepts special features; principles of cooperation – meaning and definitions of cooperative principles-evolution of cooperative principles – Rochdale principles - ICA commission 1937 - reformulation of cooperative principles by ICA in 1966 and 1995 – Application of principles in practice.
UNIT 2	Economic systems – capitalism, communism and socialism – cooperation as a balancing factor. Cooperation and other economic organizations – cooperation and joint stock company, partnership firm – cooperation and Trade Union.
UNIT 3	History of cooperation in foreign countries: Consumer Cooperatives in England, credit cooperatives in Germany, Dairy cooperative in Denmark and marketing cooperatives in Canada.
UNIT 4	Cooperative movement in India – Genesis and growth of cooperative movement in the pre-independence and post-independence periods-important land marks from 1875- committees, enactment of various Acts, development of Cooperatives under Five Year plans [from VI Five Year plan]
UNIT 5	Cooperative education and training – need and importance – Arrangements made at Varies Level –NCUI, State cooperative unions, District cooperative unions, member education – structure of Cooperative training institutes – Role of universities / colleges. Role of ICA.

REFERENCE BOOKS:

1. R.D.Bedi, Theory, History and practice of Cooperation, International Publishing House, Meerut.
2. B.S.Mathur, Cooperation in India, Sahitya Bhavan, Agra.
3. T.N.Hajela, Cooperation – Principles, Problems and practice, Konark Publishers, Delhi.
4. O.R.Krishnaswami & V.Kulandaisamy, Theory of Cooperation, Shanma publications, Coimbatore.
5. V.Saradha, Theory of Cooperation, Himalaya Publishing House, Bombay.
6. D.Jha, In search of Cooperative values, Vikash Publishing House, Delhi.
7. G.R.Madan, Cooperative movement in India, Mittal Publications, Delhi.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M421B	CORE : II FINANCIAL ACCOUNTING	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Book Keeping- Objects- Double Entry- Advantages –Journal- Subsidiary Books- Uses – Ledgers Postings and Balancing – Cash Book – Types of Cash Books.
UNIT 2	Depreciation- Causes- Methods of Depreciation-Straight line method and Diminishing Return method- Annuity Method – Prevision and Reserves- Types of Reserves.
UNIT 3	Trial Balance – Preparation –Capital and Revenue items-Errors disclosed and not disclosed by Trial Balance – Rectification of errors – Suspense Account.
UNIT 4	Preparation of Final Accounts- Gross Profit, Net Profit- Trading Account, Profit and Loss Account – Balance Sheet- Adjusting entries.
UNIT 5	Accounts of Non Trading concerns – Receipts and Payments Accounts – Income and Expenditure Accounts- Balance Sheet. Departmental Accounts – Meaning-Need- Advantages- Distinction Between Department and Branches.

BOOKS RECOMMENDED:

1. Financial Accounting – Jain S.P. & Narang K.L. (First Edition – 2004)
2. Financial Accounting- Reddy T.S & Murthy.
3. Advanced Accounting – M.C.Shukla
4. Advanced Accounting- Pillai and Bhagavathi.
5. Advanced Accounting- Jain and Narang
6. Advanced Accounting- Gupta
7. Principles of Accounting- N.Vinayakam& K.L Nagarajan.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14C421A	ALLIED: I ECONOMIC ANALYSIS	6	-	-	5

UNIT	SYLLABUS
UNIT 1	The Nature & Scope of Economics, Demand analysis – Demand schedule, law of Demand – Demand Curve. Utility analysis – law of Diminishing marginal utility, consumer's equilibrium – Elasticity of Demand.
UNIT 2	Production Function – Factors of production, law of returns, Cost and Revenue – Total Fixed Cost, Total Variable Cost, Total Cost, Average Fixed Cost, Average Variable Cost, Average Cost, Marginal Cost, Short Run Cost Curves –Revenue Curves.
UNIT 3	Market Structure – Pricing Under Perfect Competition and Monopoly. Price Discrimination – Pricing Under Monopolistic Competition – Duopoly and Oligopoly.
UNIT 4	Pricing, Marginal Productivity Theory – Rent – Quasi Rent, Interest Theory – Profit Theory.
UNIT 5	National Income – National Product and National Income – Problems of Economics Welfare - Nature and Principles of Public Finance, Public Expenditure and Indirect Taxes.

REFERENCE BOOKS :

1. P.N.Reddy & H.R. Appanniah Principles of Business Economics.
2. Dr.Sankaran S.Economic Analysis.
3. Dr.Sankaran S.Principles of Economics.
4. ML.Sethu Lakshmi Narain Agarwal – Principles of Economic
5. ML.Sethu Lakshmi Narain Agarwal – Money Banking International Trade and Public Finance.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M422C	CORE: III COOPERATIVE FINANCE	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Cooperative credit: Evolution and structure of cooperative credit movement in India – Rural and Urban, Agricultural and non-agricultural – Role of credit Organisation – RBI, NABARD, RRBs.
UNIT 2	Primary Agricultural Cooperative Credit Societies – constitution and management, size, functions. Crop Loan System – meaning features, procedures, problems – overdues – remedies – Development Action Plan.
UNIT 3	District Central Cooperative Banks – origin – constitution, management, structure – Resource mobilization, branch banking, Lending functions. State Cooperative Bank origin - constitution – management, structure Resource mobilization – funds management, functions. National Federation Of State Cooperative Banks (NAFSCOBs)
UNIT 4	Long Term Credit : Origin, Nature and Features of Long Term Credit – Need for separate agency – Primary Agricultural and Rural Development Banks (PARD Banks) – Organizational pattern, sources of finance – Loan sanctioning procedures – Recovery management. State Agricultural and Rural Development Bank (SARD Banks) –Objectives, constitution, raising of funds – Issue of various debentures – Redemption of debentures – Functions.
UNIT 5	Non Agricultural Cooperative Credit: constitution, objectives, functions and management of Urban Cooperative Banks, Employees Thrift and credit cooperatives, Industrial Cooperative Bank, Housing Cooperatives.

REFERENCE BOOKS :

1. Mathur B.S.: Cooperation in India.
2. Memoria C.B.: Agricultural Problems of India.
3. Nakkiran.S.: Agricultural Finance and Rural Banking.
4. Naidu V.T.: Farm Credit and Cooperatives in India.
5. Rustagi N.K.: Crop. Insurance in India.
6. Sami Uddin and Mahfoozur Rahman : Cooperative Sector in India.
7. Hajela T.N. : Cooperation Principles, Problems and Practice
Abdul Kuddus: Cooperative credit and banking.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M422D	CORE: IV MANAGEMENT ACCOUNTING	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Principles of Management Accounting: Origin, Definition, objectives, functions, scope and limitations. Principles Of Management Accounting – Management Accounting Vs Financial Accounting - Management Accounting Vs Cost Accounting – Functions of Management Accountant.
UNIT 2	Analysis and Interpretation of Financial Statements – Meaning and types of financial statement, format of income statement and balance sheet.
UNIT 3	Accounting Ratio: Meaning, Advantages, and Limitations of ratio analysis of different categories of ratio – Fund Flow & cash flow statements and its uses.
UNIT 4	Budgetary Control: Meaning of budget, budgeting and budgetary control – Objectives, advantages and limitations of Budgetary Control. Types of Budgets – Preparation of Budget: Sales, Production, Purchase, Cash, Master Budget. Fixed and Flexible budget.
UNIT 5	Management Accounting Practices to different types of Cooperatives – Marginal costing and break even analysis.

REFERENCE BOOKS:

1. Maheswari S.N. – Principles of Management Accounting.
2. Khan M.Y & Jain P.K. – Management Accounting.
3. Reddy T.S & Hari Prasad Reddy – Management Accounting.
4. Pandey I.M. – Financial Management.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14C422B	ALLIED: II BUSINESS ORGANISATION	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Business – Characteristics of Business – Classification of Business – Industry, Commerce, Trade, Business Firms Business System – Objectives of Business, Economics objectives – Essentials of a successful Business.
UNIT 2	Form of Business organizations – Sole Proprietorship – Partnership – Cooperative societies –Joint Stock Company – State Enterprises – Public Under taking – Public Enterprises.
UNIT 3	Setting up of a business – Procedural aspects in setting up of a new business. Factors involved in locating the business.
UNIT 4	Financing of a business –need for finance – sources of finance – methods of raising funds – Trade and its Divisions, wholesale Trade, Retail Trade, Hire and Installment Purchase – International Trade.
UNIT 5	Meaning of Associations – Trade Associations – chambers of Commerce – Stock Exchanges – Nature of commodities functions.

REFERENCE BOOKS:

1. Bushan Y.K. Fundamental of Business Organization & Management.
2. Peter F.Drucker –Management Tasks Responsibilities and Practices.
3. Dinkar Pagare – Business Organisation and Management.
4. Shoriekar S.A – Modern Business Organisation and Management.
5. James A.F. Stoner & R.Edward Freeman – Management.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M423E	CORE: V NON-CREDIT COOPERATIVES	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Cooperative marketing – Need and importance of cooperative marketing – Origin of cooperative marketing societies in India Role and Function of Marketing societies at various levels Primary, Central, State and National – Role of NABARD and NCDC. Dantwala Committee On Cooperative Marketing. Importance of storage and Ware Housing in agricultural marketing.
UNIT 2	Dairy Cooperatives – Place of dairying in National Economy – Importance of cooperative dairying in India – Structure and functions - Anand Pattern – Development of Dairy Cooperatives under Operation Flood Programme III – Role of NDDB.
UNIT 3	Industrial Cooperatives – Importance and types – Constitution and working of Handloom weaver's cooperatives – At primary and state level – Cooperative Tea factories.
UNIT 4	Consumer cooperatives – Need and importance – Structure and working of consumer cooperatives at Primary, District, State and National level – Purchase policy sales policy, personnel policy – Role in Public Distribution System – Latest trends – Problems.
UNIT 5	Production and processing cooperatives – constitution and working of Cooperative sugar factories – Cooperative spinning mills – Labour cooperatives.

REFERENCE BOOKS:

1. R.D.Bedi, Theory, History and practice of Cooperation, International Publishing House, Meerut.
2. B.S.Mathur, Cooperation in India, Sahitya Bhavan, Agra
3. B.S.Mathur, Cooperative Marketing in India.
4. T.N.Hajela, Principles problems and practice of cooperation konark Publishing House.
5. G.R.Madan, Cooperative movement in India Mittal Publications New Delhi.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M423G	CORE: VI COST ACCOUNTING	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Introduction of cost accounting – Meaning, definition, scope and objectives of cost accounting. cost accounting Vs financial accounting – Difference between cost accounting and Management accounting – Requisites of good costing system – Steps necessary to install a cost system – General principles – Classification methods and techniques of cost accounting.
UNIT 2	COST SHEET AND RECONCILIATION: Elements of cost – Classification of overheads – Cost sheet– cost sheet vs production statement – Stock of Raw materials – specimen cost sheet with inventories – Cost Reconciliation.
UNIT 3	MATERIALS: Meaning of material control – Essentials, objectives, advantages – Store keeping and inventory control – Economic Ordering Quantity (EOQ) – pricing of material issues (LIFO, FIFO, HIFO, Simple Average & weighted average).
UNIT 4	LABOUR: Computation and control of Labour – Labour turnover – Time keeping department – payroll department – Remuneration and incentives – time rate system, piece rate system – premium and Bonus plan.
UNIT 5	OVERHEADS: Meaning and definition – Importance- Classification – Primary - Distribution of overheads, Secondary distribution of overheads – Absorption of overheads – calculation of Machine hour rate.

REFERENCE BOOKS:

1. Cost Accounting, T.S. Reddy Y.Hari Prasad Reddy
2. Cost Accounting, Jain And Narang
3. Cost Accounting, S.P. Iyengar
4. Advanced Problems and Solutions in Cost Accounting, Dr.S.N. Maheswari.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14C423C	ALLIED: III Business Statistics	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Origin, Meaning, definition and characteristics of statistics – Uses and limitation.
UNIT 2	Classification and Tabulation of Data – Types and Importance - Presentation of data including diagrammatic and Graphical Methods – Bar Diagram, Pie Diagram histogram and Ogive. Frequency Table – Structure and Formation – Discrete and Continuous Series.
UNIT 3	Measure of Central Tendency / Average – Arithmetic Mean, Median, Mode, Quartiles, Geometric, Harmonic Mean - Combined Arithmetic Mean and weighted Mean.
UNIT 4	Measures of Dispersion – Range, Quartile Deviation, Mean Deviation and Standard Deviation.
UNIT 5	Measures of skewness – Meaning, Definition and Types – Karl Pearson's Coefficient of Skewness and Bowley's Coefficient of Skewness.

REFERENCE BOOKS:

1. S.P. Gupta – Statistical methods
2. D.N. Gupta – Business statistics
3. B.N. Asthana – Elements of statistics
4. R.S.N. Pillai and V. Bhagavathi – Statistics

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M424H	CORE: VII COOPERATIVE MANAGEMENT	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Management: Definition - Need and functions of management - Evolution of management thought – Taylor and scientific Management H. Fayal’s modern management theory – principles of Management.
UNIT 2	Planning: Meaning – Types, importance steps in planning – process and techniques of planning – Organizing : meaning - nature - Purpose - types – Formal and informal organization – Authority and Responsibility – Delegation of Authority.
UNIT 3	Staffing: Recruitment – Selection –Training – Placement. Motivation – Leadership – Communication – Control – Control Techniques.
UNIT 4	Cooperative management: meaning objectives functions distinctive features of cooperative Management – Comparison with other enterprises, principles of cooperative management – Decision making in Cooperatives.
UNIT 5	Organisation and management of cooperatives: meaning, objectives, principles of organization. Democratic structure – General body – Role of managing committee and subcommittee in cooperatives. Staffing – Recruitment in cooperatives – control: Meaning, importance and process of control in Cooperatives – Essentials of effective control system in Cooperatives.

REFERENCE BOOKS:

1. Dr. S. Nakkiran – Cooperative management
2. Dr.V. Kulandaisamy – Cooperative management
3. Sherlekar S.S Business organisation and management.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M424J	CORE: VIII INCOME TAX LAW AND PRACTICE	5	-	-	4

UNIT	SYLLABUS
UNIT 1	Meaning of Income - Definition - Assessment year - Previous year - Assessee – Persons -Agricultural income - Exempted income- Fully exempted- Partially exempted - Residential status of an individual – Scope of total income.
UNIT 2	Heads of income - Income from Salary - Meaning – Definition – Chargeability - Allowances - Perquisites - Valuation of perquisites - Gratuity – Pension (simple problem only).
UNIT 3	Income from House Property – Meaning – Definitions - Annual value - Chargeability - Deductions from house property (simple problem only).
UNIT 4	Income from Capital Gains – Income from other Sources – Deductions under section 80 – C to 80 G (simple problem only).
UNIT 5	Assessment of individuals – Assessment Procedure – Self Assessment – Best Judgment Assessment.

REFERENCE BOOKS:

1. Income Tax Law and Practice – H.C. Mehrotra
2. Income Tax Law & Practice – U. P. Gavl & D. B. Narang
3. Income Tax Law & Practice – Hari Prasad Reddy & Reddy

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14C424D	ALLIED: IV COMPUTER APPLICATION	3	-	3	5

UNIT	SYLLABUS
UNIT 1	Computers: Introduction – Importance - History of Computers - Classifications -Components of computers- Hardware and Software.
UNIT 2	Ms-Office Word: creating, Saving Files- formatting pages, paragraphs-creating list and numbering, headings-style, font, sizes-Editing text-tables-finding and replacing text-Inserting pages, Breaks, pages numbers, book marks-header and footers-working with charts and graphs-working with tools-mail merge.
UNIT 3	Ms-office Excel : creating and selecting works sheet-using auto fill-Adding and removing rows and columns-copying and moving information –creating and copying formulas-naming ranges-using function ,filter, pivot tables –chart, Creating, formatting & Printing.
UNIT 4	Ms-Office Power point; Creating a Presentation-Editing a presentation-Customizing animation - Networks; Internet-internet explorer-components-internet environment-WWW-working, browsing, searching and savings –book mark-favorite, create, delete, printing –email :creating, receiving, reading & Sending message, etc.,
UNIT 5	A Detailed study and Working with software on the Accounting of Primary Cooperative Societies.

PRACTICAL

- Note:** 1. Among the Unit II,III and IV One Question may be asked with either or basis .
2. Unit V Practical Question relating to software is a compulsory question.

UNIT: II

- 1. Creating official letter**
- 2. Creating Business letter**
- 3. Preparation of Bio-data**
- 4. Use of Mail Merge.**
- 5. Insertion of charts, Tables and Diagrams.**

UNIT: III

- 1. Entering information in the worksheet.**
- 2. Sum Function, entering formula**
- 3. Moving, copying, inserting and Deleting rows and Columns**
- 4. Creating a worksheet like Mark sheet, Pay slip.**
- 5. Creating charts.**

UNIT: IV

- 1. Creating slides.**
- 2. Creating a presentation and views on Slides.**
- 3. Changing Slide layouts.**
- 4. Inserting Clip Art**
- 5. Adding Tables.**

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M425K	CORE: IX COOPERATIVE LAW	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Need for separate legislation for cooperatives – General and specific – cooperative law viz a Viz Cooperative principles. History of Cooperative legislation in India – Cooperative Credit Societies Act 1904, Cooperative Societies Act 1912, Madras Cooperative Societies Act 1932. Multi Unit Cooperative Societies Act 1941, Model Cooperative Societies bill 1957, Madras State Cooperative Societies Act 1961, Rules 1963, Multi State Cooperative Societies Act 2002.
UNIT 2	Short Title, Extent and commencement, definitions, Registration Qualifications of Members their Rights and Liabilities, Management of Registered Societies, Duties and Privileges of Registered Societies.
UNIT 3	State aid to registered societies, paid officers and servants of society Audit, Inquiry, Inspection, Investigation, Surcharge, Super session, Settlement of Disputes.
UNIT 4	Insured cooperative Banks, Joint farming Societies, Lift Irrigation Societies, Land Development Banks, Winding up and Cancellation of Registration of Registered Societies, Execution of Degree, Decisions Awards and Orders.
UNIT 5	Appeals, Revision and Review, Offences and Penalties Miscellaneous.

REFERENCE BOOKS :

1. Bedi R.D – Cooperative Law in India.
2. Calvert .H – The Law and Principles of Cooperation.
3. Government of India – Report of Committee on Cooperative Law.
4. Government of Tamil Nadu – Tamil Nadu State Cooperative Societies Act 1983 and Rules 1988.
5. Rajagopalan .S Tamil Nadu Cooperative Societies Act and Rules.
6. Vidvans MD – Cooperatives Law in India.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M425L	CORE: X BANKING LAW AND PRACTICE	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Banking structure in India – Banks and economic development – Social responsibilities of Banks – Commercial banks, origin, functions, Nationalisation of banks, RBI and its role.
UNIT 2	Role of Commercial banks in Indian Money markets. Its relationship with cooperative banks and credit institutions – Commercial banks and agriculture finance. Provision of Banking Regulation Act as applicable to cooperative banks – NABARD, Origin and functions.
UNIT 3	Banker and customer relationship – Definition – Opening of a Bank account – Relationship between banker and customer – Rights and duties of a banker – Bankers lien – Opening of a new account – Special types of customers – Minor – Partnership firms – Joint stock companies.
UNIT 4	Negotiable instrument : Cheques & bill of exchange – Crossing of cheque – Different kinds of crossing and their significance – Duties and responsibilities of paying banker and Collecting banker Endorsement – Kinds of endorsement.
UNIT 5	Funds mobilization and deployment : various Loans and advances – Cash credit Over draft – Principles of lending, E-banking : Credit card, Debit card, ATM, RTGS & NEFT –Net banking.

REFERENCE BOOKS:

1. Sundaram & Varshney –Banking theory law & practice.
2. Radhasamy .M – Practice of Banking.
3. Santhanam – Banking, theory law & practice.
4. Davar S.R. – Law & practice of Banking.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M425M	CORE: XI ENTREPRENEURSHIP DEVELOPMENT	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Entrepreneurship –Meaning, definition type – Factors influencing entrepreneurship development – Function of entrepreneurs.
UNIT 2	Entrepreneurial development agencies : Commercial Banks – District industries center – National small Industries Corporation – Small Industries Development Organization : SISI (Small Industries Service Institute) ALL INDIA financial institutions : IDBI, IFCI, ICICI, IRDBI, etc.,
UNIT 3	Project Management: Identification of business opportunity – feasibility study – Marketing – finance – Technology and legal formalities, preparation of project report.
UNIT 4	Entrepreneurial development programmes (EDPs): Role and relevance, Role of Government in organizing EDPs – Role of NGOs in Organizing EDPs.
UNIT 5	Procedures and steps involved in establishing small and village industries, operational features and problem – Field visits – entrepreneurial profile of such industries. SKILL DEVELOPMENT: Feedback from Successful Entrepreneurs.

REFERENCE BOOKS:

1. Director of Industries: A guide to small scale entrepreneurs.
2. Baunbuck C.M. and Manusco. R – Entrepreneurship and Venture Management.
3. Holt – Entrepreneurship.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14A4251	CORE: XII APPLICATION ORIENTED PAPER I PRACTICAL TRAINING PHASE – I	-	-	6	6

UNIT	SYLLABUS
UNIT 1	OBJECTIVES OF THE PRACTICAL TRAINING 1. To give practical knowledge on constitution, management, business operations of various types and levels of cooperative banks and societies. 2. To train in day to day administration, Accounts maintenance and Auditing. 3. To develop the capability to appreciate and understand the working and the influence of various economic and social forces on the institutions visited. 4. To provide exposure for career development.
UNIT 2	The training shall be the study visits to State, District and Primary level institutions such as : State Level –State Cooperative Bank, State Cooperative Agriculture and Rural Development Bank, State Industrial Cooperative Bank, State Cooperative Marketing Federation, State Cooperative Milk Producers Federation, State Consumers Cooperative Federation, State Cooperative Housing Federation, State Weavers Cooperative Society, State Cooperative Union etc., District Level : Central cooperative Banks (other than Chennai Central Cooperative Bank) District Cooperative Union, Milk Producers Cooperative Union, Marketing and Supply Society, Printing Press etc., Primary Level : Primary cooperative bank / society, milk producers society, consumer stores, marketing society, Agriculture and Rural Development Bank etc., Others : Urban Bank, Employees thrift and Credit society, House Building Society, Industrial Cooperative Estate etc., The visits shall be under the guidance and supervision of Assistant Professor of the Department of Cooperation. The student should maintain the record of the study visits wherein he should record all the information gathered in accordance with the proforma devised by the department.
UNIT 3	ASSESSMENT OF THE TRAINING RECORD The training undergone and the record prepared shall be assessed by a committee consisting of the Head of the Department, one lecturer and the lecturer – incharge for the training programme. The assessment shall be based on the following criteria. 1. Record 50 marks 2. Test 20 marks 3. Viva- voce 30 marks

B.COM-COOPERATION

UNIT 4	RECORD The record submitted by each student should contain all the information gathered during the study visit. The record shall be assessed on the basis of the following criteria. 1. Whether the working of the institutions is recorded well 2. Whether the relevant data collected and presented well 3. Whether the student actively participated during the study visits. 4. Whether key problems of each society visited have been identified and analyzed. 5. Whether conclusions and suggestions are sound, practical and useful.
UNIT 5	TEST AND VIVA VOCE To test the knowledge of the students of the institutions they visited , the Lecturer – in-charge of the training programme will frame a question paper containing questions relating to constitution, management and business operations and value the answer scripts.

Viva voce

The viva –voce examination shall be conducted by a committee consisting of the Professor – in-charge (internal) for training and an External Examiner drawn from the Panel of Examiners as suggested by the Board of Studies in Cooperation. The marks to be awarded based on the following.

1. Factual Information about the cooperatives	10 marks
2. Knowledge of the problem and solutions	10 marks
3. Clarity and expression	10 marks
	
	30 Marks
	

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M425N	ELECTIVE: I COMPUTER APPLICATION –TALLY	3	-	3	5

UNIT	SYLLABUS
UNIT 1	Computer – Environment usage – Tally loading – Setting the directory.
UNIT 2	Tally – Starting – Creating Company – Altering company operations – General environment configuration – Functional keys and shortcut keys.
UNIT 3	Voucher entry – delivery note – Payment voucher – Receipt voucher - debit note - Credit note.
UNIT 4	Creations of various accounts – Indexing – Creation of ledgers – Multiple ledgers – Cost categories – cost centers, Budget – Bank Reconciliation – Inventory maintenance – Inventory valuation – Interest calculation.
UNIT 5	Consolidation of accounts – Import / export data – Final accounts – Reporting – Fund flow statements, cash flow statements – Inventory analysis report – Printing of Report – ERP.

REFERENCE BOOKS:

1. Vishnu Priya Singh - Tally9
2. Kogent Solutions Inc - Tally9
3. Ramaiah Publications - Tally9

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M426P	CORE: XIII COOPERATIVE ADMINISTRATION AND AUDIT	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Meaning and nature of Administration – Definition of cooperative administration – Scope of cooperative administration – Main fields of Cooperative administration – Significance of cooperative administration.
UNIT 2	The organizational set-up of the cooperative departments – Registrar of Cooperative Societies and other Functional Registrars – Set-up of the Cooperative department at State, Regional, District And Taluk / Block Levels In Tamil Nadu.
UNIT 3	Audit – Definition – Objects – Advantages Of Audit – Kinds Of Audit – Audit Programmes –Duties and responsibilities of the auditor – Vouching and Routine Checking – Internal Check and Internal Audit – Verification and Valuation of Assets and Liabilities.
UNIT 4	Audit of Final accounts and balance sheet – Misappropriation, embezzlement of frauds – Audit Classification RBI Norms – Preparation of Final Audit – Memorandum and its enclosures.
UNIT 5	Definition – Objectives and needs for Cooperative audit – Duties and powers of Cooperative auditors – Agencies for Cooperative audit – Kinds of cooperative audit – Audit of cooperative credit societies, marketing societies, and consumers cooperative stores.

REFERENCE BOOKS:

1. O.R. Krishnaswamy – Principles of Cooperative Audit
2. Government of Tamilnadu State Cooperative societies Act – 1983 and Rules 1988.
3. Goel R.B. – Cooperative Management and Administration
4. S.L. Goel and B.B. Geol: Principles, Problems and Prospects of Cooperative Administration.
5. B.N.Tandon : Practical Auditing
6. Dinkar Pagare : Principles and Practice of Auditing.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M426Q	CORE: XIV BUSINESS LAW	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Nature of Contract : Object of Law of contract The Indian contract act 1872 – Definition of contract - Essential elements of a valid contract – clarification of contracts – offer and acceptance and Communication of offer and Acceptance and Revocation. Consideration – Capacity to contract – Free consent - Legality of object – void agreement.
UNIT 2	Performance of contract – offer to perform contracts which need not be performed – by whom contract must be performed who can demand performance. Discharge of Contract – meaning – methods – by performance –by agreement – impossibility of performance.
UNIT 3	Remedies for Breach of Contract – Introduction Recession – Damages – Specific Performance – injunction - Quasi contracts.
UNIT 4	Special Contracts : Contract of Indemnity and guarantee – Contract of bailment and pledge – Contract of Agency – Creation of agency – Rights, duties and liabilities of an agent - Termination of agency.
UNIT 5	Sale of Goods Act : Formation of contract of Sale - caveat emptor - Express and implied conditions and warranties – Performance of Contract of Sale – Rights of an unpaid Seller.

REFERENCE BOOKS:

1. N.D.Kapoor- “Business Law” Sulthanchand Publishers
2. Srinivasan Business Law Margham Publishers Chennai – 2004
3. Kuchcal, Mercantile Law, Vikas Publishing house New Delhi – 2003.
4. Commercial / Business Law – N.D. Kapoor

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M426R	CORE: XV OFFICE MANAGEMENT	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Office Management: Meaning, functions, Role of manager in office – Planning & scheduling of office work.
UNIT 2	Records Management: Meaning purpose, Principles – Filing: objectives characteristics of good filing system, methods of filing.
UNIT 3	Office correspondence – Handling inward mail and outward mail, Typing and reproduction service, mail service – Forms: Types of Forms, Form design, principles and control.
UNIT 4	Office stationery & supplies –Types of stationery, stationery purchase, record, storage and issue of stationery.
UNIT 5	Office Cost Reduction: Elements of office cost – methods of cost control – management of office work – setting standard – process of measurement – work simplification.

REFERENCE BOOKS:

1. Leffing welland Robinson: Text Book of office management.
2. P.K.Ghose – Office Management.
3. J.C.Denyly – Office Management.

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14A4262	CORE: XVI APPLICATION ORIENTED PAPER II PRACTICAL TRAINING PHASE II	-	-	5	6

UNIT	SYLLABUS
UNIT 1	Unit 1: OBJECTIVE OF THE INTERNSHIP 1. To impart training in one Cooperative society / bank for 15 days thereby providing an opportunity to the student to know in detail the general working. 2. To bring out a project report like record by a student under the guidance of a Lecturer in the department of Cooperation. List of Cooperatives / departments recommended for apprenticeship training. 1. Primary Agricultural Cooperative Bank 2. District Central Cooperative Bank / Brance 3. Primary Agriculture And Rural Development Bank 4. Urban Cooperative Bank 5. Employees Thrift and Credit Society 6. House Building Cooperative Society 7. Cooperative Consumer Whole Sale Stores / Super market. 8. Primary Weaver's Society 9. District Cooperative Union 10. Circle Deputy Registrar's Office 11. Block Department office – Extension officer / Cooperation 12. District Cooperative Audit office.
UNIT 2	Unit 2: Detailed study of the byelaws of the society Registration, Liability, Working Capital, Membership, Functions, Profit Distribution etc.,
UNIT 3	Unit 3: Management and Administration of the society, General body, Board of Management Secretary And Various Sections / Departments.
UNIT 4	Unit 4: Statutory matters like Amendment of byelaws, Audit – Classification, Inspection Inquiry Arbitration Liquidation etc.,
UNIT 5	Unit 5: Preparation Record: each student shall submit two records original and duplicate. The record shall be corrected by the lecturer allotted, The record shall contains 3 chapters 1. General Profile 2. Special functions 3. The Work Learnt

Assessment of Apprenticeship training:

A faculty on rotation basis will be in-charge of this Phase-II practical training programme. The assessment of apprenticeship training shall be assessed by internal examiner the Professor in-charge of the Training Programme and an external examiner drawn from the panel of examiners recommended by the board of studies in cooperation. The following criteria shall be adopted for an assessment.

1. Internal – by Internal examiner	20 Marks
2. Record	50 Marks
3. Viva Voce	<u>30 Marks</u>
	<u>100 Marks</u>

For record and viva voce marks the average of both examiners will be taken into account.

1. Apprenticeship under gone : To Assess the students performance, the department shall evolve a proforma containing the areas like Attendance, work Learnt, behavior, Attitude towards the training etc., and get a confidential performance appraisal report from the concerned society in the prescribed proforma.
2. Apprenticeship record assessment :
 1. To verify the record whether it reflects active participation of the student.
 2. To verify the records whether the administrative functions of the society are well recorded.
 3. To verify whether the special functions carried out to fulfill the requirement of the principal objective are well Interpreted.
 4. To verify whether the various books, records maintained are recorded.
 5. To verify whether the data collected have been presented well (sequence of ideas elastic tabulation diagram etc.,).

B.COM-COOPERATION

Course Code	COURSE TITLE	L	T	P	C
14M426S	ELECTIVE: II PRINCIPLES OF MARKETING	5	-	-	5

UNIT	SYLLABUS
UNIT 1	Marketing: Concept of Market and Marketing, Modern Concept of Marketing, Objectives, Classification of Markets, Market Selling, Marketing and Economic Development.
UNIT 2	Marketing Functions: Marketing Process- Concentration, Dispersion and Equalization: Classifications of Marketing Functions, Functions of Exchange - Functions of Physical Supply- Facilitating Functions- Approaches to Marketing - Marketing Management- Process and Concepts.
UNIT 3	Marketing Mix: Meaning of Product, Product Mix- Product Life Cycle- Price Mix- Pricing Objectives, Kinds of Pricing, Methods of Price Determination, Market Segmentations: Meaning, Definition, Pattern of Segmentation, New Product Development and Segmentation Steps.
UNIT 4	Promotion Mix: Importance of Advertising- Personal Selling and Sales Promotion, Place Mix- Importance of Channels of Distribution - Functions of Middlemen
UNIT 5	Services Marketing: Meaning, Definition, Features - Difference between Transaction Marketing and Services Marketing- Classification of services, expanded marketing mix for services- SWOT of service mix of Educational Institutions.

REFERENCE BOOKS:

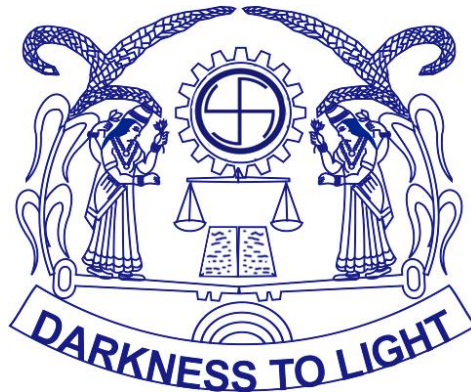
1. Services Marketing in Indian Context - R.Srinivasan
2. Principles of Marketing - Philip Kotlar.
3. Marketing Management - Pillai and Bagavathi.
4. Marketing Management - Mamoria, C.B and Satish Mamoria
5. Marketing - Gandhi. J.C.

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

**DEPARTMENT OF CORPORATE
SECRETARYSHIP**
B.Com. (Corporate Secretaryship)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

B.COM-CORPORATE SECRETARYSHIP

SCHEME OF EXAMINATIONS

SEMESTER – I

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
TLC I	14L11AA	Foundation Course: Tamil-I or any language	6	3	20	80	100
ELC I	14E11AA	Foundation Course: English – I	4	3	20	80	100
Core I	16M441A	Core Course: Financial Accounting – I	6	4	20	80	100
Core II	16M441B	Core Course: Business Management	6	4	20	80	100
Allied Subject -I	16C441A	Allied – I Banking & Financial Services	4	5	20	80	100
Non-Major - I	14N61ZA	Basics of Retail Marketing	2	2	20	80	100
Soft Skills	14S61AA	Essentials of Language and Communication	2	2	20	80	100
		Total	30	23			700

SEMESTER – II

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
TLC II	14L12AB	Foundation Course: Tamil/language II	6	3	20	80	100
ELC II	14E12AB	Foundation Course: English – II	4	3	20	80	100
Core III	16M442C	Core Course: Financial Accounting – II	6	4	20	80	100
Core IV	16M442D	Core Course: Business Environment	6	4	2	80	100
Allied Subject-II	16C442B	Allied – II Office Management	4	5	20	80	100
Non-Major - II	14N62ZB	Fundamentals of Insurance	2	2	20	80	100
Soft Skills	14S62AB	Essentials of Spoken and Presentation Skills	2	2	20	80	100
		Total	30	23			700

B.COM-CORPORATE SECRETARYSHIP

SEMESTER – III

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
TLC III	14L13AC	Foundation Course: Tamil/language III	6	3	20	80	100
ELC III	14E13AC	Foundation Course: English – III	4	3	20	80	100
Core V	16M443E	Core Course: Corporate Accounting-I	6	5	20	80	100
Core VI	16M443G	Business Law	6	5	20	80	100
Allied Subject - III	16C443C	Allied – III Business Statistics – I	6	5	20	80	100
Soft Skills	14S63AC	Personality Enrichment	2	2	20	80	100
		Total	30	23			600

SEMESTER- IV

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
TLC IV	14L14AD	Foundation Course: Tamil/Language IV	6	3	20	80	100
ELC IV	14E14AD	Foundation Course: English – IV	4	3	20	80	100
Core VII	16M444H	Core Course: Corporate Accounting-II	6	4	20	80	100
Core VIII	16M444J	Business Communication	5	4	20	80	100
Allied Subject – IV	16C444D	Allied – IV Business Statistics – II	5	5	20	80	100
EVS	16E64AA	Environmental Studies	2	2	20	80	100
Soft Skills	14S64AD	Computing Skill	2	2	20	80	100
		Total	30	23			600

B.COM-CORPORATE SECRETARYSHIP

SEMESTER – V

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
Core IX	16M445K	Core Course: Cost Accounting	6	4	20	80	100
Core X	16M445L	Human Resources Management	6	4	20	80	100
Core XI	16M445M	Income Tax law and Practice-I	6	4	20	80	100
Core XII	16M445N	Company Law & Secretarial Practice	5	4	20	80	100
Core XIII	16A445A	Application Oriented Subject I Entrepreneurial Development	5	5	20	80	100
VE	14V66AG	Value Education	2	2	20	80	100
		Total	30	23			600

SEMESTER – VI

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
Core XIV	16M446P	Core Course: Accounting for managerial decisions	6	5	20	80	100
Core XV	16M446Q	Industrial Law	6	4	20	80	100
Core XVI	16M446I	Computer Application in Business	5	4	20	80	100
Core XVII	16M446R	Income Tax Law & Practice II	6	4	20	80	100
Core XVIII	16A446B	Application Oriented Subject II- Institutional Training (Project Report and Viva Voce Examination)	5	5	20	80	100
		Total	30	23			500

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M444H	Financial Accounting – I	6	-		4

UNIT	SYLLABUS
UNIT I	<u>Basic Accounting Concepts & Conventions Final Accounts</u> Meaning and scope of Accounting, Basic Accounting concepts and conventions – Objectives of Accounting – Preparation of Final Accounts of a Sole Trading concern – with necessary adjustments.
UNIT II	<u>Average due date</u> Insurance Claims – Average Clause Policy Excluding Loss of Profit – Average due date.
UNIT III	<u>Rectification of Errors & B.R.S</u> Classification of Errors – Rectification of errors – Preparation of Suspense Account – Bank Reconciliation Statement (BRS)
UNIT IV	<u>Depreciation</u> Depreciation accounting – Straight line & Diminishing balance include change in method of Depreciation.
UNIT V	<u>Single Entry System</u> Single Entry System – Meaning, Features, Defects – Difference between single entry and Double entry system – Statement of Affairs method – Conversion method.

TEXT BOOKS:

1. R.L. Gupta & V.K. Gupta _ Financial Accounting – Sultan Chand Publishing – New Delhi.
2. T.S. Reddy & A. Murthy – Financial Accounting – Margham Publishers T. Nagar – 17.

REFERENCE BOOKS:

1. Jain & Narang – Financial Accounting – Kalyani Publishers Patiala
2. Tulsian – Financial Accounting – Tata MC Graw wills New Delhi.

Rajasekar – Financial Accounting – Pearson Publications

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M441B	Business Management	6	-		4

UNIT	SYLLABUS
UNIT I	Management: Importance – Definition – Nature and Scope of Management Process – Role and Functions of a Manager – Levels of Management – Development of Scientific Management and other Schools of thought and approaches.
UNIT II	Planning: Nature – Importance – forms – Types – Steps in Planning – Objectives – Policies – Procedures and Methods – Natures and Types of Policies – Decision Making- Process of Decision-Making – Types.
UNIT III	Organizing: Types of Organizations – Organization Structure – Span of Control Departmentalization Informal Organization.
UNIT IV	Authority – Delegation – decentralization – Difference between Authority and Power – Responsibility –Direction – Nature and Purpose.-- Leader ship and Kinds Motivation Kinds Of Motivation.
UNIT V	Co- Ordination – Need, Type and Techniques and Requisites for Excellent Co - Ordination – Controlling – Meeting and Importance – Control Process.

TEXT BOOKS:

1. Stephen P. Robbins and Mary Coulter, 'Management', Prentice Hall of India, 8th edition. 2005.
2. Charles W L Hill, Steven L McShane, 'Principles of Management', Mcgraw Hill Education, Special Indian Edition, 2007.

REFERENCE BOOKS:

1. Hellriegel, Slocum & Jackson, ' Management -A Competency Based Approach', "Thomson South Western, 10th edition, 2007.
2. Harold Koontz, Heinz Weihrich and Mark V Cannice, 'Management -A global perspective, Prentise hall, 2005.
3. Stephen Robbins, Business Management, Pearson Education pub, 2008.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16C441A	Banking & Financial Services	4	-		5

UNIT	SYLLABUS
UNIT I	Origin of banks – Banking Regulation Act, 1949 (Definition of Banking, Licensing, Opening of branches, Functions of Banks, Inspection) – Role of Banks and Economic Development – Central Banking and Role of RBI and their functions.
UNIT II	Commercial Banks – Functions – Accepting Deposits – Lending of Funds, E-Banking – ATM Cards, Debit Cards, Personal Identification Number – Online enquiry and update facility – Electronic Fund Transfer – Electronic Clearing System – Core-Banking.
UNIT III	Opening of an Account – Types of Deposit Account – Types of Customers (Individuals, Firms, Trust and Companies) – Negotiable Instruments Act.
UNIT IV	Cheques –Definition – Endorsement – kinds of endorsement
UNIT V	Financial Services - Meaning, Types & Importance – Merchant Banking – Underwriting – Mutual Funds.

TEXT BOOKS:

1. Santhanam. B, “Financial Services”, Margham Publications, Chennai 2003.
2. Khan. M.Y, “Financial Services”, TataMcGraw Hill Publications.2004

REFERENCE BOOKS:

1. Banking Law Theory & Practice – Sundaram and Varshney – Sultan Chand Co.
2. Banking and Financial Systems – B. Santhanam – Margham Publishers.
3. Banking Law Theory & Practice – S N Maheswari – Kalyani Publishers.
4. Indian Banking – Parameswaran.
5. Banking Theory Law & Practice – Tanon.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14N61ZA	Basics of Retail Marketing	2	-		2

UNIT	SYLLABUS
UNIT I	Retailing – Definition – Retail marketing – Growth of organized retailing in india – importance of retailing.
UNIT II	Function of Retailing – Characteristics of Retailing – Types of Retailing – Store Retailing – Non store retailing.
UNIT III	Retail Location Factors – Branding in Retailing – Private Labeling – Franchising Concept.
UNIT IV	Communication tools used in retailing – Sales Promotion, E –Tailing – Window Display.
UNIT V	Supply Chain Management – Definition – Importance – Role of Information technology in Retailing.

TEXT BOOKS:

1. Philp Kotler, “Marketing Management”, Pearson Education.
2. Rajan Nair, “Marketing Management”, Sultan Chand & Sons.

REFERNCE BOOKS:

1. Gilbert Pearson , Retail Marketing Education Asia , 2001
2. Vedamani Gibson , Retail Marketing Jaici Publishing House New Delhi – 2000
3. Berman & Evans Retail Management Phi , New Delhi 2001
4. ta Mc , Graw Hill, New Delhi 2001
5. Dr. L. Natarajan Retail Marketing Margham Publication Chennai

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14S61AA	Essentials of Language and Communication	2	-		2

UNIT	SYLLABUS
UNIT I	Recap of language skills – vocabulary, phrase, clause, and sentence.
UNIT II	Fluency building.
UNIT III	Principles of Communication.
UNIT IV	Types of Communication.
UNIT V	LSRW in Communication.

Recommended Texts

- Monippally, Matthukutty. M. 2001. *Business Communication Strategies*. 11th Reprint. Tata McGraw-Hill. New Delhi.
- Sasikumar. V and P.V. Dhamija. 1993. *Spoken English: A Self-Learning Guide to Conversation Practice*. 34th Reprint. Tata McGraw-Hill. New Delhi.
- Swets, Paul. W. 1983. *The Art of Talking So That People Will Listen: Getting Through to Family, Friends and Business Associates*. Prentice Hall Press. New York.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M442C	Financial Accounting – II	6	-		4

UNIT	SYLLABUS
UNIT I	<u>Branch Accounts</u> Branch Accounts – Dependent Branches – Stock and Debtors System – Branch Trading Accounts – Distinction between whole sale profit and Retail Profit.
UNIT II	<u>Departmental Accounts</u> Departmental Accounts – Basis for allocation of expense – Inter departmental - Transfer of cost (or) Selling price – Treatment of expenses which cannot be allocated
UNIT III	<u>Hire Purchase & Installment Purchase System</u> Hire Purchase Accounting – Treatment of Default and Repossession – Complete and Partial – Installment Purchase System.
UNIT IV	<u>Partnership Accounts</u> Partnership Accounts – Concepts - Treatment of Goodwill – Admission – Retirement cum Admission – Simple Problems only.
UNIT V	<u>Dissolution of Partnership Firm</u> Partnership Dissolution – Insolvency of a partner – All Partners – Distribution – Simple Problems only.

TEXT BOOKS:

1. T.S.Reddy&A.Murthy, “Financial Accounting”, Margham Publications, Sixth Revision Edition, 2011.
2. P.C. Tulsian, “Financial Accounting”, Tata MC Graw Hill Ltd, 2003.

REFERENCE BOOKS:

1. R.L. Gupta & V.K. Gupta _ Financial Accounting – Sultan Chand Publishing – New Delhi.
2. Jain & Narang – Financial Accounting – Kalyani Publishers Patiala
3. Tulsian – Financial Accounting – Tata MC Graw will New Delhi.
4. T.S. Reddy & A. Murthy – Financial Accounting – Margham Publishers T. Nagar – 17.
5. Rajasekar – Financial Accounting – Pearson Publications

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M442D	Business Environment	6	-		4

UNIT	SYLLABUS
UNIT I	The concept of Business Environment – its nature and significance – Brief overview of political – Cultural – legal – economic and social and environments and their impact on business and strategic decisions.
UNIT II	Political Environment – Government and Business relationship in India – Provisions of Indian Constitution pertaining to business.
UNIT III	Social environment – Cultural heritage – social attitudes – impact of foreign culture – castes and communities – joint family system – linguistic and religious groups – Types of social organization –social responsibilities of business.
UNIT IV	Economics Environment – Economic systems and their impact on business – Macro economic parameters like GDP – growth rate of population – Urbanisation – Fiscal deficit – Plan investment – Per capita income and their impact on business decisions – Five Year Planning.
UNIT V	Financial and technological Environment – Financial system – Commercial banks – Financial Institutions – RBI Stock Exchange – IDBI – Non Banking Financial Companies NBFCs

TEXT BOOKS:

1. Francis Cherunilam, Business Environment-Himalaya Publishing House, New Delhi,2009
2. Aswathappa, Essentials Of Business Environment, Himalaya Publishing House, New Delhi.2013

REFERENCE BOOKS:

1. Sankaran S – Business Environment
2. Francis Cherunilam - Business Environment
3. Aswathappa - Business Environment
4. Dasgupta & Sengupta – Government and Business in India
5. Srinivisan K. – Productivity and social Environment.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16C442B	Office Management	4			5

UNIT	SYLLABUS
UNIT I	Meaning of Office – Office Functions – The Office manager & his job – Office Organisation – Its significance – Elements of Management – Qualities of Office Manager – Importance of Office Management.
UNIT II	Office Accommodation – Principles – Location of Office – Office Layout – Open and Private Offices – Office Environment Office Lightening, Ventilation, Interior Decoration – Furniture – noise & Dust – Physical Hazards – Sanitary Requirements.
UNIT III	Office systems and Procedures – Definitions – Characteristics of systems – Functions and Responsibilities of Systems and Procedures office security – Office Manual office Services – Work Simplification (O&M) work measurement and control – motion Study Theory – Time Study – Advantages and disadvantages of these studies.
UNIT IV	Office Committee – Office Form – Design Management and Control – Office Stationery – Need to control – Office Stationery and Supplies – Purchasing and Managing of Office Supplies – Continues Stationery.
UNIT V	Office Mail Service – handling Inwards and Outwards Mail – Office Appliances and Equipments – Equipments – Used in a modern Office including Franking Machine, Xeroxing Machine, Fax, Pager, Cellular phones. Records Management – Filing – Different Methods of filing – Essential features of good filing system – Their advantages and disadvantages – Indexing – Different Methods of Indexing – Their Advantages and Disadvantages.

TEXT BOOKS:

1. Dr. Jayashree, Business Organisation and Business Management, Kalyani Publication, 2011.
2. Dr. Jayashankar , Office Management, Margham Publication, 2015.

REFERENCE BOOKS:

1. P.K. Gosh – Office Management
2. J.C. Denyer – Office Management
3. Chopra P.K. – Office Management
4. S.P. Arora – Office Management
5. Little Field CL and Peterson RL – Modern Office Management

B.COM-CORPORATE SECRETARYSHIP

6. Littleingnell – Office Management

Course Code	COURSE TITLE	L	T	P	C
14N62ZB	Fundamentals of Insurance	2			2

UNIT	SYLLABUS
UNIT I	Origin And history Of Insurance – Meaning and definition of Insurance - Features Of Insurance – Principle Of Insurance – Objective and advantage of Insurance – Types of Insurance – Insurance – Insurance Organization In India And their Profile – Insurance Regulatory And Development Authority – Its duties and functions.
UNIT II	Meaning and definition of Life Insurance – Its Features – Its fundamental Principles – Types of Policies in Life Insurance - Meaning And definition of Fire Insurance – Features – Fundamental Principles – Types of Policies in Fire Insurance – Meaning And definition of Marine Insurance – Features – Fundamental Principles – Types of Policies in Marine Insurance.

Recommended Books:

1. A. Murthy : Elements Of Insurance
2. M.N.Mish : Insurance – Principles And practices

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14S62AB	Essentials of Spoken and Presentation Skills	2			2

UNIT	SYLLABUS
UNIT I	Thinking and Articulation – cognitive, affect, critical, creative aspects of articulation.
UNIT II	Acquisition of Oral and Aural Skills.
UNIT III	Communication Boosters – body language.
UNIT IV	Function of Cultural Codes in Presentation – etiquette.
UNIT V	Models of Presentation.

Recommended Texts

- Powell. *In Company*. MacMillan.
- Cotton, et al. *Market Leader*. Longman.
- Pease, Allan. 1998. *Body Language: How to Read Others Thoughts by their Gestures*. Sudha Publications. New Delhi.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice: A Reader*. Basic Books. New York.
- De Bono, Edward. 2000. *Six Thinking Hats*. 2nd Edition. Penguin Books.
- De Bono, Edward. 1993. *Serious Creativity*. Reprint. Harper Business.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M443E	Corporate Accounting-I	6	-		5

UNIT	SYLLABUS
UNIT I	Company – Definition - kinds of companies, types of shares – Issue of shares and debentures – Issue at par, premium and discount – Forfeiture and reissue-underwriting of shares and debentures – Liability of under writers – partial, complete and firm.
UNIT II	Redemption of Preference shares and debentures – purchase of business – Profit prior to incorporation.
UNIT III	Preparation of Company's Final Accounts – Company Balance sheet preparation – computation of Managerial Remuneration.
UNIT IV	Valuation of goodwill and Shares.
UNIT V	Internal Reconstruction – Alteration of share capital and Reduction of capital.

TEXT BOOKS:

1. R.L.Gupta – Corporate Accounting, Sultan chand.
2. Jain and Narrang - Company Accounts, Kalyani.

REFERENCE BOOKS :

1. Shukla and Grewal – Advanced Accounts, S.Chand
2. T.S. Reddy and A.Murthy – Corporate Accounting, Margam
3. Chakraborti- Advanced Accountancy.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M443G	Business Law	6	-		5

UNIT	SYLLABUS
UNIT I	<u>Nature of Contract : Object of Law of contract</u> The Indian contract act 1872 – Definition of contract - Essential elements of a valid contract – clarification of contracts – offer and acceptance and Communication of offer and Acceptance and Revocation. Consideration – Capacity to contract – Free consent - Legality of object –void agreement.
UNIT II	Performance of contract – offer to perform contracts which need not be performed – by whom contract must be performed who can demand performance. Discharge of Contract – meaning – methods – by performance –by agreement – impossibility of performance.
UNIT III	Remedies for Breach of Contract – Introduction Recession – Damages – Specific Performance – injunction - Quasi contracts.
UNIT IV	<u>Special Contracts</u> Contract of Indemnity and guarantee – Contract of bailment and pledge – Contract of Agency – Creation of agency – Rights, duties and liabilities of an agent - Termination of agency.
UNIT V	<u>Sale of Goods Act</u> Formation of contract of Sale - caveat emptor - Express and implied conditions and warranties – Performance of Contract of Sale – Rights of an unpaid Seller.

TEXT BOOKS:

1. N.D.Kapoor- “Business Law” Sulthanchand Publishers.
2. RSN Pillai & Bhagavathy Business Law, Sultan chand & Co Ltd,

REFERENCE BOOKS :

1. Srinivasan Business Law Margham Publishers Chennai.
2. Kuchcal, Mercantile Law, Vikas Publishing house New Delhi.
3. Commercial / Business Law – N.D. Kapoor

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16C443C	Business Statistics – I	6	-		5

UNIT	SYLLABUS
UNIT I	Origin, Meaning, definition and characteristics of statistics – Uses and limitation.
UNIT II	Classification and Tabulation of Data – Types and Importance. Presentation of data including diagrammatic and Graphical Methods – Bar Diagram, Pie Diagram histogram and Ogive. Frequency Table – Structure and Formation – Discrete and Continuous Series.
UNIT III	Measure of Central Tendency / Average – Arithmetic Mean, Median, Quartiles, Mode, Geometric, Harmonic Mean, Combined Arithmetic Mean and weighted Mean.
UNIT IV	Measures of Dispersion – Range, Quartiles, Deviation, Mean Deviation and Standard Deviation.
UNIT V	Measures of skewness – Meaning, Definition and Types – Karl Pearson's Coefficient of Skewness and Bowley's Coefficient of Skewness.

TEXT BOOKS:

1. S.P.Gupta, "Statistical methods", Sultan Chand,
2. P.R.Vittal, 'Business statistics and operation', Margham Publications.

REFERENCE BOOKS:

1. S.P. Gupta – Statistical methods
2. D.N. Gupta – Business statistics
3. B.N. Asthana – Elements of statistics
4. R.S.N. Pillai and V. Bhagavathi – Statistics

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14S63AC	Personality Enrichment	2			2

UNIT	SYLLABUS
UNIT I	Introduction • Definition of Personality • Components of Personality – Structural and Functional aspects • Determinants of Personality – Biological, Psychological and Socio-Cultural factors • Assessment of Personality – Observation, Interview and Psychological Tests • Misconceptions and Classifications • Need for Personality Development
UNIT II	Self Awareness and Self Motivation • Self Analysis through SWOT and Johari window • Elements of Motivation • Seven rules of Motivation • Techniques and Strategies for Self Motivation • Motivation Checklist and Goal Setting based on the principles of SMART • Self Motivation and Life
UNIT III	General Knowledge and Current Affairs • Regional, National and International events • Geographical, Political and Historical facts • Information on sports and other recreational activities • Basic knowledge with regard to health and health promotion
UNIT IV	Memory, Decision Making and Study Skills • Definition and Importance of Memory • Causes of Forgetting • How to forget (thought stopping), how to remember (techniques for improving memory) • The technique of passing exams • The rational decision making process • Improving creativity in decision making and components of creativity
UNIT V	Power of Positive Thinking • Thinking power – seven steps for dealing with doubt • Traits of positive thinkers and high achievers • Goals and techniques for positive thinking • Enhancement of concentration through positive thinking • Practicing a positive life style

PRACTICAL TRAINING – The course would include the following practical exercises

- Ice Breaking
- Brainstorming
- Stimulation Exercises
- Thought Stopping
- Memory
- Study Skills Training

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M444H	Corporate Accounting-II	6	-		4

UNIT	SYLLABUS
UNIT I	Human Resource Accounting – Accounting Standards – Financial Reporting Practices – Accounting for price 1 level changes.
UNIT II	Amalgamation – Absorption and external reconstruction of a company – (intercompany investments excluded)
UNIT III	Preparation of profit and loss account and balance sheet of banking companies and insurance companies
UNIT IV	Holding Companies and preparation of Consolidated Balance Sheet.(simple problems only)
UNIT V	Liquidation – meaning – order of payment liquidator’s remuneration – Liquidator’s final statement of account

TEXT BOOK:

1. T.S. Reddy & Murthy, “Corporate Finance”, Margham Publications.
2. R.L. Gupta – Corporate Accounting, Sultan Chand

REFERENCE BOOKS :

1. Shukla and Grewal – Advance Accounts, S.Chand
2. T.S. Reddy and A. Murthy – Corporate Accounting, Margam.
3. Jainand Narang – Company Accounts, Kalyani
4. R.L. Gupta – Corporate Accounting, Sultan chand

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M444J	Business Communication	5	-		4

UNIT	SYLLABUS
UNIT I	Definition – Methods – Types – Principles of effective Communication – Barriers to Communication – Business Letter – Layout.
UNIT II	Kinds of Business Letter: Interview – Appointment – Acknowledgement – Promotion – Enquiries – Replies – Orders – Sales – Circular – Complaints.
UNIT III	Bank Correspondence – Insurance Correspondence – Agency Correspondence – Correspondence with Shareholders, Directors.
UNIT IV	Reports Writing – Agenda, Minutes of Meeting – Memorandum – Office Order – Circular – Notes.
UNIT V	Modern Forms of Communication: Fax – e-mail – Video Conferencing – Internet – Websites and their use in Business.

TEXT BOOKS:

1. Essentials of business communication-Rajendra pal & J.S.Korlahalli.
2. Communication for business-Shirley taylor

REFERENCE BOOK:

1. Essentials of Business Communication – Rajendra Pal & J.S. Korlahalli
2. Communication for Business – Shirley Taylor.
3. Business Communication Today – Bovee, Thill, Schatzman
4. Advanced Business Communication – Penrose, Rasbery, Myers]

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16C444D	Business Statistics – II	5	-		5

UNIT	SYLLABUS
UNIT I	Correlation – Meaning, Definition, Significance and Types of Correlation, Scatter Diagram, Karl Pearson’s Coefficient of Correlation – Spearman’s Rank Correlation.
UNIT II	Regression Analysis – Meaning and Importance – Regression Equations
UNIT III	Time Series Analysis – Meaning, Need and Components of Time Series – Different methods – Simple Average Method – Free hand, Semi Average, Moving Average and Least square Method – Seasonal indices.
UNIT IV	Index Numbers – Definition, Usage, Methods of construction of Index Numbers – Types – Unweighted and Weighted Index Numbers. Simple, Aggregate, Price Relatives Methods – Laspeyres, Paasche’s, Bowley’s and Fisher’s Index numbers – Time and Factor Reversal Tests – Cost of Living Index.
UNIT V	Sampling – Meaning, Importance, Types – Probability and Non-Probability – Sampling Errors – Tools used in Business Research (Theory only)

TEXT BOOKS:

1. S.P. Gupta (S.P.): “Statistical Methods”, Sultan Chand & Sons.
2. Richard Levin & David Rubin, “Statistics for management”, Prentice Hall.

REFERENCE BOOKS:

1. S.P. Gupta – Statistical Methods
2. B.N. Gupta – Business Statistic
3. Asthana – Elements Of Statistics
4. R.S.N. Pillai And V. Bhagavathi – Statistics

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14S64AD	Computing Skill	2			2

UNIT	SYLLABUS
UNIT I	Introduction to Computers – Classification of Computers; Role of Computers in society; Inside the Computers – Hardware (processing, memory, i/o, storage), Software (systems, application), CPU, OS, (DOS, Windows, Unix, Linux), Storage Devices; Programming – Overview, need for languages, skills; Networking Basics; Virus; Hacking.
UNIT II	Word Processing – Open, Save and close word document; Editing text – tools formatting, bullets; Spell Checker; Navigating in word – keyword, Mouse document formatting – paragraph alignment, indentation, headers and footers numbering; printing – preview, options.
UNIT III	File Management – Understanding the importance of file management; backing of files, navigating thru My Computer and Windows Explorer; Files and Folders – editing, retrieving, deleting, renaming, subfolders – manipulate windows – maximize, minimize; Power point basics – terminology, templates, viewing
UNIT IV	Spreadsheets – MS Excel – opening, entering text and data, formatting, navigating; Formulas – entering, handling and copying; Charts – creating, formatting and printing, header and footer, centering data, printing
UNIT V	Networks – Internet Explorer – components; www – working, browsing, searching, saving – Bookmark – favorite, create, delete – Printing a web page; email – creating, receiving, reading and sending messages.

TEXT BOOKS:

1. Surtis Frye, Joyce Cox, Steve Lambert, “Microsoft Office System” Step By Step, 2007.
2. Nance Muir, “Microsoft Office- Power Point 2007 Plain and Simple”, Amazon.Com .

REFERENCE BOOKS:

1. Introduction to Computers – Peter Norton, Tata McGraw-Hill.
2. Microsoft 2003 – Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, Tata McGraw-Hill.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16E64AA	Environmental Studies	2			2

UNIT	SYLLABUS
UNIT I	The Multi disciplinary Nature of Environmental Studies Definition, scope and importance, Need for public awareness.
UNIT II	Natural Resources Renewable and non-renewable resources: Natural resources and associated problems • Forest Resources: Use and over-exploitation, deforestation case studies, timber extraction, mining, dams and their effects on forests and tribal people. • Water Resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams – benefits and problems. • Mineral Resources: Use and exploitation, environmental effects of extracting using mineral resources case studies. • Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging salinity, case studies. • Energy Resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources – Case Studies. • Land Resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual and conservation of natural resources – Equitable use of resources for sustainable life styles.
UNIT III	Ecosystems Concept of an Ecosystem – Structure and Function – Producers, consumers and decomposers – Energy flow in the ecosystem – Ecological succession – Food chains, food webs and ecological pyramids – Introduction, types, characteristics, features, structures and function of Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem and Aquatic Ecosystem (ponds, streams, lakes, rivers, oceans, estuarine)
UNIT IV	Biodiversity and its Conservation Introduction – Definition genetic species and eco-system diversity – Bio-geographical classification of India – Value of the biodiversity – consumptive use, productive use, social, ethical. Aesthetic and option values – Biodiversity at Global, National and Local levels – India as a mega – diversity nation – Hot-Spots of biodiversity – Threats to biodiversity habitat loss, poaching of wildlife, man wildlife conflicts – Endangered and endemic species of India – Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.

B.COM-CORPORATE SECRETARYSHIP

UNIT V	Environmental Pollution Definition Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards – Solid water management causes, effects and control measures of urban and industrial wastes – Role of an individual in prevention of pollution – Pollution of case studies – Disaster management, floods, earthquake, cyclone and landslides.
UNIT VI	Social Issues and the Environment Unsustainable to Sustainable development – Urban problems related to energy – Water conservation, rain water harvesting, watershed management – Resettlement and rehabilitation of people; its problems and concerns & Case Studies – Environmental ethics issues and possible solutions – Climate change, global warming, Acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies, Wasteland reclamation – Consumerism and waste products – Environmental Protection Act – Air (Prevention and Control of Pollution) Act – Water (Prevention and Control of Pollution) Act – Wildlife Protection Act – Forest Conservation Act – Issues involved in enforcement of environmental legislation – Public awareness.
UNIT VII	Human Population and the Environment Population growth, variation among nations – Population explosion – Family Welfare Programme – Environment and human health – Human Rights – Value Education – HIV / AIDS – Women and Child welfare – Role of Information Technology in Environment and human health – Case Studies.
UNIT VIII	Field Work Visit to a local area to document environmental assets – river / forest / grassland / hill mountain – Visit to a local polluted site – Urban / Rural / Industrial / Agricultural – Study of common plants, insects, birds – Study of simple ecosystems – pond, river, hill slopes, etc. (Field work equal to 5 lecture hours)

TEXT BOOKS:

1. Dr. Shradhasinha, Dr.Manishashukula, Dr. Ranjana Shukla, “Environmental studies, Kurukshetra University.

REFERENCE BOOKS:

1. Dr. N. Arumugam, Prof.V. Kumaresan, “Environmental studies”, Saras Publication,
2. Thangamani&ShyamalaThangamani, “Environmental studies”,Kurukshetra University.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M445K	Cost Accounting	6	-		4

UNIT	SYLLABUS
UNIT I	Introduction of cost accounting – Meaning, definition, scope and objectives of cost accounting, cost accounting Vs financial accounting – Difference between cost accounting and Management accounting – Requisites of good costing system – Steps necessary to install a cost system – General principles – Classification methods and techniques of cost accounting
UNIT II	<u>Cost sheet, Tender, Quotations</u> Elements of cost – Classification of overheads – Cost sheet– cost sheet vs production statement – Stock of Raw materials – specimen cost sheet with inventories – Tenders and quotations
UNIT III	<u>Materials</u> Meaning of material control – Essentials, objectives, advantages – Store keeping and inventory control – Economic Ordering Quantity(EOQ) – pricing of material issues (LIFO, FIFO, HIFO, Simple Average, weighted average, Standard Price method, inflated price method <u>Labour :</u> Computation and control of Labour – Labour turnover – Time keeping department – payroll department – Remuneration and incentives – time rate system, piece rate system – premium and Bonus plan.) material losses
UNIT IV	<u>Overheads</u> Meaning and definition – Importance- Classification – Primary Distribution of overheads, Secondary distribution of overheads – Absorption of overheads – calculation of Machine hour rate
UNIT V	Process Costing – with loss, Normal and Abnormal Loss – Abnormal gain – Inter process profit.

TEXT BOOKS:

1. M.C. Shukla, T.S. Grewal, Dr.M.P.Gupta, “ Cost Accounting”, S.Chand& Company Ltd,
2. Advanced Problems and Solutions in cost accounting- Dr. S. N. Maheswari.

REFERENCE BOOKS :

1. Cost Accounting : T.S. Reddy Y.Hari Prasad Reddy
2. Cost Accounting : Jain And Narang

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3. Cost Accounting : S.P. Iyengar

Course Code	COURSE TITLE	L	T	P	C
16M445L	Human Resources Management	6	-		4

UNIT	SYLLABUS
UNIT I	Nature and scope of HRM-Differences between personnel management and HRM – Environment of HRM – Human resource planning – Recruitment – Selection – methods of Selection – Use of Various tests – Interview techniques in selection – Placement
UNIT II	Induction – Training – Methods – Techniques – identification of the training needs – Training and Development – Performance appraisal-transfer – promotion and termination of services – Career development.
UNIT III	Remuneration – Components of remuneration – Incentives – Benefits – Motivation – Welfare and social security measures.
UNIT IV	Labour Relations – Functions of trade unions – Forms of collective bargaining – Workers participation in management – Types and effectiveness – Industrial Disputes and settlements (laws excluded)
UNIT V	Human Resource Audit – Nature – Benefits – Scope – approaches.

TEXT BOOKS:

1. L.M.Prasad , Human Resource Management., sultan chand.
2. C. B. Mamoria ,Personnel Management,Himalaya Publishing.

REFERENCE BOOKS:

1. V.S.P. Rao – Human Resource Management
2. Ashwathappa – Human Resource Management
3. Garry Deseler – Human Resource Management
4. L.M. Prasad – Human Resource Management
5. Tripathi – Human Resource Management

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M445M	Income Tax law and Practice-I	6	-		4

UNIT	SYLLABUS
UNIT I	Meaning of Income – Canons of Taxation and Income Tax Act – Important definitions under the Income Tax Act – Scope of total income – Residential Status – Incomes exempt from Tax.
UNIT II	Heads of Income – Salaries – Allowances – perquisites and their valuations – Deductions from Salary – Other related provisions –Gratuity – pension – commutation of pension – Provident Fund.
UNIT III	Income from house property – Definition of annual value deductions from annual value – computation under different circumstances.
UNIT IV	Income from business or profession – Allowable and not allowable expenses – General deductions – Principles – Provisions relating to depreciation – deemed business profits chargeable to profits to tax – compulsory maintenance of books of account – audit of accounts of certain persons – special provision for computing incomes on estimated basis under section 44 AD and 45 AE – Computation of income from business or profession
UNIT V	Filing of return of Income – Assessment procedure in brief – Due date of filling of return – Defective return -Belated Return form – Revised return – Self assessment – Best Judgment assessment -various Income Tax Authorities. & Their powers and duties

TEXT BOOKS:

1. V.B. Gaur & Narang, “Income Tax Law And Practice”, Kalayani Publishers..
2. T.S. Reddy & Y. Hari Prasad Reddy, “Income Tax Law and Practice” Margham Publications

REFERENCE BOOKS:

1. Income Tax Law & Accounts – H.C.M.ehrotrc
2. Income Tax Law & Practice – Bhagavathi Prasad
3. Outline of Income Tax - Rupram Gupta
4. Income Tax Law & Accounts – Vinod Singhania

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M445N	Company Law & Secretarial Practice	5	-		4

UNIT	SYLLABUS
UNIT I	Introduction – Definition of company – characteristics – advantages – lifting of the corporate veil – kinds of company – The Company’s Act, 1956 (overview) – The Company Secretaries Act, 1980 (overview).
UNIT II	Secretary – Definition- types of secretaries – Company Secretary – Legal position – Qualifications – Appointment – Rights, duties and liabilities – Dismissal of company secretary.
UNIT III	Formation of Company – incorporation – Documents to be filed with Register – Certificate of Incorporation – Effects of registration – Promoter – Preliminary contracts – duties of secretary at the promotion stage – Memorandum of Association – Articles of association – contents – alteration – secretary’s duties. Prospectus – Contents – Misstatement in prospectus and their consequences – statement in lieu of prospectus – Commencement of business – duties of secretary at commencement stage.
UNIT IV	Dividends, Accounts and Audit: Dividend - Definition – Rules regarding Dividends – Secretarial procedure regarding payment of Dividends. Accounts – Statutory Books – Books of Accounts – Annual Accounts and Balance Sheet – Secretarial Duties.
UNIT V	Winding Up: Meaning – Modes of winding up – Compulsory winding up – Voluntary winding up – Winding up subject to supervision of court – Duties of secretary art in respect of winding up – Liquidators – Duties and powers of Liquidator.

TEXT BOOKS:

1. N.D.Kapoor-Sultan CVhand & Sons- Company law

REFERENCE BOOKS:

1. N.D. Kapoor – Company Law And Secretarial Practice
2. P.P.S. Gogna – A Text Book Of Company Law
3. P.K. Ghosh & Dr. V. Balachandran – Outline of Company Secretary Practice
4. B.N. Tondon – Manual of Secretarial Practice

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16A445A	Entrepreneurial Development	5			5

UNIT	SYLLABUS
UNIT I	Entrepreneurship Concept of Entrepreneurship – delete – Meaning – Types – Qualities of an Entrepreneur – Classification of Entrepreneurs – Factors influencing Entrepreneurship – Functions of Entrepreneurs
UNIT II	Banking & Financial Institutions Entrepreneurial Development – Agencies – Commercial Banks – District Industries Centre – National Small Industries Corporation – Small Industries Development Organisation – Small Industries Service Institute. All India Financial Institutions – IDBI – IFCI – ICICI – IRDBI.
UNIT III	Project Management Business idea generation techniques – identification of Business Opportunities – Feasibility study – Marketing, Finance, Technology & Legal Formalities-Preparation of Project Report Tools of Appraisal.
UNIT IV	EDP Business idea generation techniques – identification of Business Opportunities – Feasibility study – Marketing, Finance, Technology & Legal Formalities-Preparation of Project Report Tools of Appraisal.
UNIT V	Economic development and entrepreneurial growth Role of Entrepreneur in economic growth – Strategic approaches in the changing economic scenario for small scale Entrepreneurs – Networking – Niche play, Geographic Concentration, Franchising/dealership – Development of Women Entrepreneurship.

TEXT BOOKS:

1. C.S.V. Murthy, “Entrepreneurial Development”, Himalaya publishing house

REFERENCE BOOKS:

1. Srinivasan N.P. – Entrepreneurial Development
2. Saravanavel – Entrepreneurial Development
3. Vasant Desai – Project Management
4. Jayashree Suresh – Entrepreneurial Development
5. Holt – Entrepreneurship – New Venture Creation

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14V66AG	Value Education	2			2

UNIT	SYLLABUS
UNIT I	Introduction: Value Education and its relevance to present day – Meaning of Value Education – The meaning of the word value – Significance of Thirukkural about ‘Value Education’ Personal Values: Meaning – Different personal values – Love – Compassion – Gratitude – Courage – Optimism – Friendship
UNIT II	Family Values: Meaning – Social Attitude to Women, Children and Elders – Familal Responsibilities – Dos and Don’ts for Stronger Family bonding – Significance of Thirukkural about ‘Family Values’.
UNIT III	Self Esteem: Fear of failure – Approval seeking – Self Esteem is not selfishness / Ego – Self Esteem / Arrogance – Qualities of a person with Self Esteem – Significance of Thirukkural about ‘Self Esteem’ – Anger: Common situations where people fly into rage – Anger at services – Some practical methods of handling anger – techniques to handle our anger – Handling anger in others – methods to replace anger.

REFERENCE BOOKS:

1. Value Education - N S Raghunathan, Margham Publication

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M446P	Accounting for managerial decisions	6	-		5

UNIT	SYLLABUS
UNIT I	Management Accounting – definition, functions scope, Management Accounting Vs Financial Accounting, Management Accounting Vs cost Accounting.
UNIT II	Analysis and Interpretation of financial statements – Nature, Objectives, essentials and tools, methods – Comparative statements, common size statement and trend Analysis – Ratio Analysis – Meaning, Advantages, Limitations – Profitability, Liquidity and Turnover ratios.
UNIT III	Funds flow and cash flow Analysis funds flow statement – meaning, Importance. Difference between funds flow and Balance sheet – Cash flow statement – meaning, importance – Difference between funds flow analysis and cash flow Analysis – Advantages and Limitations.
UNIT IV	Budgets and Budgetary control – meaning, objectives, merits and demerits – Types of Budgets – Production, Production cost budget, Cash budget, Flexible budget, Sales budget.
UNIT V	Marginal costing (excluding decision making) CVP Analysis – Break Even Analysis – simple problems.

TEXT BOOKS:

1. I.M. Pandey, “Management Accounting”, Vikas Publishing.
2. M Y Khan, PK Jain, “Management Accounting”, Tata McGraw hill.

REFERENCE BOOKS:

1. Management Accounting - T.S.Reddy, Y.Hari Prasad Reddy –Margam Publication.
2. Dr.S.N.Maheswari, Management Accounting, Sultan Chand & Sons.
3. Jain & Narang, Management Accounting. Kalyani Publishers.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M446Q	Industrial Law	6	-		4

UNIT	SYLLABUS
UNIT I	Factories Act, 1948: Definitions – Health – Safety – Welfare – Working hours of Adults, Employment of Women – Employment of Young Persons – Leave with wages.
UNIT II	Minimum Wages Act, 1948 : Interpretation – Fixing minimum rates of wages – Procedures for fixing – Committee and Advisory Boards – Payment of Minimum Wages – Register and Records – Inspectors – Claims – Penalties and Procedures – The Schedule
UNIT III	Workmen’s Compensation Act, 1923: Meaning of the terms compensation – Dependants – Disablement – Temporary and permanent disablement – Employers liability – Accident Arising out of employment and in the course of Employment – notional extension – Occupational Diseases – Determination of Compensation – Duties and powers of the Commissioners
UNIT IV	The Payment of Bonus Act, 1965: History of Bonus Act – Objects of the Act – Application of the Act – Eligibility for Bonus – Computation of Gross Profit – Determination of available surplus and allocable surplus – Steps for calculation of bonus for banking and non-banking companies – Disqualification for bonus – proportionate reduction in bonus – Deductions from bonus – time limit for payment of bonus – Functions of Inspectors.
UNIT V	The Industrial Disputes Act, 1947: Definitions – Authorities under the Act – Reference of Disputes – Procedures and powers of authorities – Strikes and Lockouts – Layoff and Retrenchment – Special provision relating to Lay-Off – Retrenchment and Closure.

TEXT BOOKS:

1. Monnappa, A. Industrial Relations. New Delhi: Tata McGraw Hill.
2. Sen, R. Industrial Relation in India. New Delhi: Macmillan India

REFERENCE BOOKS:

- 1) N.D.Kapoor – Mercantile Law
- 2) Chawla and Garg – Mercantile Law
- 3) Avtar Singh – Mercantile Law
- 4) M.C.Shukla – Mercantile Law
- 5) P.C.Tripathi – Industrial Law

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6) K.R.Balan – Lectures on Applied Public Relations

Course Code	COURSE TITLE	L	T	P	C
16M446I	Computer Application in Business	5	-		4

UNIT	SYLLABUS
UNIT I	MS – Office – Components of MS Office – Word, Formatting, Alignment, Fonts, Picture and image insertion, Mail merge, template – creation of document using template.
UNIT II	MS Excel, Cell Formatting, Cell Alignment, Functions, Chart creation and insertion.
UNIT III	MS PowerPoint, slide creation and presentation, custom animation, layout.
UNIT IV	Tally – About Tally software, uses, group creation, ledger creation, stock group and stock item creation, voucher creation.
UNIT V	SPSS – about SPSS, Statistical analysis, Statistical reports.

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16M446R	Income Tax Law & Practice II	6	-		4

UNIT	SYLLABUS
UNIT I	Income under capital gains – short term, long term capital gains – cost of acquisition – cost of improvement – indexation of cost – capital gains under different circumstances – Exempted capital gains – computation of capital gains.
UNIT II	Income from other sources – as a residing head of income – their computation – grossing up – deduction in computing income under the head and other related provisions.
UNIT III	Clubbing of income – Transfer of income without the transfer of asset – circumstances under which the individual is assessable in respect of remuneration of spouse – assessability of income from assets transferred to spouse, son's wife, another person for the benefit of spouse – Assessability in respect of income of minor child – setoff – carry forward and set off.
UNIT IV	Permissible deductions from gross total income – sec 80 cc to 80U.
UNIT V	Assessment of individuals, Partnership firms and Association of persons. Simple problems only from unit I,II,IV and V only

TEXT BOOKS:

1. V.B. Gaur & Narang, "Income Tax Law And Practice", Kalayani Publishers.
2. T.S. Reddy & Y. Hari Prasad Reddy, "Income Tax Law And Practice" Margham Publications.

REFERENCE BOOKS:

1. Income Tax Law & accounts - H.C. Mehrotra
2. Income Tax Law & Practice - Bhagavathi Prasad
3. Outline of Income Tax - Rupram Gupta
4. Income Tax Law & accounts - Vinod K. Singhanian
5. Income Tax Law & Practice - Gaurand Narang

B.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
16A446B	Institutional Training (Project Report and Viva Voce Examination)	5			5

Supervised Institutional Training shall be an integral part of the Course. It is to be a sort of job testing programme – bridge the gap between theory and practice. It is designed to create a natural interest in the practical aspects of the Company Secretaryship so as to stimulate trainee's desire to face its challenges and problems.

The training should be given under the joint supervision and guidance of the Training Officer of the Institution and Faculty member of Corporate Secretaryship of the college. The details of the training given and the assessment of each student in that regard should be fully documented.

The duration of the training shall be for a period of 30 days during the third year. The training shall broadly relate to (a) Office Management (b) Secretarial Practice.

The training relating to Office Management may be designed to acquaint the trainees with:

1. Company's activities, organization structure, departments and authority relationship.
2. Study of layout, working conditions, office maintenance, safety and sanitary conditions.
3. Study of the Secretarial service, communication, equipments, postal and mailing services and equipments.
4. Acquaintance with office machines and equipments and accounting machines.
5. Acquaintance with filling department, sales, purchase, sales accounts, salary, administration and personnel departments.

The training pertaining to Secretarial Practice shall be on all aspects of the functions of a corporate secretary.

The following types of organizations may be selected for the training:

1. Private or Public Limited Companies (Both Industrial and Commercial).
2. Statutory bodies, Public Enterprises and Public Utilities like L.I.C., Electricity Board, Housing Board and Chambers of Commerce, Cooperative Societies and banks.
3. Multi National Companies.

NOTE:

The paper on Institutional Training shall carry hundred marks and Internal and External Viva – Voce based on a report submitted by the candidate, under the guidance of the faculty member of the respective colleges assisted by the training officers of the Institutions providing training.

The report shall be around 50 typed pages, excluding tables, figures, bibliographies and appendices. The department of the respective college shall value the report. A candidate failing to secure the minimum for a pass (40%) shall be required to resubmit this report to the Department.

The external examiner in consultation with internal examiner should conduct Viva-Voce and evaluate the report.

DHANRAJ BAID JAIN COLLEGE (Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COMMERCE B.Com. (Commerce)



SYLLABUS (Choice Based Credit System)

Total No. of Semesters: 6

Total No. of Credits: 140

SCHEME OF EXAMINATIONS

SEMESTER I

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Foundation Course: Tamil-I or any language	5	3	100	3
II	Foundation Course: English – I	5	3	100	3
Core I	Core Course: Financial Accounting – I	6	3	100	4
Core II	Core Course: Business Statistics	6	3	100	4
Allied Subject -I	Allied – I Business Economics	6	3	100	5
Non-Major	Basic of Retail Marketing	1	3	100	2
	Soft Skill	1	3	100	2

SEMESTER II

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
	Foundation Course: Tamil/language II	5	3	100	3
	Foundation Course: English – II	5	3	100	3
Core III	Core Course: Financial Accounting – II	6	3	100	4
Core IV	Core Course: Quantitative Analysis for Management	6	3	100	4
Allied Subject II	Allied – II Indian Economy	6	3	100	5
Non-Major	Fundamentals of Insurance	1	3	100	2
	Soft skill	1	3	100	2

SEMESTER III

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core	Corporate Accounting I	5	3	100	3
Core	Business Law	5	3	100	3
Core	Business Management	6	3	100	5
Core	Banking Theory Law & Practice	6	3	100	4
Allied Subject	Principles of E-Commerce	6	3	100	5
Non-Major	Personality enrichment	2	3	100	2

SEMESTER IV

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core	Corporate Accounting II	5	3	100	3
Core	Company Law	5	3	100	3
Core	Business Environment	6	3	100	5
Core	Business Communication	5	3	100	4
Allied Subject	Computer Application in Tally	6	3	100	5
Non-major	Computing Skill	2	3	100	2
	Environmental studies	1	3	100	4

SEMESTER V

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core	Core Course: Cost Accounting	6	3	100	4
Core	Human Resources Management	6	3	100	4
Core	Entrepreneurial Development	6	3	100	5
Core	Marketing Management	6	3	100	4
Core	Application Oriented Subject I Income Tax law and Practice-I	6	3	100	5
Non-Major	Value Education	1	3	100	

SEMESTER VI

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core	Core Course: Accounting for managerial decisions	6	3	100	4
Core	Practical Auditing	5	3	100	4
Core	Financial Services	6	3	100	5
Core	Financial Statement Analysis	6	3	100	5
Core	Application Oriented Subject II- Income Tax Law & Practice II	6	3	100	5
	Extension activities				1

ANCILLARY SUBJECT

DEPARTMENT	SUBJECT	SEMESTER
I B.SC Maths & B.com ISM	Financial Accounting	I
I B.SC Maths & B.com ISM	Advanced Financial Accounting	II
II B.SC Maths & Eco & BBA	Cost Accounting	III
II B.SC Maths & Eco & BBA	Management Accounting	IV

Course Code	COURSE TITLE	L	T	P	C
16M431A	Financial Accounting – I	6	-		4

UNIT	SYLLABUS
UNIT 1	<u>Basic Accounting Concepts & Conventions Final Accounts:</u> Meaning and scope of Accounting, Basic Accounting concepts and conventions – Objectives of Accounting – Preparation of Final Accounts of a Sole Trading concern – With necessary adjustments.
UNIT 2	Insurance Claims – Average Clause Policy Excluding Loss of Profit – Average due date.
UNIT 3	<u>Rectification of Errors & B.R.S</u> Classification of Errors – Rectification of errors – Preparation of Suspense Account – Bank Reconciliation Statement (BRS).
UNIT 4	<u>Depreciation</u> Depreciation accounting – Straight line & Diminishing Balance including change in method of Depreciation
UNIT 5	<u>Single Entry System</u> Single Entry System – Meaning, Features , Defects – Difference between single entry and Double entry system – Statement of Affairs method – Conversion method.

REFERENCE BOOKS:

1. R.L. Gupta & V.K. Gupta _ Financial Accounting – Sultan Chand Publishing – New Delhi.
2. Jain & Narang – Financial Accounting – Kalyani Publishers Patiala
3. Tulsian – Financial Accounting – Tata MC Graw will New Delhi.
4. T.S. Reddy & A. Murthy – Financial Accounting – Margham Publishers T. Nagar – 17.
5. Rajasekar – Financial Accounting – Pearson Publications

Course Code	COURSE TITLE	L	T	P	C
16C431A	BUSINESS STATISTICS	6	-		4

UNIT	SYLLABUS
UNIT 1	Introduction – Meaning and Definition of Statistics – Collection and Tabulation of Statistical data – Diagrammatic and Graphical representation of data.
UNIT 2	Measures of Central Tendency – Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean.
UNIT 3	Measures of Dispersion – Range – Standard deviation – Mean deviation – Quartile deviation.
UNIT 4	Correlation Analysis – Types of Correlation – Karl Pearson’s coefficient of correlation – Rank Correlation.
UNIT 5	Regression Analysis – Uses of Regression Analysis – Regression Lines.

RECOMMENDED BOOKS:

1. Statistical Methods – S.P. GUPTA
2. Business Statics – P.R. VITAL
3. Basic Statics – B.AGARWAL
4. Business Statistics- J.K. SHARMA

Course Code	COURSE TITLE	L	T	P	C
14C431B	BUSINESS ECONOMICS	6	-		5

UNIT	SYLLABUS
UNIT 1	Introduction to Economics – Wealth, Welfare and Scarcity – Views in Economics – Positives and Normative Economics – Definition – Scope and Importance of Business Economics. Concept – Production Possibility Frontiers – Opportunity Cost – Accounting Profit And Economics – Profit Incremental and Marginal Concepts, Time & Discounting Principle – concept of Efficiency.
UNIT 2	Demand and supply Functions – Meaning Of Demand – Determinants and Distinctions of Demand – Law of Demand – Elasticity of Demand – Demand Forecasting – Supply Concept and Equilibrium.
UNIT 3	Consumer Behaviours Theory – Marshallion and Hicksion Interpretation.
UNIT 4	Theory of Production – Law of Variabe Proportion – Law of Returns to Scale.
UNIT 5	Market Structure – Role of Time Elements in Price Theory – Competition and Price Determination.

RECOMMENDED BOOKS:

1. Stonier & Hague : Text books of Economic theory.
2. H.L. Ahuja : Principles of Micro Economics
3. S.Sankaran : Economics analysis
4. HS Agarwall : Micro economics
5. M.L Seeth : Principles of Economics
6. Watson D.S : Price Theory and its uses

Course Code	COURSE TITLE	L	T	P	C
16N61ZA	BASIC OF RETAIL MARKETING (NON – MAJOR)	1			2

UNIT	SYLLABUS
UNIT 1	Retailing – Retail marketing, Importance of retailing
UNIT 2	Retailing – Functions, Characteristics, Types of retailing –store retailing-non store retailing
UNIT 3	Retail location factors – Branding in retailing-private labeling-Franchising concept.
UNIT 4	Communication tool used in retailing-sales promotion, E –tailing-window display.
UNIT 5	Supply chain management –Definition-importance – Role of information technology in retailing

Recommended Books :

1. Gilbert Pearson , Retail Marketing Education Asia , 2001
2. Vedamani Gibson , Retail Marketing Jaici Publishing House New Delhi – 2000
3. Berman & Evans Retail Management Phi , New Delhi 2001
4. Michael Levy And Barton A Weitz, Retailing Management Tata Mc , Graw Hill, New Delhi 2001
5. Dr. L. Natarajan Retail Marketing Margham Publication Chennai

Course Code	COURSE TITLE	L	T	P	C
16M432B	Financial Accounting – II	6	-		4

UNIT	SYLLABUS
UNIT 1	<u>Branch Accounts:</u> Branch Accounts – Dependent Branches – Stock and Debtors System – Branch Trading Accounts – Distinction between whole sale profit and Retail Profit
UNIT 2	<u>Departmental Accounts:</u> Departmental Accounts – Basis for allocation of expense – Inter departmental -Transfer of cost (or) Selling price – Treatment of expenses which cannot be allocated.
UNIT 3	<u>Hire Purchase & Installment Purchase System</u> Hire Purchase Accounting – Treatment of Default and Repossession – Complete and Partial – Installment Purchase System.
UNIT 4	<u>Partnership Accounts:</u> Partnership Accounts – Concepts - Treatment of Goodwill – Admission – Retirement Retirement cum Admission – Simple Problems only.
UNIT 5	<u>Dissolution of Partnership Firm</u> Partnership Dissolution – Insolvency of a partner – All Partners – Distribution – Simple Problems only.

Reference Books

1. R.L. Gupta & V.K. Gupta _ Financial Accounting – Sultan Chand Publishing – New Delhi.
2. Jain & Narang – Financial Accounting – Kalyani Publishers Patiala
3. Tulsian – Financial Accounting – Tata MC Graw will New Delhi.
4. T.S. Reddy & A. Murthy – Financial Accounting – Margham Publishers T. Nagar – 17. Rajasekar – Financial Accounting – Pearson Publications

Course Code	COURSE TITLE	L	T	P	C
16C432C	Quantitative Analysis for Management	6	-		4

UNIT	SYLLABUS
UNIT 1	Origin and Development of OR – Introduction – Definitions – Scope of Operation Research – Phase of OR – Models in operations Research Advantages of a model.
UNIT 2	Linear Programming – Formulation of LP Problem – Graphical solution – Procedure of solving LPP by Graphical method.
UNIT 3	Transportation Problem – Introduction – definitions Finding Initial Solution – North West Corner Rule – Least Cost or Matrix Minima Method Vogel's Approximation method.
UNIT 4	Assignment Problem – Introduction – Definition – Difference between Transportation and Assignment Problem – Unbalanced Assignment problem.
UNIT 5	Network Analysis – PERT and CPM (No crashing).

RECOMMENDED BOOKS:

1. Operational Research – Hira and Gupta s. chand
2. Operational Research – Dr. P.R. Vital
3. Operational Research – Handy and A. Tata.
4. Statistical methods and operation Research – S.P. Gupta

Course Code	COURSE TITLE	L	T	P	C
14C432D	Indian Economy	6	-		5

UNIT	SYLLABUS
UNIT 1	Features of Less Developed and Developing Economics – Economics and Non Economic Factors Impeding Economic Growth and Development – Factor Determining Economic Development.
UNIT 2	Human Resources – Population Growth as a Regarding Factor – Population Policy.
UNIT 3	Agriculture – Its Contribution to Economic Development – Food Problem – Methods of Solving it – Measure to Increase Agricultural Productivity – Land Reforms – Green Revolution – Agricultural Credit.
UNIT 4	Role of Industries in Economic Development – Cottage and Small Scale Industries – Large Scale Industries – Iron and Steel Cement and Sugar, Public Sector – Trade Unions.
UNIT 5	Transport (Road, Railway and Civil aviation) Transport Co – Operation – Poverty In India – Poverty Eradication Programmes – Planning in India – Objectives – Achievement of Five Year Plan.

Recommended Books:

1. Dhingara I.C	:	Indian Economy
2. Dutt and Sundaram	:	Indian Economy
3. S. Sankaran	:	Indian Economy
4. Five year plan	:	Govt. of India Publication
5. The economic & Political weekly:	:	Govt. of India Publication
6. Economic Survey	:	Govt. of India Publication

Course Code	COURSE TITLE	L	T	P	C
14N62ZB	FUNDAMENTAL OF INSURANCE (NON MAJOR)	1			2

UNIT	SYLLABUS
UNIT 1	Origin And history Of Insurance – Meaning and definition of Insurance - Features Of Insurance – Principle Of Insurance – Objective and advantage of Insurance – Types of Insurance – Insurance – Insurance Organization In India And their Profile – Insurance Regulatory And Development Authority – Its duties and functions.
UNIT 2	Meaning and definition of Life Insurance – Its Features – Its fundamental Principles – Types of Policies in Life Insurance - Meaning And definition of Fire Insurance – Features – Fundamental Principles – Types of Policies in Fire Insurance – Meaning And definition of Marine Insurance – Features – Fundamental Principles – Types of Policies in Marine Insurance.

Recommended Books:

1. A. Murthy : Elements Of Insurance
2. M.N.Mish : Insurance – Principles And Practice

Course Code	COURSE TITLE	L	T	P	C
16M433C	CORPORATE ACCOUNTING-I	5	-	-	3

UNIT	SYLLABUS
UNIT 1	Company – Definition - kinds of companies, types of shares – Issue of shares and debentures – Issue at par, premium and discount – Forfeiture and reissue- underwriting of shares and debentures – Liability of under writers – partial, complete and firm.
UNIT 2	Redemption of Preference shares and debentures – purchase of business – Profit prior to incorporation.
UNIT 3	Preparation of Company’s final accounts – Company Balance sheet preparation – computation of Managerial Remuneration
UNIT 4	Valuation of goodwill and shares.
UNIT 5	Internal Reconstruction – Alteration of share capital and Reduction of capital.

Reference Books :

1. Shukla and Grewal – Advanced Accounts, S.Chand
2. T.S. Reddy and A.Murthy – Corporate Accounting, Margam
3. Jain and Narrang - Company Accounts, Kalyani.
4. R.L.Gupta – Corporate Accounting, Sultan chand.
5. Chakraborti- Advanced Accountancy.

Course Code	COURSE TITLE	L	T	P	C
16M433D	BUSINESS LAW	5	-	-	3

UNIT	SYLLABUS
UNIT 1	<u>Nature of Contract : Object of Law of contract</u> The Indian contract act 1872 – Definition of contract - Essential elements of a valid contract – clarification of contracts – offer and acceptance and Communication of offer and Acceptance and Revocation. Consideration – Capacity to contract – Free consent - Legality of object – void agreement.
UNIT 2	Performance of contract – offer to perform contracts which need not be performed – by whom contract must be performed who can demand performance. Discharge of Contract – meaning – methods – by performance –by agreement – impossibility of performance.
UNIT 3	Remedies for Breach of Contract – Introduction Recession – Damages – Specific Performance – injunction - Quasi contracts.
UNIT 4	Contract of Indemnity and guarantee – Contract of bailment and pledge – Contract of Agency – Creation of agency – Rights, duties and liabilities of an agent - Termination of agency
UNIT 5	Formation of contract of Sale - caveat emptor - Express and implied conditions and warranties – Performance of Contract of Sale – Rights of an unpaid Seller.

Books Recommended

1. N.D.Kapoor- “Business Law” Sulthanchand Publishers
2. Srinivasan Business Law Margham Publishers Chennai – 2004
3. Kuchcal, Mercantile Law, Vikas Publishing house New Delhi – 2003
4. Commercial / Business Law – N.D. Kapoor

Course Code	COURSE TITLE	L	T	P	C
16M433E	BUSINESS MANAGEMENT	6	-		5

UNIT	SYLLABUS
UNIT 1	Management : Importance – Definition – Nature and Scope of Management Process – Role and Functions of a Manager – Levels of Management – Development of Scientific Management and other Schools of thought and approaches.
UNIT 2	Planning: Nature – Importance – forms – Types – Steps in Planning – Objectives – Policies – Procedures and Methods – Natures and Types of Policies – Decision Making- Process of Decision-Making – Types
UNIT 3	Organizing : Types of Organizations – Organization Structure – Span of Control– Departmentalization – Informal Organization.
UNIT 4	Authority – Delegation – decentralization – Difference between Authority and Power – Responsibility –Direction – Nature and Purpose.- - Leadership and Kinds Motivation Kinds Of Motivation
UNIT 5	Co- Ordination – Need, Type and Techniques and Requisites for Excellent Co - Ordination – Controlling – Meeting and Importance – Control Process

REFERENCE BOOKS:

1. P.C. Tripathi & P.N. Reddy	Principles of Management
2. L.M. Prasad	Principles of Management
3. Dinkar Pagare	Principles of Management
4. C.B. Gupta	Business Management
5. N. Premavathy	Business Management
6. J. Jayasankar	Principles of Management

Course Code	COURSE TITLE	L	T	P	C
16M433G	BANKING THEORY LAW AND PRACTICE	6	-		4

UNIT	SYLLABUS
UNIT 1	▪ Definition of banking-Classification of banks-Role of banks in economic development ▪ Banking Regulation Act: Importance, Provisions regarding capital structure, Core Capital – Capital Adequacy Ratio-Appropriation of funds, Licensing, Opening of new branches, Management and control over banks.
UNIT 2	▪ Characteristics of a Central Bank ▪ Administration and management of Reserve Bank ▪ Functions of Reserve Bank of India, methods of issue, credit control, qualitative and quantitative techniques of credit control
UNIT 3	▪ Commercial Banks, Various functions ▪ Credit creation, Loans and Advances, E-Banking, Credit cards, Debit cards, ATM cards, Electronic clearing system, Electronic Fund transfer-Real Time Gross settlement System and Internet Banking
UNIT 4	▪ Opening of an account, Types of deposit account ▪ Types of customers, Relationship between banker and a customer ▪ Importance of customer relations, Customer grievances and redressal, role of banking ombudsman.
UNIT 5	▪ Negotiable Instruments-Meaning and Characteristics ▪ Promissory notes, bills of exchange ▪ Cheques including e-cheques, Feature, Material alteration, Crossing-Meaning, Kinds, Endorsement-Meaning and Types, Payment and Collection of Cheques, Rights, Duties, Statutory protection to the paying banker and collecting banker

REFERENCE BOOKS

1. B.Santhanam, 2005, *Banking theory Law & Practice*, 4thEd., Margham Publications, Chennai.
2. Dr.K Nirmala Prasad & J Chandradass, 2005, *Banking theory Law & Practice*, 1st Ed., Himalaya Publishing House, Mumbai.
3. M.L.Tannan, 2005, *Banking Law & Practice*, 21st Ed., Wadheva Publishers, Mumbai.
4. www.banking_guide.org.uk

Course Code	COURSE TITLE	L	T	P	C
16M433H	PRINCIPLES OF E- COMMERCE	6	-		5

UNIT	SYLLABUS
UNIT 1	E-Commerce – Introduction, Advantages and Disadvantages of E-Commerce, Role of E-Commerce, Basis of IT and Business.
UNIT 2	Internet and Networking Concept – Definitions, www, network concept, types of networks (LAN, MAN, WAN), Internet Protocol, TCP/IP, IP Addressing, HTML, HTML tags, Intranet and Extranet.
UNIT 3	Web Marketing Strategies – Introduction, Different types of Marketing strategies (product Based and Customer Based), Communicating with different Market segments, Advertising on the web.
UNIT 4	Electronic Data Interchange – Introduction on EDI, EDI on internet Supply Chain Management, its software, Online payment, payment cards, advantages and disadvantages of Payment cards.
UNIT 5	Internet Security – Introduction, Computer Security its types , threats, Hackers, Classification of Computer security (Security, Integrity, Necessity), Security Policy and Integrated Security.

Text Books:

1. Electronics Commerce by Gary P. Schnider, fourth annual edition.

Reference:

1. Electronic Commerce by Marilyn Greenstein and ToddM Feinman.
2. E-commerce by Kamlesh K. Bajaj and Debjani nag.

Course Code	COURSE TITLE	L	T	P	C
14S63AC	PERSONALITY ENRICHMENT	2	-		2

UNIT	SYLLABUS
UNIT 1	Introduction • Definition of Personality • Components of Personality – Structural and Functional aspects • Determinants of Personality – Biological, Psychological and Socio-Cultural factors • Assessment of Personality – Observation, Interview and Psychological Tests • Misconceptions and Classifications • Need for Personality Development
UNIT 2	Self Awareness and Self Motivation • Self Analysis through SWOT and Johari window • Elements of Motivation • Seven rules of Motivation • Techniques and Strategies for Self Motivation • Motivation Checklist and Goal Setting based on the principles of SMART • Self Motivation and Life
UNIT 3	General Knowledge and Current Affairs • Regional, National and International events • Geographical, Political and Historical facts • Information on sports and other recreational activities • Basic knowledge with regard to health and health promotion
UNIT 4	Memory, Decision Making and Study Skills • Definition and Importance of Memory • Causes of Forgetting • How to forget (thought stopping), how to remember (techniques for improving memory) • The technique of passing exams • The rational decision making process • Improving creativity in decision making and components of creativity

UNIT 5	Power of Positive Thinking • Thinking power – seven steps for dealing with doubt • Traits of positive thinkers and high achievers • Goals and techniques for positive thinking • Enhancement of concentration through positive thinking • Practicing a positive life style

REFERENCES

1. Mile, D J (2004), Power of Positive Thinking, Delhi, Rohan Book Company.
2. Pravesh Kumar (2005), All about Self-Motivation, New Delhi, Goodwill Publishing House
3. Dudley, G A (2004), Double your Learning Power, Delhi, Konark Press, Thomas Publishing Group Ltd.,
4. Lorayne, H (2004), How to develop a super power memory, Delhi, Konark Press, Thomas Publishing Group Ltd.,
5. Hurlock, E B (2006), Personality Development, 28th Reprint, New Delhi, Tata MCGraw Hill.

Course Code	COURSE TITLE	L	T	P	C
16M434J	CORPORATE ACCOUNTING-II	5	-		3

UNIT	SYLLABUS
UNIT 1	Human Resource Accounting – Accounting Standards – Financial Reporting Practices – Accounting for price level changes.
UNIT 2	Amalgamation – Absorption and external reconstruction of a company – (inter company investments excluded)
UNIT 3	Preparation of profit and loss account and balance sheet of banking companies and insurance companies
UNIT 4	Holding Companies and preparation of Consolidated Balance Sheet.(simple problems only)
UNIT 5	Liquidation – meaning – order of payment liquidator’s remuneration – Liquidator’s final statement of accounts-statement of affairs.

Reference Books :

1. Shukla and Grewal – Advance Accounts, S.Chand
2. T.S. Reddy and A. Murthy – Corporate Accounting, Margam
3. Jainand Narang – Company Accounts, Kalyani
4. R.L. Gupta – Corporate Accounting, Sultan chand

Course Code	COURSE TITLE	L	T	P	C
16M434K	COMPANY LAW	5	-		3

UNIT	SYLLABUS
UNIT 1	Meaning, Definition & Salient Features of Companies Act, 2013 Kinds of Companies - Role of Promoters-Incorporation of a Company
UNIT 2	Memorandum of Association, Contents & Alteration Articles of Association, Contents & Alteration-Prospectus, Contents & Consequences of misstatement -Doctrine of Ultra Virus & Indoor Management.
UNIT 3	Directors-Appointment, Qualification-Disqualification -Membership in a Company, Modes of acquiring Membership -Rights and Liabilities of Members, Termination of Membership -Corporate Governance-Meaning, benefits of good governance, factors influencing corporate governance.
UNIT 4	General and Statutory Meeting, Extraordinary Meetings -Resolutions, Meaning and Kinds -Role of Company Secretary with respect to meetings
UNIT 5	Meaning and modes of winding up -Powers of court in winding up - Consequences and procedures for winding up -Powers, Liabilities and Duties of Liquidators

TEXT BOOK

N.D.Kapoor, 2003, *Elements of Company Law*, 27th Ed., Sultan Chand & Sons, New Delhi.

REFERENCES

1. S.Kathireasan & Dr.V.Radha, 2006, *Company Law*, 6th Ed., Prasanna Publishers, Chennai.
2. P.C.Tulsian, 2005, *Business & Corporate Laws*, 1st Ed., Tata McGraw Hill, New Delhi.
3. Majumdar & G.K.Kapoor, 2005, *Company Law*, 9th Ed., S.Chand & Sons, New Delhi.
4. H.R.Machiraju, 2004, *Corporate Governance*, 1st Ed., Himalaya Publishing House, Mumbai.

Course Code	COURSE TITLE	L	T	P	C
16M431L	BUSINESS ENVIRONMENT	6	-		5

UNIT	SYLLABUS
UNIT 1	The concept of Business Environment – its nature and significance – Brief overview of political – Cultural – legal – economic and social and environments and their impact on business and strategic decisions.
UNIT 2	Political Environment – Government and Business relationship in India – Provisions of Indian Constitution pertaining to business.
UNIT 3	Social environment – Cultural heritage – social attitudes – impact of foreign culture – castes and communities – joint family system – linguistic and religious groups – Types of social organization –social responsibilities of business
UNIT 4	Economics Environment – Economic systems and their impact on business – Macroeconomic parameters like GDP – growth rate of population – Urbanization – Fiscal deficit – Plan investment – Per capita income and their impact on business decisions – Five Year Planning.
UNIT 5	Financial and technological Environment – Financial system – Commercial banks – Financial Institutions – RBI Stock Exchange – IDBI – Non Banking Financial Companies NBFCs

REFERENCE BOOKS:

1. Sankaran S – Business Environment
2. Francis Cherunilam - Business Environment
3. Aswathappa - Business Environment
4. Dasgupta & Sengupta – Government and Business in India
5. Srinivisan K. – Productivity and social Environment.

Course Code	COURSE TITLE	L	T	P	C
16M434M	BUSINESS COMMUNICATION	5	-		4

UNIT	SYLLABUS
UNIT 1	Definition – Methods – Types – Principles of effective Communication – Barriers to Communication – Business Letter – Layout.
UNIT 2	Kinds of Business Letter: Interview – Appointment – Acknowledgement – Promotion – Enquiries – Replies – Orders – Sales – Circular – Complaints.
UNIT 3	Bank Correspondence – Insurance Correspondence – Agency Correspondence – Correspondence with Shareholders, Directors.
UNIT 4	Reports Writing – Agenda, Minutes of Meeting – Memorandum – Office Order – Circular – Notes.
UNIT 5	Modern Forms of Communication : Fax – e-mail – Video Conferencing – Internet – Websites and their use in Business

REFERENCE BOOKS:

1. Essentials of Business Communication – Rajendra Pal & J.S. Korlahalli
2. Communication for Business – Shirley Taylor.
3. Business Communication Today – Bovee, Thill, Schatzman
4. Advanced Business Communication – Penrose, Rasbery, Myers]

Course Code	COURSE TITLE	L	T	P	C
16M4341	COMPUTER APPLICATION IN TALLY	6	-		5

UNIT	SYLLABUS
UNIT 1	MS – Office – Components of MS Office – Word, Formatting, Alignment, indentation, Fonts, Picture and image insertion, Mail merge, template – creation of document using template.
UNIT 2	MS Excel, Cell Formatting, Cell Alignment, Functions, Chart creation and insertion.
UNIT 3	MS PowerPoint, slide creation and presentation, custom animation, layout.
UNIT 4	Tally – About Tally software, uses, group creation, ledger creation, stock group and stock item creation, voucher creation.
UNIT 5	SPSS – about SPSS, Statistical analysis, Statistical reports

Course Code	COURSE TITLE	L	T	P	C
14E64AA	ENVIRONMENTAL STUDIES	1			4

UNIT	SYLLABUS
UNIT 1	The Multi disciplinary Nature of Environmental Studies Definition, scope and importance, Need for public awareness
UNIT 2	Natural Resources Renewable and non-renewable resources: Natural resources and associated problems • Forest Resources: Use and over-exploitation, deforestation case studies, timber extraction, mining, dams and their effects on forests and tribal people. • Water Resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams – benefits and problems. • Mineral Resources: Use and exploitation, environmental effects of extracting using mineral resources case studies. • Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging salinity, case studies. • Energy Resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources – Case Studies. • Land Resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual and conservation of natural resources – Equitable use of resources for sustainable life styles.
UNIT 3	Ecosystems Concept of an Ecosystem – Structure and Function – Producers, consumers and decomposers – Energy flow in the ecosystem – Ecological succession – Food chains, food webs and ecological pyramids – Introduction, types, characteristics, features, structures and function of Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem and Aquatic Ecosystem (ponds, streams, lakes, rivers, oceans, estuaries)
UNIT 4	Biodiversity and its Conservation Introduction – Definition genetic species and eco-system diversity – Bio-geographical classification of India – Value of the biodiversity – consumptive use, productive use, social, ethical. Aesthetic and option values – Biodiversity at Global, National and Local levels – India as a mega – diversity nation – Hot-Spots of biodiversity – Threats to biodiversity habitat loss, poaching of wildlife, man wildlife conflicts – Endangered and endemic species of India – Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.

UNIT 5	Environmental Pollution Definition Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards – Solid waste management causes, effects and control measures of urban and industrial wastes – Role of an individual in prevention of pollution – Pollution of case studies – Disaster management, floods, earthquake, cyclone and landslides.
UNIT 6	Social Issues and the Environment Unsustainable to Sustainable development – Urban problems related to energy – Water conservation, rain water harvesting, watershed management – Resettlement and rehabilitation of people; its problems and concerns & Case Studies – Environmental ethics issues and possible solutions – Climate change, global warming, Acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies, Wasteland reclamation – Consumerism and waste products – Environmental Protection Act – Air (Prevention and Control of Pollution) Act – Water (Prevention and Control of Pollution) Act – Wildlife Protection Act – Forest Conservation Act – Issues involved in enforcement of environmental legislation – Public awareness.
UNIT 7	Human Population and the Environment Population growth, variation among nations – Population explosion – Family Welfare Programme – Environment and human health – Human Rights – Value Education – HIV / AIDS – Women and Child welfare – Role of Information Technology in Environment and human health – Case Studies
UNIT 8	Field Work Visit to a local area to document environmental assets – river / forest / grassland / hill mountain – Visit to a local polluted site – Urban / Rural / Industrial / Agricultural – Study of common plants, insects, birds – Study of simple ecosystems – pond, river, hill slopes, etc. (Field work equal to 5 lecture hours)

Course Code	COURSE TITLE	L	T	P	C
16M435N	COST ACCOUNTING	6	-		4

UNIT	SYLLABUS
UNIT 1	Introduction of cost accounting – Meaning, definition, scope and objectives of cost accounting, cost accounting Vs financial accounting – Difference between cost accounting and Management accounting – Requisites of good costing system – Steps necessary to install a cost system – General principles – Classification methods and techniques of cost accounting.
UNIT 2	<u>Cost sheet, Tender, Quotations</u> Elements of cost – Classification of overheads – Cost sheet– cost sheet vs production statement – Stock of Raw materials – specimen cost sheet with inventories – Tenders and quotations
UNIT 3	<u>Materials</u> Meaning of material control – Essentials, objectives, advantages – Store keeping and inventory control – Economic Ordering Quantity(EOQ) – pricing of material issues (LIFO, FIFO, HIFO, Simple Average, weighted average, Standard Price method, inflated price method) material losses. <u>Labour :</u> Computation and control of Labour – Labour turnover – Time keeping department – payroll department – Remuneration and incentives – time rate system, piece rate system – premium and Bonus plan.
UNIT 4	<u>Overheads :</u> Meaning and definition – Importance- Classification – Primary Distribution of overheads, Secondary distribution of overheads – Absorption of overheads – calculation of Machine hour rate.
UNIT 5	Process Costing – with loss, Normal and Abnormal Loss – Abnormal gain – Inter process profit.

Books for Reference :

1. Cost Accounting : T.S. Reddy Y.Hari Prasad Reddy
2. Cost Accounting : Jain And Narang
3. Cost Accounting : S.P. Iyengar
4. Advanced Problems and Solutions in cost accounting : Dr.S.N. Maheswari

Course Code	COURSE TITLE	L	T	P	C
16M435P	HUMAN RESOURCES MANAGEMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	I Human Resource Management (HRM) Definition – objectives – functions - Nature and scope of HRM- Differences between personnel management and HRM – qualities of good HR manager – changing roles of a HR manager – problems and challenges of HR manager.
UNIT 2	Human Resource Planning (Man power planning) Definition of HR planning – objectives – steps in HR planning – types of planning – need and importance – tools and techniques – job analysis – job description job specification – job evaluation
UNIT 3	Recruitment and Selection Recruitment and selection – objectives of recruitment – sources – internal and external recruitment – application blank – testing – interviews – techniques in selection – placement and induction
UNIT 4	Training and Development Training and development – principles of training – assessment of training needs – methods – evolution of effectiveness of training programme
UNIT 5	Performance Appraisal Performance appraisal – process – methods of performance appraisal – appraisal counseling – motivation process – theories of motivation – compensations – incentives – monetary and non monetary – promotion and transfers.

REFERENCE BOOKS:

1. Ashwathappa – Human Resource Management
2. L.M. Prasad – Human Resource Management
3. Jayashankar – HRM - margham publications, Chennai.
4. Chitra Atmaran Naik - Hen – Ane books Pvt. Ltd.
5. Dr. Radha – HRM.

Course Code	COURSE TITLE	L	T	P	C
16M435R	MARKETING MANAGEMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	<u>Marketing Management</u> Definition of Marketing and Marketing Management Marketing Process – marketing management – orientation – marketing plan – marketing mix – functions of marketing management – MIS.
UNIT 2	<u>Emerging Issues in Marketing</u> Consumer orientation – Integrated marketing – Business Ethics in Marketing – Direct and online marketing (Cyber Marketing) – Green Marketing – Quantitative Techniques for marketing Decisions – Consumerism – Consumer Relation Building
UNIT 3	<u>Product and Pricing Decisions</u> Product – features – Product Mix – Product Policy – Product Planning – New Product Development – Product Life Cycle – Pricing – Importance – Objectives – Pricing Policies, Strategies and Techniques – Pricing Methods.
UNIT 4	<u>Consumer / Business Market Segmentation</u> Definition – Need for Segmentation – factors deciding the success of market segmentation – Bases for Segmentation – Process of market segmentation – Niche Marketing – Characteristics of Niche Market.
UNIT 5	<u>Sales Promotion and Advertising</u> Sales Promotion Techniques and Methods – Advertising – Objectives Benefits – Selection of Media, Advertising copy – Ethics in Advertising Salesmanship – Objectives, qualities and types of salesman – E. marketing

Reference Books:

1. Rajan Nair - Marketing – Sultan chand & sons New Delhi
2. Philip Kotler - Marketing Management Prentice Hill
3. R.S.N. Pillai - Modern Marketing S. Chand & Co. Ltd. New Delhi
4. Cundiff - Fundamentals of Marketing
5. Dr. R.B. Rudan - Basics of marketing mgt. Theory & Practice, S. Chand & Co.ltd
6. Dr. D.L. Varshney & Dr. S.L. Gupta Marketing mgt. An Indian Perspective.

Course Code	COURSE TITLE	L	T	P	C
16A435A	ENTREPRENEURIAL DEVELOPMENT	6	-		5

UNIT	SYLLABUS
UNIT 1	Concept of Entrepreneurship – delete – Meaning – Types – Qualities of an Entrepreneur – Classification of Entrepreneurs – Factors influencing Entrepreneurship – Functions of Entrepreneurs
UNIT 2	Entrepreneurial Development – Agencies – Commercial Banks – District Industries Centre – National Small Industries Corporation – Small Industries Development Organisation – Small Industries Service Institute. All India Financial Institutions – IDBI – IFCI – ICICI – IRDBI.
UNIT 3	Project Management - Business idea generation techniques – identification of Business Opportunities – Feasibility study – Marketing, Finance, Technology & Legal Formalities- Preparation of Project Report Tools of Appraisal
UNIT 4	Entrepreneurial Development programmes (EDP) – their role, relevance, and achievements – Role of Government in organizing EDPs – critical evaluation
UNIT 5	Economic development and entrepreneurial growth - Role of Entrepreneur in economic growth – Strategic approaches in the changing economic scenario for small scale Entrepreneurs – Networking – Niche play, Geographic Concentration, Franchising/dealership – Development of Women Entrepreneurship

REFERENCE BOOKS:

1. Srinivasan N.P. – Entrepreneurial Development
2. Saravanavel – Entrepreneurial Development
3. Vasant Desai – Project Management
4. Jayashree Suresh – Entrepreneurial Development
5. Holt – Entrepreneurship – New Venture Creation

Course Code	COURSE TITLE	L	T	P	C
16M435Q	INCOME TAX LAW & PRACTICE – I	6	-		5

UNIT	SYLLABUS
UNIT 1	Meaning of Income – Canons of Taxation and Income Tax Act – Important definitions under the Income Tax Act – Scope of total income – Residential Status – Incomes exempt from Tax.
UNIT 2	Heads of Income – Salaries – Allowances – perquisites and their valuations – Deductions from Salary – Other related provisions –Gratuity – pension – commutation of pension – Leave encashment - Provident Fund.
UNIT 3	Income from house property – Definition of annual value deductions from annual value – computation under different circumstances.
UNIT 4	Income from business or profession – Allowable and not allowable expenses – General deductions – Principles – Provisions relating to depreciation – deemed business profits chargeable to profits to tax – compulsory maintenance of books of account – audit of accounts of certain persons – special provision for computing incomes on estimated basis under section 44 AD and 45 AE – Computation of income from business or profession.
UNIT 5	Filing of return of Income – Assessment procedure in brief – Due date of filling of return – Defective return -Belated Return form – Revised return – Self assessment – Best Judgment assessment -various Income Tax Authorities. & Their powers and duties.

Reference Books:

Income Tax Law & Accounts – H.C.M.ehrotrc
Income Tax Law & Practice – Bhagavathi Prasad
Outline of Income Tax -Rup ram Gupta
Income Tax Law & Accounts – Vinod Singhania
Income Tax Law & Practice – GaurandNarang

Course Code	COURSE TITLE	L	T	P	C
16M436S	ACCOUNTING FOR MANAGERIAL DECISIONS	6			4

UNIT	SYLLABUS
UNIT 1	Management Accounting – Definition, Functions, Scope, Management Accounting Vs Financial Accounting, Management Accounting Vs Cost Accounting.
UNIT 2	Ratio Analysis – Meaning, Types, Advantages and Limitations – Profitability ratios – Turnover Ratios – Financial Ratios
UNIT 3	Funds flow analysis – Meaning, Importance, Difference between funds flow and Balance Sheet – Advantages and Limitations – Cash flow statement – Meaning – Importance – Difference between funds flow analysis and cash flow analysis – Advantages and Limitations.
UNIT 4	Budgets and Budgetary Control – Meaning, objectives, merits and demerits – Types of budgets – Production, Production cost budget, Cash budget, Flexible budget, Sales budget.
UNIT 5	Marginal Costing (excluding decision making) – CVP analysis – Break even analysis

REFERENCE BOOKS:

1. Management Accounting – T.S. Reddy, Y. Hari Prasad Reddy, - Margham Publications.
2. Dr. S.N. Maheswari – Management Accounting, Sultan Chand & Sons
3. Jain & Narang – Management Accounting, Kalyani Publishers

Course Code	COURSE TITLE	L	T	P	C
16A436T	PRACTICAL AUDITING	5	-		4

UNIT	SYLLABUS
UNIT 1	Auditing – meaning – Definition Objectives – kinds.
UNIT 2	Internal control – internal check – Internal audit – audit Note book – Audit working paper - Audit programmer.
UNIT 3	Vouching – Verification & Valuation of Assets & Liabilities
UNIT 4	Company Auditor – appointment – qualification – disqualification – removal of auditor – Audit report – duties, powers and liabilities of auditors.
UNIT 5	EDP – Audit

Reference Books:

- 1.B.N.Tandon – practical Auditing sultan chand publication – 2009 – New Delhi
2. Dinakarpagare – principles of Auditing sultan chand publication – 2009 – New Delhi
- 3.Spicer & Pegler – Auditing, MC million publications – 2000 – New Delhi

Course Code	COURSE TITLE	L	T	P	C
16M436U	FINANCIAL SERVICE	6	-		5

UNIT	SYLLABUS
UNIT 1	Meaning and importance of Financial Service – Types of Financial Services – Financial services and economic environment – Players in Financial Services Sector.
UNIT 2	Merchant Banking – Functions – Issue Management – Managing of new issues – underwriting - capital market - stock exchange - Rule& SEBI.
UNIT 3	Leasing and Hire purchase – concepts and features – Types of Lease.
UNIT 4	Factoring – Functions of factor – Consumer finance – Venture capital – Mutual funds – Credit rating.
UNIT 5	Insurance – Different Types – Life, marine, fire, motor, health, pension plan, annuity, rural insurance. Insurance Laws and Regulations (A brief introduction to IRDA Insurance Act 1938)

Reference Books:

1. Mahendra Raja – F.S. –Sultan Chand Pub – New Delhi – 1998.
2. M.Y. Khan – FS – tataMcGraw Hill – New Delhi – 2000.
3. D. Joseph Anbrasur, V.K. Boominathan, P. Manoharan, G. Gnanaraju.
4. FS. Sultan chand& sons – New Delhi – 2004.
5. ShasiK.Gupta& Nisha Aggarwar – F.S. Kalyani – Pub – 2010 New Delhi Chennai.
6. B. Santhanam – Financial Services – Margham Publication – 2010 – Chennai.

B.Com - General

Course Code	COURSE TITLE	L	T	P	C
16M466V	INCOME TAX AND PRACTICE II	6	-		5

UNIT	SYLLABUS
UNIT 1	Income under capital gains – short term, long term capital gains – cost of acquisition – cost of improvement – indexation of cost – capital gains under different circumstances – Exempted capital gains – computation of capital gains.
UNIT 2	Income from other sources – as a residing head of income – their computation – grossing up – deduction in computing income under the head and other related provisions.
UNIT 3	Clubbing of income – Transfer of income without the transfer of asset – circumstances under which the individual is assessable in respect of remuneration of spouse – assess ability of income from assets transferred to spouse, son's wife, another person for the benefit of spouse – Assess ability in respect of income of minor child – setoff – carry forward and set off losses.
UNIT 4	Permissible deductions from gross total income – Sec 80 C to 80U.
UNIT 5	Assessment of individuals, Partnership firms and Association of persons

Reference Books:-

1. Income Tax Law & accounts - H.C. Mehrotra
2. Income Tax Law & Practice - Bhagavathi Prasad
3. Outline of Income Tax - Rupram Gupta
4. Income Tax Law & accounts - Vinod K.Singhania
5. Income Tax Law & Practice - GaurandNarang

Course Code	COURSE TITLE	L	T	P	C
16A436B	FINANCIAL STATEMENT ANALYSIS	6	-		5

UNIT	SYLLABUS
UNIT 1	Financial Statement Analysis - Meaning, Nature, Importance, Types and limitations of financial statements – Financial Statement analysis and interpretation – Objectives of analysis – Window dressing – Meaning – Measures to check window dressing.
UNIT 2	Analysis and Interpretation of financial statements – Nature, Objective, Tools.
UNIT 3	Disclosure practices in financial reporting – Interim reports – Segment reports – Social reporting – Human resources reporting.
UNIT 4	Accounting standards – Meaning and objectives, advantages and disadvantages, Need and Significance – Formation of the Accounting Standard Board – Scope and Functions of ASB – Accounting Standards in India – AS 1 to AS 15 only.
UNIT 5	Financial Reporting by banks and Insurance companies – Accounting Policies – Meaning and notes to accounts.

REFERENCE BOOKS:

1. I.M. Pandey – Essentials of Management Accounting
2. Foster G – Financial Statement Analysis, Prentice Hall, New Delhi.

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF MANAGEMENT STUDIES
B.Com. (ISM)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

SCHEME OF EXMINATIONS

SEMESTER I

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Foundation Course: Tamil-I or any Language – I	5	3	100	3
II	Foundation Course: English – I	5	3	100	3
Core I	Core Course: Financial Accounting	6	3	100	4
Core II	Core Course: Introduction to Information Technology	6	3	100	4
Allied Subject -I	Allied – I Business Statistics	6	3	100	5
	Basis of Retail Marketing	1	3	100	2
	Soft Skill	1	3	100	2

SEMESTER II

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
	Foundation Course: Tamil/language II	5	3	100	3
	Foundation Course: English – II	5	3	100	3
Core III	Production and Materials Management	6	3	100	4
Core IV	Core Course: Management Information System	6	3	100	4
Allied Subject II	Allied – II Quantitative Analysis For Management	6	3	100	5
	Soft Skill	1	3	100	2
	Fundamental of Insurance	1	3	100	2

SEMESTER III

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core V	Business Management	6	3	100	3
Core VI	Problem Solving & Programming	6	3	100	3
Core VII	C Practical	6	3	100	4
Core VIII	Corporate Financial Management	5	3	100	4
Allied Subject -III	Allied – III Business Mathematics	6	3	100	5
	Personality Enrichment	1	3	100	3

SEMESTER IV

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core IX	Data Base Management System	5	3	100	3
Core X	DBMS Practical	5	3	100	3
Core XI	Management Accounting	6	3	100	4
Core XII	Business Communication	5	3	100	4
Allied Subject –IV	Allied – IV Business Environment	5	3	100	5
	Environmental Studies	2	3	100	2
	Computing Skill	2	3	100	3

SEMESTER V

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core XIII	Human Resource Management	6	3	100	4
Core XIV	Visual Basic Programming	6	3	100	4
Core XV	Visual Basic Practical	6	3	100	4
Core XVI	Marketing Management	6	3	100	5
Core XVII	Application Oriented Subject I Entrepreneurial Development	6	3	100	5

SEMESTER VI

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
Core XVIII	Core Course: Marketing Research	6	3	100	4
Core XIX	Organizational Behaviour	5	3	100	5
Core XX	Research Methodology	6	3	100	4
Core XXI	Computer Applications - Tally	6	3	100	5
Core XXII	Application Oriented Subject II- Project Work (Project Report and Viva Voce Examination)	6	3	100	5
	Value Education	1	3	100	2
	Extension Activities				1

COURSE CODE	COURSE TITLE	L	T	P	C
16M481A	FINANCIAL ACCOUNTING	6			4

UNIT	SYLLABUS
UNIT 1	Meaning and scope of Accounting, Basic Accounting Concepts and Conventions – Objectives of Accounting – Accounting Transactions – Double Entry Book Keeping – Journal, Ledger, Preparation of Trial Balance – Preparation of Cash Book.
UNIT 2	Preparation of Final Accounts of a Sole Trading Concern – Adjustments – Closing Stock, Outstanding and Prepaid items, Depreciation, Provision for Bad Debts, Provision for Discount on Debtors, Interest on Capital and Drawings (Simple Problems).
UNIT 3	Classification of Errors – Rectification of Errors – Preparation of Suspense Account. Average Due Date .
UNIT 4	Depreciation – Meaning, Causes, Types – Straight Line Methods, Written Down Value Method (Change in Method Excluded). Bank Reconciliation Statement (Simple Problems).
UNIT 5	Single Entry – Meaning, Features, Defects, Difference between Single Entry and Double Entry System – Statement of Affairs Methods- Conversion Methods (Only Simple Problems).

SKILL DEVELOPMENT: Practical preparation of Final Accounts for Sole Trading Firm.

REFERENCE BOOK:

1. R.L. Gupta & V.K. Gupta –Advanced Accounting – Sultan Chand – New Delhi
2. T.S. Reddy & a. Murthy –Financial Accounting – Margham Publications – Chennai
3. Shukla & Grewal – Advanced Accounting – S. Chand – New Delhi
4. Jain & Narang – Financial Accounting
5. P.C. Tulsian – Financial Accounting
6. S. Parthasarathy and A. Jaffarulla (Kalyan Publishers) – Financial Accounting
7. R.L. Gupta & Radhaswamy – Advanced Accounting – Volume 1

COURSE CODE	COURSE TITLE	L	T	P	C
14M481B	INTRODUCTION TO INFORMATION TECHNOLOGY	6			4

UNIT	SYLLABUS
UNIT 1	▪ The Computer system-their uses and components-CPU: control & logic unit ▪ Generation of computers-Classification of Computers ▪ PC-Laptop ▪ Memory: Volatile, non-volatile & virtual memory-Types of Bus.
UNIT 2	▪ Input devices: Keyboard, mouse, joystick, scanner, light pen, and touch screen ▪ Output devices: printers, dot-matrix printer, ink-jet printer, laser printer-monitor. ▪ Storage devices: Magnetic tape, Hard disks, CD-ROM, Speakers
UNIT 3	▪ Software concepts: Types of software ▪ System software: Operation System and its types, Assembler, Compiler, Interpreter. ▪ Application software: Word processing, Presentation tools, Electronic Spreadsheets Database system, DTP Packages, Graphic packages, Business system.
UNIT 4	▪ Principles and Techniques of Programming: Program definition-Program lifestyle. ▪ Flow-Chart: Definition, Symbols, Benefits, Limitations and examples. ▪ Characteristics, Benefits, Drawbacks and Examples of Algorithms
UNIT 5	▪ Databases: Structure of a data table. ▪ Internet features– E-mail

TEXT BOOKS:

1. C.S.V.Murthy, 2001, *Fundamentals of Computers*, 1st Edition, Himalaya publishing House.
2. LPEditorial Board, *Fundamentals of Computer*, 1st Edition, Law Point Publishers.

REFERENCES

1. V.RAJARAMAN, 2002, *Fundamentals of Computers*, 3rd Edition, Prentice Hall of India.
2. Marilyn W. Meyer and Roberta L. Baber, *Computers in your future*, 2nd Edition Prentice Hall of India.
3. www.itmagz.com
4. En.wikipedia.org

COURSE CODE	COURSE TITLE	L	T	P	C
16CA481A	BUSINESS STATISTICS	6			5

UNIT	SYLLABUS
UNIT 1	Introduction – Meaning and Definition of Statistics – Collection and Tabulation of Statistical data – Diagrammatic and Graphical representation of data.
UNIT 2	Measures of Central Tendency – Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean.
UNIT 3	Measures of Dispersion – Range – Standard deviation – Mean deviation – Quartile deviation.
UNIT 4	Correlation Analysis – Types of Correlation – Karl Pearson's coefficient of correlation – Rank Correlation.
UNIT 5	Regression Analysis – Uses of Regression Analysis – Regression Lines.

BOOK:

1. Contents and Treatment as in Statistical Methods by S.P.Gupta Published by Sultan Chand & Sons, New Delhi.

RECOMMENDED BOOKS:

1. Statistical Methods – S.P. GUPTA
2. Business Statics – P.R. VITAL
3. Basic Statics – B.AGARWAL
4. Business Statistics- J.K. SHARMA.

COURSE CODE	COURSE TITLE	L	T	P	C
14N61ZA	BASIS OF RETAIL MARKETING	1			2

UNIT	SYLLABUS
UNIT 1	Retailing – Definition – Retail Marketing – Growth of Organized Retailing in India Importance of Retailing
UNIT 2	Functions of Retailing – Characteristics of Retailing – Types of Retailing – Store Retailing – Non-Store Retailing
UNIT 3	Retail Location Factors – Branding in Retailing – Private Labeling – Franchising Concept
UNIT 4	Communication Tools used in Retailing – Sales Promotion, E-Tailing – Window Display
UNIT 5	Supply Chain Management – Definition – Importance – Role of Information Technology in Retailing.

RECOMMENDED BOOKS:

1. Gilbert Pearson, Retail Marketing Education Asia, 2001
2. Vedamani Gibson, Retail Marketing, Jaici Publishing House, New Delhi, 2000
3. Berman & Evans, Retail Management, Phi, New Delhi, 2001
4. Michael Levy and Barton A Weitz, Retailing Management, Tata Mc Graw Hill, New Delhi, 2001
5. Dr. L. Natarajan, Retail Marketing, Margham Publication, Chennai

COURSE CODE	COURSE TITLE	L	T	P	C
14S61AA	Soft skill – I ESSENTIALS OF LANGUAGE AND COMMUNICATION-II	1			2

UNIT	SYLLABUS
UNIT 1	Recap of language skills – vocabulary, phrase, clause, sentence.
UNIT 2	Fluency building.
UNIT 3	Principles of Communication
UNIT 4	Types of Communication.
UNIT 5	LSRW in Communication.

Recommended Texts

- Monippally, Matthukutty. M. 2001. *Business Communication Strategies*. 11th Reprint. Tata McGraw-Hill. New Delhi.
- Sasikumar. V and P.V. Dhamija. 1993. *Spoken English: A Self-Learning Guide to Conversation Practice*. 34th Reprint. Tata McGraw-Hill. New Delhi.
- Swets, Paul. W. 1983. *The Art of Talking So That People Will Listen: Getting Through to Family, Friends and Business Associates*. Prentice Hall Press. New York.
- Hewings, Martin. 1999. *Advanced English Grammar: A Self-Study Reference and Practice Book for South Asian Students*. Reprint 2003. Cambridge University Press. New Delhi.
- Lewis, Norman. 1991. *Word Power Made Easy*. Pocket Books.
- Hall and Shepherd. *The Anti-Grammar Grammar Book: Discovery Activities for Grammar Teaching*. Longman

Websites

- www.tatamcgrawhill.com/digital_solutions/monippally
- www.dictionary.cambridge.org
- www.wordsmith.org

COURSE CODE	COURSE TITLE	L	T	P	C
16M482C	PRODUCTION AND MATERIALS MANAGEMENT	6			4

UNIT	SYLLABUS
UNIT 1	Meaning, Nature and Scope of Production Management, Production Planning and control, Selection of sites for locating plants, Layout Planning
UNIT 2	Routing, Scheduling, Dispatch and Follow up Operations for Jobbing, batch and mass production, New product design and product planning.
UNIT 3	Quality Assurance: Application of statistical quality control, Total quality Management - Role, scope and importance of material management - Make-or-buy Decisions.
UNIT 4	Concept and scope of purchasing management, Principles and objectives of purchasing, purchasing procedure: requisitioning, selecting source of supply, Ordering, Delivery, Scientific Purchasing.
UNIT 5	Inventory Management: Meaning and functions, Inventory Planning and Control, E.O.Q. Minimum and maximum Level, Re-order level, ABC analysis.

REFERENCES:

1. Buffa, A.E.S: Modern Production Management
2. Chase,R.B., Acquilano N.Jr.Production and Operation Management
3. Laufer A.C.: Operations Management
4. O.P. Khanna: Industrial Engineering Management
5. S.K.Hajra & Choudhary & Nihar Roy: Production management
6. Hicks, P.E.: Introduction to Industrial Engineering & Management Science
7. S.K.Dutta: Materials Management
8. Larner & Donald: Purchasing and Material Management
9. Dean S.Ammer: Material Management

COURSE CODE	COURSE TITLE	L	T	P	C
14M482D	MANAGEMENT INFORMATION SYSTEMS	6			4

UNIT	SYLLABUS
UNIT 1	Definition of Management Information System – MIS support for planning, Organizing and controlling – Structure of MIS – Information for decision – making.
UNIT 2	Concept of System – Characteristics of System – Systems classification – Categories of Information Systems – Strategic information system and competitive advantage
UNIT 3	Computers and Information Processing – Classification of computer – Input Devices – Output devices – Storage devices – Batch and online processing. Hardware – Software. Database management system.
UNIT 4	System Analysis and design – SDLC – Role of System Analyst – Functional Information system – Personnel, production, material, marketing.
UNIT 5	Decision Support Systems – Definition. Group Decision Support Systems – Business Process Outsourcing – Definition and function

REFERENCE BOOK:

1. “Management Information Systems”, Prentice Hall of India – Mudrick & Ross
2. “Management Information System”, - Gordan B. Davis
3. “Information Systems Analysis and Design” – James A Senn
4. “Management Information Systems” – Prentice – Hall of Undua – Sadagopan
5. “Management Information System” – CSV Murthy – Himalaya Publications

COURSE CODE	COURSE TITLE	L	T	P	C
16C482B	QUANTITATIVE ANALYSIS FOR MANAGEMENT	6			5

UNIT	SYLLABUS
UNIT 1	Origin and Development of OR – Introduction – Definitions – Scope of Operation Research – Phase of OR – Models in operations Research Advantages of a model.
UNIT 2	Linear Programming – Formulation of LP Problem – Graphical solution – Procedure of solving LPP by Graphical method.
UNIT 3	Transportation Problem – Introduction – definitions Finding Initial Solution – North West Corner Rule – Least Cost or Matrix Minima Method Vogel's Approximation method.
UNIT 4	Assignment Problem – Introduction – Definition – Difference between Transportation and Assignment Problem – Unbalanced Assignment problem.
UNIT 5	Network Analysis – PERT and CPM (No crashing).

RECOMMENDED BOOKS:

1. Operational Research – Hira and Gupta s. chand
2. Operational Research – Dr. P.R. Vital
3. Operational Research – Handy and A. Tata.
4. Statistical Methods and Operation Research – S.P. Gupta

COURSE CODE	COURSE TITLE	L	T	P	C
14S62AB	Soft skill – II ESSENTIALS OF SPOKEN PRESENTATION SKILLS-II	1			2

UNIT	SYLLABUS
UNIT 1	Thinking and Articulation – cognitive, affect, critical, creative aspects of articulation.
UNIT 2	Acquisition of Oral and Aural Skills.
UNIT 3	Communication Boosters – body language.
UNIT 4	Function of Cultural Codes in Presentation – etiquette.
UNIT 5	Models of Presentation.

Recommended Texts

- Powell. *In Company*. MacMillan.
- Cotton, et al. *Market Leader*. Longman.
- Pease, Allan. 1998. *Body Language: How to Read Others Thoughts by their Gestures*. Sudha Publications. New Delhi.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice: A Reader*. Basic Books. New York.
- De Bono, Edward. 2000. *Six Thinking Hats*. 2nd Edition. Penguin Books.
- De Bono, Edward. 1993. *Serious Creativity*. Reprint. Harper Business.

COURSE CODE	COURSE TITLE	L	T	P	C
14N62ZB	FUNDAMENTALS OF INSURANCE	1			2

UNIT	SYLLABUS
UNIT 1	Origin and history of Insurance – Meaning and definition of Insurance – Features of Insurance – Principles of Insurance – Objectives and advantages of Insurance – Types of Insurance – Insurance organizations in India and their profile – Insurance Regulatory and Development Authority – its duties and functions
UNIT 2	Meaning and Definition of Life Insurance – its features – its fundamental principles – Types of policies in Life Insurance Meaning and definition of Fire Insurance – its features – its fundamental principles – Types of policies in Fire Insurance Meaning and definition of Marine Insurance – its features – its fundamental principles – Types of policies in Marine Insurance

REFERENCE BOOKS:

1. A Murthy – Elements of Insurance
2. M N Mish – Insurance Principle and Practice

3.

COURSE CODE	COURSE TITLE	L	T	P	C
16M483E	BUSINESS MANAGEMENT	6			3

UNIT	SYLLABUS
UNIT 1	Management : Importance – Definition – Nature and Scope of Management Process – Role and Functions of a Manager – Levels of Management – Development of Scientific Management and other Schools of thought and approaches.
UNIT 2	Planning: Nature – Importance – forms – Types – Steps in Planning – Objectives – Policies – Procedures and Methods – Natures and Types of Policies – Decision Making- Process of Decision-Making – Types.
UNIT 3	Organizing : Types of Organizations – Organization Structure – Span of Control– Departmentalization – Informal Organization.
UNIT 4	Authority – Delegation – decentralization – Difference between Authority and Power – Responsibility –Direction – Nature and Purpose.-- Leader ship and Kinds Motivation Kinds Of Motivation
UNIT 5	Co- Ordination – Need, Type and Techniques and Requisites for Excellent Co - Ordination – Controlling – Meeting and Importance – Control Process.

REFERENCE BOOKS:

1. P.C. Tripathi & P.N. Reddy	Principles of Management
2. L.M. Prasad	Principles of Management
3. Dinkar Pagare	Principles of Management
4. C.B. Gupta	Business Management
5. N. Premavathy	Business Management
6. J. Jayasankar	Principles of Management

COURSE CODE	COURSE TITLE	L	T	P	C
16M483G	PROBLEM SOLVING AND PROGRAMMING	6			3

UNIT	SYLLABUS
UNIT 1	INTRODUCTION TO PROGRAMMING What is programming? Programs and algorithms - Compilers and interpreters. Debugging programs. Overview of C – Constraints, Variables and Data types.
UNIT 2	INTRODUCTION TO C LANGUAGE Operators and expressions – Managing Input / Output Operations – Formatted I/O – decision making – Branching – IF, Nested IF – Switch – Goto – Looping – While, do, for statements
UNIT 3	ARRAYS & FUNCTIONS Arrays – Dynamic and multi-dimensional arrays – Character arrays and strings – String handling functions – User Defined functions – Categories of functions – Recursion
UNIT 4	STRUCTURES & UNION Structures – Unions – Type, Definition – enum – Array of Structures – Pointers to Structures – Structures and functions.
UNIT 5	POINTERS AND FILE MANAGEMENT Pointers – Declaration, Accessing a variable , Pointer Arithmetic – File management in C – File operations - Dynamic memory allocation

REFERENCES

1. The C Programming Language (2nd Edition) by Brian Kernighan and Dennis Ritchie, published by Prentice Hall, 1988.
2. Programming in C by Stephen Kochan, published by SAMS, 2004
3. R.G. Dromey, “How to solve it by computer”, PHI, 1998
4. E.Balagurusamy, “Programming in Ansi C”, Tata McGraw Hill, 2004
5. Deitel and Deitel, “C How to program”, Addison Wesley, 2001
6. Brian W Kernighan & Dennis Ritchie, “C Programming Language”, PHI, 1990
7. Byron S Gottfried, “Schaum’s Outline of Programming with C”, 2nd ed., 1996.

COURSE CODE	COURSE TITLE	L	T	P	C
16M4832	C PRACTICAL	6			4

- 1) To find Minimum and Maximum of n Numbers
- 2) To generate Fibonacci Series
- 3) NPR and NCR
- 4) Matrix Addition and Subtraction
- 5) Transpose of a Matrix
- 6) Sorting – Bubble Sort
- 7) Reverse a String and Check for Palindrome
- 8) Counting the number of Vowels, Consonants, Words and White Spaces in a line of text
- 9) Linear Search
- 10) Binary Search
- 11) Illustration of Classes and Object Concept

COURSE CODE	COURSE TITLE	L	T	P	C
16M483H	CORPORATE FINANCIAL MANAGEMENT	5			4

UNIT	SYLLABUS
UNIT 1	Meaning, objective and scope – Relationship between management accounting, Cost accounting and financial accounting – Financial statements – Tools for analysis and interpretation
UNIT 2	Financial planning and control – Break – even analysis – Operation leverage – Cost – volume – Profit analysis
UNIT 3	Cost of capital – Basic concepts, rational and assumptions – Cost of equity capital – Cost of debt –Cost of preference capital – Cost of retained earnings
UNIT 4	Capital structure decision of the firm – Composition and sources of long – term funds – financial leverage – Factors determining funds requirements.
UNIT 5	Financial Information systems

REFERENCE BOOK:

1. Financial Management – Prasanna Chandra
2. Khan and Jain – Financial Management
3. Pandey I M – Financial Management
4. Vanhorne – Fundamentals of Financial Management

COURSE CODE	COURSE TITLE	L	T	P	C
16C483C	BUSINESS MATHEMATICS	6			5

UNIT	SYLLABUS
UNIT 1	Sets – Introduction – Definition – Sets Operation – Laws of Sets
UNIT 2	Matrices – Introduction – Fundamental Idea about Matrices – Matrix Operation – Types of Matrix
UNIT 3	Time Series Analysis – Introduction – Uses of Analysis of Time Series – Components of Time Series – Measurement of Secular Trend – Method of Semi Averages – Methods of Moving Averages – Methods of Least Squares
UNIT 4	Index Numbers – Introduction – Classification of Index Numbers – Uses of Index Numbers – Laspeyre's – Paasche's – Fisher's Index Numbers – Time Reversal Test – Factor Reversal Test
UNIT 5	Vital Statistics – Introduction – Uses of Vital Statistics – Methods of obtaining Vital Statistics – Measurement of Mortality – Crude Death Rate – Specific Death Rates – Standardized Death Rates – Infant Mortality Rate

REFERENCE BOOKS:

1. Statistical Methods by S.P.Gupta Published by Sultan Chand & Sons, New Delhi.
2. Business Mathematics & Statistics – P.R. Vittal
3. Business Mathematics – Sunderasen & Jayaselan.
4. Elements of Mathematics – Prem Narain.
5. Business Mathematics – P.P. Gupta & G.S. Malik

COURSE CODE	COURSE TITLE	L	T	P	C
14S63AC	PERSONALITY ENRICHMENT	1			3

UNIT	SYLLABUS
UNIT 1	Introduction • Definition of Personality • Components of Personality – Structural and Functional aspects • Determinants of Personality – Biological, Psychological and Socio-Cultural factors • Assessment of Personality – Observation, Interview and Psychological Tests • Misconceptions and Classifications • Need for Personality Development
UNIT 2	Self Awareness and Self Motivation • Self Analysis through SWOT and Johari window • Elements of Motivation • Seven rules of Motivation • Techniques and Strategies for Self Motivation • Motivation Checklist and Goal Setting based on the principles of SMART • Self Motivation and Life
UNIT 3	General Knowledge and Current Affairs • Regional, National and International events • Geographical, Political and Historical facts • Information on sports and other recreational activities Basic knowledge with regard to health and health promotion
UNIT 4	Memory, Decision Making and Study Skills • Definition and Importance of Memory • Causes of Forgetting • How to forget (thought stopping), how to remember (techniques for improving memory) • The technique of passing exams • The rational decision making process • Improving creativity in decision making and components of creativity

UNIT 5	Power of Positive Thinking • Thinking power – seven steps for dealing with doubt • Traits of positive thinkers and high achievers • Goals and techniques for positive thinking • Enhancement of concentration through positive thinking • Practicing a positive life style

PRACTICAL TRAINING – The course would include the following practical exercises

- Ice Breaking
- Brainstorming
- Stimulation Exercises
- Thought Stopping
- Memory
- Study Skills Training

REFERENCES

1. Mile, D J (2004), Power of Positive Thinking, Delhi, Rohan Book Company.
2. Pravesh Kumar (2005), All about Self-Motivation, New Delhi, Goodwill Publishing House
3. Dudley, G A (2004), Double your Learning Power, Delhi, Konark Press, Thomas Publishing Group Ltd.,
4. Lorayne, H (2004), How to develop a super power memory, Delhi, Konark Press, Thomas Publishing Group Ltd.,
5. Hurlock, E B (2006), Personality Development, 28th Reprint, New Delhi, Tata McGraw Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
16M484J	DATABASE MANAGEMENT SYSTEMS	5			3

UNIT	SYLLABUS
UNIT 1	Purpose of Database Systems – Overall System Structure – Entity Relationship Model – Mapping Constraints – Primary Key – Foreign Keys – ER Diagrams
UNIT 2	Relation Model: Structure – Formal Query languages – SQL – DDL – DML – DCL – TCL
UNIT 3	Relational database Design: Pitfalls – Normalization using Functional Dependencies – Decomposition – Third Normal Form
UNIT 4	PL/SQL: Approach and Advantages – PL/SQL Blocks – Variables – Manipulating Data – Procedural Constructs – Exception Handling – Program Units in Oracle forms – PL/SQL Editor
UNIT 5	Database Admin – Development Stages – Application types – Backup and Recovery – Security and Privacy

REFERENCE BOOKS:

- 1) C.J.Date – An Introduction to Database Systems – 7th Edition – Addison Wesley 2000
- 2) H.F.Korth and A.Silberschatz – Database System Concepts – McGraw Hill International Publication – 1988
- 3) Albert Lulushi – Developing ORACLE FORMS Applications – Prentice Hall – 1997

COURSE CODE	COURSE TITLE	L	T	P	C
16M4843	DBMS PRACTICAL	5			3

- 1) Execute a single line and group functions for a table
- 2) Execute DCL and TCL Commands
- 3) Create and manipulate various DB Objects for a table
- 4) Create Views, Partitions and locks for a particular DB.
- 5) Write PL/SQL procedure for an application using Exception Handling
- 6) Write PL/SQL Procedure for an application using cursors
- 7) Write a DBMS program to prepare reports for an application using functions.
- 8) Write a PL/SQL block for transaction operations of a typical application using triggers.
- 9) Write a PL/SQL block for transaction operations of a typical application using package.
- 10) Design and develop an application using any front end and back end tool (Make use of ER diagram and DFD)

COURSE CODE	COURSE TITLE	L	T	P	C
16M484K	MANAGEMENT ACCOUNTING	6			4

UNIT	SYLLABUS
UNIT 1	Management Accounting – Meaning, Scope, Importance and Limitations – Management Accounting vs. Cost Accounting – Management Accounting vs. Financial Accounting.
UNIT 2	Analysis and interpretation of financial statements – Nature, Objective, Tools – Methods – Comparative statements, Common size statement and Trend Analysis – Ratio Analysis – Classification of ratios – Profitability, Turnover & Solvency Ratio
UNIT 3	Funds Flow and Cash Flow Statements (Simple Problems only)
UNIT 4	Budgets and Budgetary control – Meaning, Objectives, merits and demerits – Types of Budgets – Production, Cash and Flexible Budgets.
UNIT 5	Marginal Costing (excluding decision making) – Break Event Analysis – Break Even chart.

REFERENCE BOOKS:

1. Dr. Maheswari S.N – Management Accounting – Sultan Chand & Sons
2. Reddy and Murthy - Management Accounting – Margham Publications

COURSE CODE	COURSE TITLE	L	T	P	C
16M484L	BUSINESS COMMUNICATION	5			4

UNIT	SYLLABUS
UNIT 1	Definition – Methods – Types – Principles of effective Communication – Barriers to Communication – Business Letter – Layout.
UNIT 2	Kinds of Business Letter: Interview – Appointment – Acknowledgement – Promotion – Enquiries – Replies – Orders – Sales – Circular – Complaints.
UNIT 3	Bank Correspondence – Insurance Correspondence – Agency Correspondence – Correspondence with Shareholders, Directors.
UNIT 4	Report Writing – Agenda, Minutes of Meeting – Memorandum – Office Order – Circular – Notes.
UNIT 5	Modern Forms of Communication : Fax – e-mail – Video Conferencing – Internet – Websites and their use in Business.

REFERENCE BOOK:

1. Essentials of Business Communication – Rajendra Pal & J.S. Korlahalli
2. Communication for Business – Shirley Taylor.
3. Business Communication Today – Bovee, Thill, Schatzman
4. Advanced Business Communication – Penrose, Rasbery, Myers

COURSE CODE	COURSE TITLE	L	T	P	C
16C484D	BUSINESS ENVIRONMENT	5			5

UNIT	SYLLABUS
UNIT 1	The concept of Business Environment – its nature and significance – Brief overview of political – Cultural – legal – economic and social and environments and their impact on business and strategic decisions.
UNIT 2	Political Environment – Government and Business relationship in India – Provisions of Indian Constitution pertaining to business.
UNIT 3	Social environment – Cultural heritage – social attitudes – impact of foreign culture – castes and communities – joint family system – linguistic and religious groups – Types of social organization – social responsibilities of business.
UNIT 4	Economics Environment – Economic systems and their impact on business – Macroeconomic parameters like GDP – growth rate of population – Urbanisation – Fiscal deficit – Plan investment – Per capita income and their impact on business decisions – Five Year Planning.
UNIT 5	Financial and Technological environment– Financial system – Commercial banks – Financial Institutions – RBI Stock Exchange – IDBI – Non Banking Financial Companies NBFCs

REFERENCE BOOKS:

1. Sankaran S – Business Environment
2. Francis Cherunilam - Business Environment
3. Aswathappa - Business Environment
4. Dasgupta & Sengupta – Government and Business in India
5. Srinivisan K. – Productivity and social Environment

COURSE CODE	COURSE TITLE	L	T	P	C
14E64AA	ENVIRONMENTAL STUDIES	2			2

UNIT	SYLLABUS
UNIT 1	The Multi disciplinary Nature of Environmental Studies Definition, scope and importance, Need for public awareness
UNIT 2	Natural Resources Renewable and non-renewable resources: Natural resources and associated problems • Forest Resources: Use and over-exploitation, deforestation case studies, timber extraction, mining, dams and their effects on forests and tribal people. • Water Resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams – benefits and problems. • Mineral Resources: Use and exploitation, environmental effects of extracting using mineral resources case studies. • Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging salinity, case studies. • Energy Resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources – Case Studies. • Land Resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual and conservation of natural resources – Equitable use of resources for sustainable life styles.
UNIT 3	Ecosystems Concept of an Ecosystem – Structure and Function – Producers, consumers and decomposers – Energy flow in the ecosystem – Ecological succession – Food chains, food webs and ecological pyramids – Introduction, types, characteristics, features, structures and function of Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem and Aquatic Ecosystem (ponds, streams, lakes, rivers, oceans, estuaries)

UNIT 4	Biodiversity and its Conservation Introduction – Definition genetic species and eco-system diversity – Bio-geographical classification of India – Value of the biodiversity consumptive use, productive use, social, ethical. Aesthetic and option values – Biodiversity at Global, National and Local levels – India as a mega – diversity nation – Hot-Spots of biodiversity – Threats to biodiversity habitat loss, poaching of wildlife, man wildlife conflicts – Endangered and endemic species of India – Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.
UNIT 5	Environmental Pollution Definition Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards – Solid waste management causes, effects and control measures of urban and industrial wastes – Role of an individual in prevention of pollution – Pollution of case studies – Disaster management, floods, earthquake, cyclone and landslides.
UNIT 6	Social Issues and the Environment Unsustainable to Sustainable development – Urban problems related to energy – Water conservation, rain water harvesting, watershed management – Resettlement and rehabilitation of people; its problems and concerns & Case Studies – Environmental ethics issues and possible solutions – Climate change, global warming, Acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies, Wasteland reclamation – Consumerism and waste products – Environmental Protection Act – Air (Prevention and Control of Pollution) Act – Water (Prevention and Control of Pollution) Act – Wildlife Protection Act – Forest Conservation Act – Issues involved in enforcement of environmental legislation – Public awareness.
UNIT 7	Human Population and the Environment Population growth, variation among nations – Population explosion – Family Welfare Programme – Environment and human health – Human Rights – Value Education – HIV / AIDS – Women and Child welfare – Role of Information Technology in Environment and human health – Case Studies
UNIT 8	Field Work Visit to a local area to document environmental assets – river / forest / grassland / hill mountain – Visit to a local polluted site – Urban / Rural / Industrial / Agricultural – Study of common plants, insects, birds – Study of simple ecosystems – pond, river, hill slopes, etc. (Field work equal to 5 lecture hours)

COURSE CODE	COURSE TITLE	L	T	P	C
14S64AD	COMPUTING SKILL	2			3

UNIT	SYLLABUS
UNIT 1	<i>Introduction to Computers</i> – Classification of Computers; Role of Computers in society; Inside the Computers – Hardware (processing, memory, i/o, storage), Software (systems, application), CPU, OS, (DOS, Windows, Unix, Linux), Storage Devices; Programming – Overview, need for languages, skills; Networking Basics; Virus; Hacking.
UNIT 2	<i>Word Processing</i> – Open, Save and close word document; Editing text – tools, formatting, bullets; Spell Checker; Navigating in word – keyword, Mouse; document formatting – paragraph alignment, indentation, headers and footers, numbering; printing – preview, options.
UNIT 3	<i>File Management</i> – Understanding the importance of file management; backing of files, navigating thru My Computer and Windows Explorer; Files and Folders – editing, retrieving, deleting, renaming, subfolders – manipulate windows – maximize, minimize; Power point basics – terminology, templates, viewing.
UNIT 4	<i>Spreadsheets</i> – MS Excel – opening, entering text and data, formatting, navigating; Formulas – entering, handling and copying; Charts – creating, formatting and printing, header and footer, centering data, printing.
UNIT 5	<i>Networks</i> – Internet Explorer – components; www – working, browsing, searching, saving – Bookmark – favorite, create, delete – Printing a web page; email – creating, receiving, reading and sending messages.

References:

1. Introduction to Computers – Peter Norton, Tata McGraw-Hill.
2. Microsoft 2003 – Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, Tata McGraw-Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
16M485M	HUMAN RESOURCES MANAGEMENT	6			4

UNIT	SYLLABUS
UNIT 1	Human Resource Management (HRM) Definition – Objectives – Functions – nature and scope of HRM – Difference between personnel management and HRM – Qualities of good HR manager – changing roles of a HR manager – problems and challenges of HR manager.
UNIT 2	Human Resource Planning (Man power planning) Definition of HR planning – objectives – Steps in HR Planning – Types of Planning – Need and importance – Tools and Techniques - Job analysis – Job analysis – Job Description Job Specification - Job evaluation.
UNIT 3	Recruitment & Selection Recruitment and Selection – objectives of Recruitment Recruitment – Sources – internal and external recruitment – application blank – Testing – Interviews – Techniques in selection – Placement & Induction.
UNIT 4	Training & Development Training and Development – Principles of Training – Assessment of Training needs – methods – evolution of effectiveness of training programme.
UNIT 5	Performance Appraisal Performance Appraisal – Process – Methods of Performance appraisal – appraisal counseling – Motivation Process – Theories of motivation – compensation – Incentives – Monetary & Non-Monetary – Promotion & Transfers

REFERENCE BOOKS:

1. Aswathappa - HRM Tata me grow hill Publishing co. New Delhi.
2. LM Prasad, HRM – Sultan Chand & Sons, New Delhi.
3. Jayashankar – HRM – Margham Publications, Chennai.
4. Chitra Atmaran Naik – Hen – Ane books Pvt.Ltd
5. Dr. Radha – HRM

COURSE CODE	COURSE TITLE	L	T	P	C
16M485N	VISUAL BASIC PROGRAMMING	6			4

UNIT	SYLLABUS
UNIT 1	Data Types – String – Numbers – Variables – Text Boxes – Labels – Creating Controls – Tool Box Name Property – Command Button – Access Keys – Image Controls – Message Boxes
UNIT 2	Displaying information – Determinate Loops – Indeterminate Loops – Conditional Built in Functions – Customizing a Form – Writing Simple Programs
UNIT 3	Functions and Procedures – Lists – Arrays – Control Arrays – Combo Boxes – Grid Control – Do Events and Sub Main
UNIT 4	Error Trapping – Event Handling – Module – monitoring Mouse Activity – Dialog Boxes – Common Controls – Menus
UNIT 5	Error Trapping – MDI Forms – Database Connectivity using Data Control and DAO.

REFERENCE BOOKS:

1. Visual Basic 6 – The Complete Reference – Noel Jerke – Tata McGraw Hill 1999
2. Visual Basic from the Groud Up – Gary Cornell – Tata McGraw Hill – 1999

COURSE CODE	COURSE TITLE	L	T	P	C
16M4854	VISUAL BASIC PRACTICAL	6			4

- 1) Simple Calculator with minimum operation using push buttons
- 2) Application to demonstrate font, font style and font size using combo box
- 3) Application to develop the digital clock using timer control
- 4) Application to implement login details using VB intrinsic controls
- 5) Application to implement the concept of modal and modalless dialog boxes
- 6) Application to implement font and color dialog boxes
- 7) Application to load a picture in picture box and image box control
- 8) Application to implement the concept of VB Menu Editor
- 9) Application to perform Pay-Slip Calculation for an Organization
- 10) VB Application for Quiz Program

COURSE CODE	COURSE TITLE	L	T	P	C
16M485P	MARKETING MANAGEMENT	6			5

UNIT	SYLLABUS
UNIT 1	Marketing Management Definition of Marketing and Marketing Management Marketing Process – marketing management – orientation – marketing plan – marketing mix – functions of marketing management – MIS.
UNIT 2	Emerging Issues in Marketing Consumer orientation – Integrated marketing – Business Ethics in Marketing – Direct and online marketing (Cyber Marketing) – Green Marketing – Quantitative Techniques for marketing Decisions – Consumerism – Customer Relation Building.
UNIT 3	Product and Pricing Decisions Product – features – Product Mix – Product Policy – Product Planning – New Product Development – Product Life Cycle – Pricing – Importance – Objectives – Pricing Policies, Strategies and Techniques – Pricing Methods.
UNIT 4	Consumer / Business Market Segmentation Definition – Need for Segmentation – factors deciding the success of market segmentation – Bases for Segmentation – Process of market segmentation – Niche Marketing – Characteristics of Niche Market.
UNIT 5	Sales Promotion and Advertising Sales Promotion Techniques and Methods – Advertising – Objectives Benefits – Selection of Media, Advertising copy – Ethics in Advertising Salesmanship – Objectives, qualities and types of salesman – E-marketing.

REFERENCE BOOKS:

1. Kotler, Philip and Gary Armstrong: Principles of Marketing, Prentice Hall, New Delhi
2. Kotler Philip Marketing Management Analysis, Planning, Implementation and Control, Prentice Hall, New Delhi
3. Majumdar, Ramanuj: Product Management in India, Prentice Hall, New Delhi
4. Mc Garity, E. Nenome and William D Perrault, Jr. Basic Marketing management Approach, Richard D. Irwin, Homewood, Illinois.
5. Ramaswamy, V.S, and Namakumari, S: Marketing Management, Macmillan India, New Delhi
6. Srinivasan R: Case Studies in Marketing: The Indian Context, Prentice Hall, New Delhi
7. Santon, William, J and Charles Futrell: Fundamentals of Marketing: McGraw Hill Publishing co, New York
8. Still, Richard R, Edward W, Clundiff and Norman A.P

COURSE CODE	COURSE TITLE	L	T	P	C
16A485A	ENTREPRENEURIAL DEVELOPMENT	6			5

UNIT	SYLLABUS
UNIT 1	Concept of Entrepreneurship – Definition – Meaning – Types – Qualities of an Entrepreneur – Classification of Entrepreneurs – Factors influencing Entrepreneurship – Functions of Entrepreneurs
UNIT 2	Entrepreneurial Development – Agencies – Commercial Banks – District Industries Centre – National Small Industries Corporation – Small Industries Development Organisation – Small Industries Service Institute. All India Financial Institutions – IDBI – IFCI – ICICI – IRDBI.
UNIT 3	Project Management - Business idea generation techniques – identification of Business Opportunities – Feasibility study – Marketing, Finance, Technology & Legal Formalities- Preparation of Project Report Tools of Appraisal.
UNIT 4	Entrepreneurial Development programmes (EDP) – their role, relevance, and achievements – Role of Government in organizing EDPs – critical evaluation
UNIT 5	Economic development and entrepreneurial growth Role of Entrepreneur in economic growth – Strategic approaches in the changing economic scenario for small scale Entrepreneurs – Networking – Niche play, Geographic Concentration, Franchising/dealership – Development of Women Entrepreneurship.

REFERENCE BOOKS:

1. Srinivasan N.P. – Entrepreneurial Development
2. Saravanavel – Entrepreneurial Development
3. Vasant Desai – Project Management
4. Jayashree Suresh – Entrepreneurial Development
5. Holt – Entrepreneurship – New Venture Creation

COURSE CODE	COURSE TITLE	L	T	P	C
16M486Q	MARKETING RESEARCH	6			4

UNIT	SYLLABUS
UNIT 1	Introduction – Definition of Marketing Research – Nature and Scope – Marketing Research as aid rational decision making.
UNIT 2	Sampling techniques – Random – Stratified – Area – Quota – Questionnaire – Interview techniques – Interviewing skills on the part of investigator.
UNIT 3	Motivation Research – Product Research
UNIT 4	Consumer Survey – Sales Control Research
UNIT 5	Media Research – Various Techniques – Measuring advertising effectiveness – Analysis and reporting research finding to the management.

REFERENCE BOOKS:

1. Majumdar – Marketing Research
2. Green and Tull - Marketing Research
3. Donal H. McBurn, Research Mathics – Thomson.
4. M. Basher Ahmed Khan - Marketing Research : Text and Cases, PHI, New Delhi
5. Sharma DD - Marketing Research
6. Tull and Hawkins : Marketing Research

COURSE CODE	COURSE TITLE	L	T	P	C
16M4846R	Paper 2 - ORGANIZATIONAL BEHAVIOUR	5			5

UNIT	SYLLABUS
UNIT 1	The concept of organization, meaning of organization theory. Organization goals, determinants of goals, goal displacement, goal distortion, organizational and industrial goals, integration of goals. Concept and determinants of organization structure. Different types and importance of organizational structure. Environment and structure, designing and organizing structure, planning for the structure.
UNIT 2	Group Dynamics: The concept of groups, kinds and functions of groups, formal and informal groups, group cohesiveness, group thinking, transactional analysis.
UNIT 3	Attitudes and perception : Concept of attitude; attitude, opinions and beliefs; attitudes and behaviour, formation of attitude, factors determine formation of attitude, attitude measurement; attitude change. Definition and meaning of perception; perceptual process; factors influencing perception.
UNIT 4	Conflict and change: Meaning and Process of conflict; causes, sources, consequences of conflict; conflict resolution strategies. Kind of change; Identification of the problem and implementation of change; resistance to change, overcoming resistance to change.
UNIT 5	Organizational Effectiveness : The concept of organizational effectiveness; efficiency, effectiveness and productivity; approaches of organizational effectiveness; contributing factors of organizational effectiveness.

REFERENCES:

1. Fred Luthans: Organizational Behaviour
2. Keith Davis: Human Behaviour at work
3. Stephen Robbins: Organization Behaviour
4. V.S.P. Rao & P.S.Narayan: Organization Theory and Behaviour
5. LM Prasad: Organizational Theory and Behaviour
6. R.A.Sharma: Organization Theory and Behaviour
7. Paul Hersey & Keith: Management of Organizational Behaviour Blanchard
8. Edgar H Schien: Organizational Psychology
9. Udai Pareek, T.V.Rao & Pestonjee, D.M: Behavioural process in Organisation

COURSE CODE	COURSE TITLE	L	T	P	C
16M486S	RESEARCH METHODOLOGY	6			4

UNIT	SYLLABUS
UNIT 1	Research – Meaning, Objectives and Purpose - Types of Research - Pure and applied, survey, case study experimental, exploratory – Research Process - Criteria of good research.
UNIT 2	Research Design – Meaning, Significance and Features - Research Problem - Steps in selection and formulation of research problem - Review of Literature - Formulation of Hypothesis
UNIT 3	Methods of data collection - Primary and secondary data - observation - interview -questionnaire - construction of tools for data collection
UNIT 4	Data Analysis and Interpretation – Types of Analysis – Chi-Square Test - Multivariate Analysis – t-Test – ANOVA (Only Theory)
UNIT 5	Report Writing – Significance – Steps in writing Report – Layout of the Research Report – Types of Reports.

REFERENCE BOOKS:

1. William C Emory, Business Research Methods, Richard D Irwin, NJ,
2. Donald R Cooper, Business Research Methods 7th Ed, McGraw Hill, 2001
3. Krishnaswami OR, Methodology of Research for Social Science, Himalaya, Mumbai, 2001.
4. Anderson J. et.al, Thesis and Assignment writing, Wiley Eastern
5. C R Kothari & Gaurav Garg, Research Methodology Methods and Techniques, New Age International Publishers

COURSE CODE	COURSE TITLE	L	T	P	C
16M486T	COMPUTER APPLICATIONS - TALLY	6			5

UNIT	SYLLABUS
UNIT 1	Computer - Environment usage - Tally loading - Setting the directory.
UNIT 2	Tally - Starting - Creating Company - Altering company operations - General environment configuration – Functional keys and shortcut keys.
UNIT 3	Voucher entry - delivery note - Payment voucher - Receipt voucher debit note - Credit note.
UNIT 4	Creations of various accounts - Indexing - Creation of ledgers -Multiple ledgers - Cost categories - cost centers, Budget - Bank reconciliation - Inventory maintenance - Inventory valuation - Interest calculation.
UNIT 5	Consolidation of accounts - Import / export data - Final accounts -Reporting - Fund flow statements, cash flow statements - Inventory analysis report - Printing of Report – ERP

Reference Books:

1. Vishnu Priya Singh – Tally 9
2. Kogent Solutions Inc – Tally 9
3. Ramaiah Publications – Tally 9

COURSE CODE	COURSE TITLE	L	T	P	C
16A486B	APPLICATION ORIENTED SUBJECT II	6			5

PROJECT WORK

UNIT	SYLLABUS
UNIT 1	A group of 3 students will be assigned a project in the beginning of the final year. The project work shall be submitted to the college 20 days before the end of the final year and the college has to certify the same. The project shall be evaluated externally. The external examiner shall be from the panel of examiners suggested by the board of studies from time to time. Project report shall carry 75 marks and Viva – Voce examinations 25 marks. Those who fail in the project work will have to redo the project work and submit to the college for external examination.

COURSE CODE	COURSE TITLE	L	T	P	C
14V66AG	VALUE EDUCATION	1			2

UNIT	SYLLABUS
UNIT 1	Introduction: Value Education and its relevance to present day – Meaning of Value Education – The meaning of the word value – Significance of Thirukkural about ‘Value Education’ – Personal Values: Meaning – Different personal values – Love – Compassion – Gratitude – Courage – Optimism – Friendship
UNIT 2	Family Values: Meaning – Social Attitude to Women, Children and Elders – Familal Responsibilities – Dos and Don’ts for Stronger Family bonding – Significance of Thirukkural about ‘Family Values’.
UNIT 3	Self Esteem: Fear of failure – Approval seeking – Self Esteem is not selfishness / Ego – Self Esteem / Arrogance – Qualities of a person with Self Esteem – Significance of Thirukkural about ‘Self Esteem’ – Anger: Common situations where people fly into rage – Anger at services – Some practical methods of handling anger – techniques to handle our anger – Handling anger in others – methods to replace anger.

REFERENCE BOOKS:

1. Value Education - N S Raghunathan, Margham Publication

DHANRAJ BAID JAIN COLLEGE (Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COMPUTER SCIENCE B.Sc. (Computer Science)



SYLLABUS (Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

SCHEME OF EXAMINATIONS**I YEAR – I SEMESTER**

S.No.	Paper Title	Credit	Max. Marks			<i>Hours</i>
			Internal	External	Total	
1	English	3	20	80	100	5
2	Tamil	3	20	80	100	5
3	Mathematics	5	20	80	100	5
4	Programming in C	5	20	80	100	5
5	Application Lab : Programming. In C	4	20	80	100	5
	Soft Skill	2	20	80	100	2

I YEAR – II SEMESTER

S.No.	Paper Title	Credit	Max. Marks			<i>Hours</i>
			Internal	External	Total	
1	English	3	20	80	100	5
2	Tamil	3	20	80	100	5
3	Mathematics	5	20	80	100	5
4	Data structures and C++	5	20	80	100	5
5	Application Lab :Data structures and C++	4	20	80	100	5
	Soft Skill	2	20	80	100	2

II YEAR – III SEMESTER

S.No.	Paper Title	Credit	Max. Marks			<i>Hours</i>
			Internal	External	Total	
1	English	3	20	80	100	5
2	Tamil	3	20	80	100	5
3	Statistics	4	20	80	100	5
4	Digital & Computer Architecture	4	20	80	100	5
5	Programming in Java	4	20	80	100	5
6	Application Lab - Programming in Java	2	20	80	100	5
	Soft Skill	2	20	80	100	2

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II YEAR – IV SEMESTER

S.No.	Paper Title	Credit	Max. Marks			Hours
			Internal	External	Total	
1	English	3	20	80	100	5
2	Tamil	3	20	80	100	5
3	Environmental studies	2	20	80	100	5
4	Visual Programming	3	20	80	100	5
5	Data base Management System	3	20	80	100	5
6	Statistics	3	20	80	100	5
7	Application Lab –Visual Programming and RDBMS	3	20	80	100	5
	Soft Skill	3	20	80	100	2

III YEAR – V SEMESTER

S.No.	Paper Title	Credit	Max. Marks			Hours
			Internal	External	Total	
1	Data Communication & Networks	4	20	80	100	5
2	Operating System	4	20	80	100	5
3	Elective –1	4	20	80	100	5
4	Web Technology	4	20	80	100	5
5	Practical – Operating system Lab	2	20	80	100	5
6	Practical – Web Application Lab	2	20	80	100	5

III YEAR – VI SEMESTER

S.No.	Paper Title	Credit	Max. Marks			Hours
			Internal	External	Total	
1	Software Engineering	4	20	80	100	5
2	Elective –2	4	20	80	100	5
3	Elective –3	4	20	80	100	5
4	XML & Web Services	4	20	80	100	5
5	Practical – Mini Project	2	20	80	100	5

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6	Practical – XML	2	20	80	100	5
	Value Education	1	20	80	100	2

Electives

- 1.Unified Modeling Language
2. Client Server Computing
3. Programming in ASP.NET
4. Electronic Commerce
5. Web Graphics
6. Software Quality Management
7. Data Mining & Data Warehousing
8. Enterprise Resource Planning
9. Design and Analysis of Algorithm
- 10.Special Elective

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M221A	PROGRAMMING IN C	5			5

UNIT	SYLLABUS
UNIT 1	C: Fundamentals, Character set – Identifier and keywords – data types – constants – variables declarations – Expressions – Statements – Arithmetic, Unary, Relational and logical, Assignment Conditional Operators – Library functions.
UNIT 2	Data input output functions – Simple C programs – flow of control – if, if-else, while, do-while, for loop, Nested control structures – Switch, break and continue, go to statements – Comma operator.
UNIT 3	Functions – Definition – Proto-types – Passing arguments – Recursions. Storage Class Automatic, External, Static, Register Variables – Multi-file programs.
UNIT 4	Arrays – Definition and Processing – Passing arrays to functions – Multi-dimension and Arrays and String. Structures – User defined data types – Passing structures to functions – Self-reference structures – Unions – Bit wise operations.
UNIT 5	Pointers – Declarations – Passing pointers to functions – Operation in Pointers - Pointers Arrays – Arrays of pointers – Structures and pointers – Files: Creating, Processing, Opening and a data file.

References:

1. B.W. Kernighan and D.M.Ritchie, The C Programming Language, 2nd Edition, PHI, 1988.
2. H.Schildt, C: The Complete Reference, 4th Edition TMH Edition, 2000.
3. Gottfried, B.S, Programming with C, Second Edition, TMH Pub. Co. Ltd., New Delhi 1996.
4. Kanethkar Y., Let us C, BPB Pub., New Delhi. 1999.

COURSE CODE	COURSE TITLE	L	T	P	C
14C221A	ALLIED MATHEMATICS — I	5			5

UNIT	SYLLABUS
UNIT 1	Matrices — Types of Matrices — Matrix Operations — Cayley Hamilton theorem — Eigen roots and Eigen vector — Inverse using Cayley Hamilton theorem (simple problems only).
UNIT 2	Set — Set operators — Cartesian products — Relations — Equivalence
UNIT 3	Trigonometry — $\sin\theta$, $\cos\theta$, $\tan\theta$ in terms of θ — Expansions of $\sin^n\theta$, $\cos^n\theta$ — Expansion of $\sin^n\theta$, $\cos^n\theta$
UNIT 4	Theory of equations — Polynomial equations with real coefficients, irrational roots, complex roots, transformation of equation by in increasing or decreasing roots by a constant, reciprocal equations, Newton's method to find a root approximately (Simple problems only).
UNIT 5	Differential Calculus — Jacobians concepts of polar coordinates — Curvature and radius of curvature in Cartesian co-ordinates (simple problems only).

Reference books:

1. Allied Maths — Vol 1 & 2, P.Duraipandian and S. Udayabaskaran, Muhil Pub, Chennai.
2. Allied Mathematics by P.R.Vittal, Margham Publishers, Chennai.

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M222B	DATA STRUCTURE USING C++	5			5

UNIT	SYLLABUS
UNIT 1	Variables, Operators, Functions
UNIT 2	Classes and Objects, Inheritance, Polymorphism
UNIT 3	Data structure , Arrays, List
UNIT 4	Stacks ,Queues
UNIT 5	Trees and Graphs

BOOKS FOR STUDY

1. E.Balagurswamy – Object Oriented Programming with C++. TMH.
2. Robert Lafore - Object Oriented Programming in Microsoft C++- Galgotia.
3. E.Horowitz and S.Shani Fundamentals of Data Structures in C++, Galgotia Pub.1999.
4. Gregory L. Heileman – Data Structures, Algorithms and Object Oriented Programming – Mc Graw Hill International Editions 1996
5. A.V. Aho, J.D. Ullman, J.E. Hopcraft: Data Structures and Algorithms –Pearson
6. Sahni, Data Structure, algorithms and application, McGraw Hill, 2001.

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14C222B	ALLIED MATHEMATICS — II	6			5

UNIT	SYLLABUS
UNIT 1	Symbolic Logic - Logical Operations — Tautology and contradiction — Laws of Algebra of propositions.
UNIT 2	Normal Forms — Disjunctive normal form — conjunctive normal form — Principal conjunctive and principal disjunctive normal forms (Problems proved by truth tables only).
UNIT 3	Boolean Algebra — Boolean Algebra and its application simple problems only.
UNIT 4	Algebra — Partial fractions — Binomial and exponential and — simple problems.
UNIT 5	Integral Calculus — Integration — Definite integrals — Reduction formulae — Simple problems only.

Reference books:

1. Introduction to Discrete Mathematics, 2nd ed., N.K.Sen and B.C.Chakraborty books and allied private ltd, Kolkatta.
2. Allied Maths - Vol.1 & 2, P.Duraipandian and S.Udayabaskaran, Muhil Pub, Chennai.
3. Allied Mathematics by P.R.Vittal, Margham Publishers, Chennai.

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14C223C	STATISTICAL METHODS AND ITS APPLICATIONS	5			4

UNIT	SYLLABUS
UNIT 1	Nature and Scope of Statistical methods and their limitations – Classification - tabulation and diagrammatic representation of various types of statistical data - frequency curves — Ogives - Lorenz Curve.
UNIT 2	Measure of Location ~ Arithmetic Mean. Median. Mode. Geometric Mean - Harmonic Mean.
UNIT 3	Measure of Dispersion — Range, Mean Deviation. Quartile deviation. Standard deviation, coefficient of variation.
UNIT 4	Scatter diagram — Correlation — Regression lines — Rank Correlation Coefficient.
UNIT 5	Sampling from finite population — Simple random sampling, stratified and systematic random sampling procedures — Concepts of sampling and non—sampling errors.

BOOKS FOR STUDY AND REFERENCES:

1. Gupta. SP. Gupta MP. Business Statistics, 16th ed.. Sultan Chand &. sons, New Delhi.2010.
2. Pillai. RSN, Bagavathi, Statistics, S.Chand New Delhi,2010.
3. Vittal, PR, Business Statistics, Margaham Pub, Chennai,2010.

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M223C	DIGITAL & COMPUTER ARCHITECTURE	5			4

UNIT	SYLLABUS
UNIT 1	Number System - Converting numbers from one base to another - Complements - Binary Codes - Integrated Circuits - Boolean algebra - Properties of Boolean algebra - Boolean functions - Canonical and Standard forms - Logical Operations - Logical gates - Karnaugh map up to 6 variables - Don't care condition - some of products and products of sum simplification - tabulation Method.
UNIT 2	Adder - Subtractor - Code converter - analyzing a combinational circuit - multilevel NAND and NOR circuits - properties of XOR and equivalence functions - Binary parallel Adder - Decimal Adder - Magnitude Comparator - Decoders - Multiplexers - ROM - PLA
UNIT 3	Analyzing a sequential circuit - state reduction - excitation tables - design of sequential circuits - counters - Design with state equation - registers - Shift Registers - Ripple and synchronous Counters.
UNIT 4	Memory unit - Central Processing Unit - General register and stack organizations, instruction formats - Input - Output Organization - Peripheral devices, I/O interface, Asynchronous data transfer, modes of transfer, priority interrupt, direct memory access, I/O processor, serial communications.
UNIT 5	Memory organisation - memory hierarchy - main memory - auxiliary memory - associative, cache and virtual memory, memory management hardware - multi processors: interconnection structures, Inter-processor arbitration.

BOOKS FOR STUDY AND REFERENCES:

1. M M Mano, Computer System Architecture PHI (Third Edition) 1993.
2. V C Hamacher, G Vranesic, S G Zaky – Computer Organization, McGraw Hill, 1990.
3. J P Hates, Computer Architecture, McGraw Hill, ISE, 1988.

COURSE CODE	COURSE TITLE	L	T	P	C
14M223D	Programming in JAVA	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to Java – Features of Java – Object Oriented Concepts – Lexical Issues – Data Types – Variables – Arrays – Operators – Control Statements
UNIT 2	Classes – Objects – Constructors – Overloading method – Access Control – Static and fixed methods – Inner Classes – String Class – Inheritance – Overriding methods – Using super – Abstract class
UNIT 3	Packages – Access Protection – Importing Packages – Interfaces – Exception Handling – Throws – Thread – Synchronization – Messaging – Runnable Interface – Inter thread communications – Deadlock – Suspending, Resuming and stopping threads – Multithreading.
UNIT 4	I/O Streams – File Streams – Applets – String Objects – String Buffer – Char Array – Java Utilities – Code Documentation.
UNIT 5	Networks basis – Socket Programming – Proxy Servers – TCP/IP Sockets – Net Address – URL – Datagram's – Working with windows using AWT Controls – Layout Managers and Menus

BOOKS FOR STUDY:

1. Cay S.Horstmann, Gary Cornell – Core Java 2 Volume I – Fundamentals, 5th Edn.PHI,2000.
2. P.Naughton and H.Schildt – Java2(The Complete Reference) Third Edition, TMH 1999.
3. K.Arnold and J.Gosling – The Java Programming Language – Second Edition, Addison Wesley

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M224G	VISUAL PROGRAMMING	5			3

UNIT	SYLLABUS
UNIT 1	a Form – writing Simple Programs – Toolbox – Creating Controls – Name Property – Command Button – Access keys – Image Controls – Text Boxes – Labels – Message Boxes – Grid - Tools – Variables – Data Types – String – Numbers
UNIT 2	Displaying Information – Determinate Loops – Indeterminate Loops – Conditionals – Built in functions and Procedures
UNIT 3	Lists – Arrays – Sorting and Searching – Records – Control Arrays – Combo Boxes – Grid Control Projects with Multiple forms – Do Events and Sub Main – Error Trapping.
UNIT 4	VB Objects – Dialog Boxes – Common Controls – Menus – MDI Forms – Testing, Debugging and optimization – working with Graphics.
UNIT 5	Monitoring Mouse Activity – File Handling – File System controls – File System Objects – COM/OLE automation – DLL Servers – OLE Drag and Drop.

BOOKS FOR STUDY:

1. Gary Cornell – Visual Basic 6 from the Ground up – Tata McGraw Hill – 1999.
2. Noel Jerke – Visual Basic 6 (The Complete Reference) – Tata McGraw Hill –1999.

COURSE CODE	COURSE TITLE	L	T	P	C
14M224E	DATA BASE MANAGEMENT SYSTEM	5			3

UNIT	SYLLABUS
UNIT 1	Advantage and Component of a Database Management Systems – Feasibility study – Class Diagrams – Data Types – Events – Normal Forms – Integrity – Converting Class Diagrams to Normalized Tables – Data Dictionary.
UNIT 2	Query Basis – Computation Using Queries – Subtotals and GROUP BY Command Queries with Multiple Tables – Subqueries – Join – DDL & DML – Testing Queries.
UNIT 3	Effective Design of Forms and Reports – Form Layout – Creating Forms – Reports – Procedural Languages – Data on Forms – Programs to Retrieve and save database Handling
UNIT 4	Power of Application Structure – User Interface Features – Transaction – Forms Events – Custom Reports – Distributing Application – Table Operations
UNIT 5	Database Administration – Development Stages – Application Types – Backup and Recovery Security and Privacy

REFERENCES:

1. G.V.Post – Database Management Systems Designing and Building Business Application - McGraw Hill International edition – 1999.
 2. Raghu Ramakrishnan – Database Management Systems – WCB/McGraw Hill – 1998.
- C.J.Date – An Introducing to Database Systems – 7th Edition- Addison Wesley – 2000

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14C224D	NUMERICAL METHODS	5			3

UNIT	SYLLABUS
UNIT 1	Roots of Equations: Bisection Method — False- Position — Newton Raphson Method.
UNIT 2	Algebraic Equations: Gauss Elimination — Gauss-Jordan, Gauss— Seidel.
UNIT 3	Interpolation: Newton's forward, Newton's backward, divided difference and Lagrange's method.
UNIT 4	Numerical Differentiation — Integration: Trapezoidal Rule — Simpson's Rule — Romberg Integration.
UNIT 5	Differential equation: Taylor's Method — Euler' Method — Rangekutta 2 nd and 4 th order methods.

Reference books:

1. Statistical Numerical Methods, PR Vittal, Margham publication, Chennai.
2. Numerical Methods for scientific and engineering computation, Jain MK, Iyengar, SRK, New age pub, New Delhi, 2010
3. Numerical methods for scientific and engineering computation, T.Veerarajan New age pub, New Delhi, 2010

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M225J	DATA COMMUNICATION AND NETWORK	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to data communication, network protocols & standards and standard organization line configuration – topology – Transmission mode – Classification of network – OSI model – layer of OSI model
UNIT 2	Parallel and serial Transmission – DTE/DCE/such as EIA-449, EIA-202 and X21 interface – Interface standards – Modems – Guided Media – Unguided Media – Performance – types of Error – Error Detection – Error corrections.
UNIT 3	Multiplexing – Types of Multiplexing – Multiplexing Application – Telephone system – Project 802 – Ethernet – Token Bus – Token Ring – FDDI – IEEE 802.6 – SMDS – Circuit Switching – Packet Switching – Message switching – Connection Oriented and Connectionless services.
UNIT 4	History of Analog and Digital Network – Access to ISDN – ISDN Layers – Broadband ISDN – X.25 Layers – Packet Layer Protocol – ATM – ATM Protocol.
UNIT 5	Repeaters – Bridges – Routers – Gateway – Routing algorithms – TCP/IP Network, Transport and Application Layers of TCP/IP – World Wide Web

BOOKS FOR STUDY:

1. Behrouz and forouzan - Introduction to Data Communication and Networking – 2nd Edition – TMH- 2001.
2. Jean Walrand – Communication Networks (A first Course) – Second Edition – WCB/McGraw Hill – 1998.

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M225K	OPERATING SYSTEMS	5			4

UNIT	SYLLABUS
UNIT 1	Introduction Views – Goals – Types of system – OS Structure – Components – Service Structure – Layered Approach – Virtual Machines – Systems Design and Implementation Management: Process – Process Scheduling – Cooperating Process – Threads – InterProcess Communication CPU Scheduling: CPU Schedulers – Scheduling Criteria – Scheduling Algorithms.
UNIT 2	Process Synchronization Critical Section Problem – Synchronization Hardware – Classical Problems of Synchronization – Critical Region – Monitor. Deadlocks: Characterization method for Handling Deadlock Prevention – Avoidance – Detection – Recovery.
UNIT 3	Memory management: Address Binding – Dynamic Loading and Linking – Overlays and physical Address space – Contiguous Allocation – Internal & External Fragmentation. Non-Contiguous Allocation: Paging and Segmentation Schemes – Implementation – Hardware-protection – Fragmentation.
UNIT 4	Virtual Memory: Demand Paging – Page Replacement – Page Replacement Algorithm Thrashing. File System: File Concepts – Access Methods – Directory Structures – Protection Semantics – File System Structures – Allocation Methods – Free Space Management.
UNIT 5	Secondary Storage Protection – Goals – Domain – Access Matrix – The Security Problem – Authentication – Threats Monitoring – Encryption. Case studies :UNIX AND WINDOWS

BOOKS FOR STUDY AND REFERENCE

1. **Text 1.** A. Silberschatz P.B. Galvin, Gange., “Operating System Concepts”, 6th Edn., Addison Pub., Co., 2002.

2.**Reference:** H.M.Deitel, An Introduction to operating system, Second Edition, Addison Wesley, 1990.

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M225H	WEB TECHNOLOGY	5			4

UNIT	SYLLABUS
UNIT 1	Internet Basic – Introduction to HTML – List – Creating Table – Linking document – Frame Graphics to HTML Doc – Style sheet basic – Add style to document - Creating style sheet rules – Style sheet properties – Font – Text – List – Color and background color – box – displaying properties.
UNIT 2	Introduction to JavaScript – Advantage of JavaScript – JavaScript Syntax –Datatype -variable – Array – Operator and Expression – Looping Constructor – Functions – Dialog box.
UNIT 3	JavaScript document object model – Introduction – Object in HTML – Events Handling - Windows Object – Document object – Browser Object – Form Object – Screen object - Navigator object – Build in Object – User defined object – Cookies.
UNIT 4	ASP.NET Language Structure – Page Structure – Page event, Compiler Directives. HTML server controls – Anchor, Tables, Forms, File server Controls – Label, Textbox, Button, Image, Links, Check & Radio button, Hyper link, Data List Web Server Controls – Check – Check box list, Radio button list, Drop down list, Data grid, Repeater
UNIT 5	Request and Response Object, Cookies, Working with Data – OLEDB connection class command class, transaction class, data adaptor class, data set class.

BOOKS FOR STUDY AND REFERENCE:

1. Bayross, Web Enable Commercial Application Development Using HTML, DHTML, Javascript, Perl CGI, BPB Publications,2000
2. J.Jaworski, Mastering Javascript, BPB Publications. 1999
3. T.A.Powell, Complete Reference HTML (Third Edition) TMH,2002
4. G.Buczek, ASP.NET Developers Guide, TMH, 2002.

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M226M	XML AND WEB SERVICES	5			4

UNIT	SYLLABUS
UNIT 1	Role Of XML – XML and The Web – XML Language Basics – SOAP – Web Services – Revolutions Of XML – Service Oriented Architecture (SOA).
UNIT 2	XML – Name Spaces – Structuring With Schemas and DTD – Presentation Techniques – Transformation – XML Infrastructure.
UNIT 3	Overview Of SOAP – HTTP – XML-RPC – SOAP: Protocol – Message Structure – Intermediaries – Actors – Design Patterns And Faults – SOAP With Attachments
UNIT 4	Overview – Architecture – Key Technologies - UDDI – WSDL – ebXML – SOAP And Web Services In E-Com – Overview Of .NET And J2EE.
UNIT 5	Security Overview – Canonicalization – XML Security Framework – XML Encryption – XML Digital Signature – XKMS Structure – Guidelines For Signing XML Documents – XML In Practice.

TEXT BOOKS:

1. Frank. P. Coyle, XML, Web Services And The Data Revolution, Pearson Education, 2002.

REFERENCES:

- 1.Ramesh Nagappan , Robert Skoczylas and Rima Patel Sriganesh, “ Developing Java Web Services”, Wiley Publishing Inc., 2004.
- 2.Sandeep Chatterjee, James Webber, “Developing Enterprise Web Services”, Pearson Education, 2004.
- 3.McGovern, et al., “Java Web Services Architecture”, Morgan Kaufmann Publishers,2005.

COURSE CODE	COURSE TITLE	L	T	P	C
14M222B	DATA WAREHOUSING AND DATA MINING	5			4

UNIT	SYLLABUS
UNIT 1	Data Mining Introduction - Data Mining – Data Mining Vs Query Tools – Practical applications of DM – Learning : Self, Machine, Concept – A Kangaroo in mist.
UNIT 2	KDD Environment Knowledge Discovery Process - Visualization Techniques – OLAP Tools – K-nearest neighbor – Decision Trees – Association Rules – Neural networks – Genetic algorithms – Setting up a KDD environment: Different forms of knowledge – KDD environment – Ten golden rules.
UNIT 3	Data Mining & Data Warehousing Introduction – Why Data Warehouse? – Designing Decision Support Systems – Integration with Data Mining – Client server & Data Warehousing – Multiprocessing machines – Cost Justification
UNIT 4	System Design & Architecture Data Warehousing – Types of Data, System, Process – Architecture – Database design – Partitioning – Aggregations – Data Marting – Metadata
UNIT 5	<i>Tuning & Testing</i> Capacity Planning – Tuning the Data Warehouse – Testing the Data Warehouse – Data Warehouse futures

TEXT BOOKS

Pieter Adriaans Dolf Zantinge – “**Data Mining**” , Addison Wesley – 1996.

Anahory S., Murray D. – “**Data Warehousing in the Real World**” – Addison Wesley – 1997

REFERENCE BOOKS

Jiawei Han, Micheline Kamber – “**Data Mining : Concepts & Techniques**” – Morgan Kaufmann Publishers – 2000.

Inmon W. H. – “**Building the Data Warehouse**” – Wiley Dreamtech – 2002

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M226L	SOFTWARE ENGINEERING	5			4

UNIT	SYLLABUS
UNIT 1	The Product – The Process – Project Management Concepts – Software Projects and Project Metrics.
UNIT 2	Software Project Planning – Risk Analysis and Management – Project Scheduling and Tracking Software Quality Assurance.
UNIT 3	Software Configuration Management – System Engineering – Analysis Concepts and Principles – Analysis Modeling.
UNIT 4	Design Concepts and Principles – Architectural Designs – User Interface Design
UNIT 5	Component Level Design – Software Testing Techniques – Software Testing Strategies – Techniques – Metrics for Software

BOOKS FOR STUDY AND REFERENCES:

1. R S Pressman – Software Engineering A Practitioner's Approach – 5th Edition – McGraw Hill.
2. Ian Sommerville – Software Engineering – 5th Edition – Addison Wesley.

B.Sc-COMPUTER SCIENCE

COURSE CODE	COURSE TITLE	L	T	P	C
14M22ZC	SOFTWARE QUALITY MANAGEMENT	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to software Quality Hierarchical Models Quality Measurement Metrics Measurement
UNIT 2	Tools for quality Case Tools Defect Prevention & Removal Reliability Growth Models
UNIT 3	Testing for reliability measurement Software Testing Operational Profiles Estimating Reliability Software Risks
UNIT 4	UNIT IV TOPIC Software reliability and availability Standards and evaluation of process Software configuration management
UNIT 5	Technical metrics for software

TEXT BOOKS

Alan Gillies-Software Quality 'Theory and Management' International Thompson Computer Press-1997

REFERENCE BOOKS

Humphery-Managing software process Addison Wesley 1998.

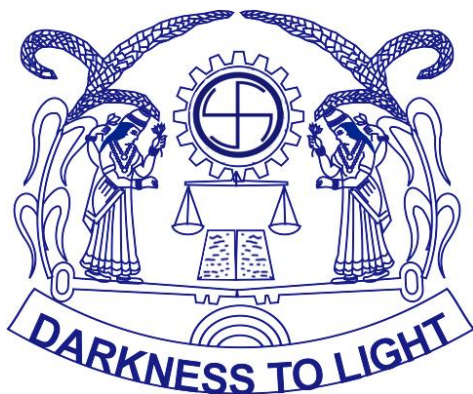
Roser Pressman-Software Engineering McGraw Hill 1997.

DHANRAJ BAID JAIN COLLEGE (Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF MATHEMATICS B.Sc. (Mathematics)



SYLLABUS (Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **140**

SCHEME OF EXAMINATIONS**FIRST SEMESTER**

Course Components	Course Code	Category	Subjects	L	T	P	C
Part – I	14L11AA	G	Language Paper - I	4	2	-	4
Part – II	14E11AA	G	English Paper - I	4	2	-	3
Part – III	14M241A	MC	Core 1 : Algebra & Analytical Geometry of 2D	5	1	-	4
Part – III	14M241B	MC	Core 2 : Calculus and Trigonometry – I	5	1	-	4
Part – III	16C241A	AS	Allied : Financial Accounting – I	5	1	-	4
Part – IV	14N624A	SE	Non major: Functional Mathematics – I	2	-	-	2
Part - IV	14S61AA	SK	Skill Based Course - I	2	-	-	2
Total No. of Credits				27	7	-	23

SECOND SEMESTER

Course Components	Course Code	Category	Subjects	L	T	P	C
Part – I	14L12AB	G	Language Paper – II	4	2	-	4
Part – II	14E12AB	G	English Paper – II	4	2	-	3
Part – III	14M242C	MC	Core 3 : Algebra & Analytical Geometry of 3D	5	1	-	4
Part – III	14M242D	MC	Core 4 : Calculus, Differential Geometry and Trigonometry – II	5	1	-	4
Part – III	16C242B	AS	Allied : Financial Accounting – II	5	1	-	4
Part – IV	14N624B	SE	Non major: Functional Mathematics – II	2	-	-	2
Part - IV	14S62AB	SK	Skill Based Course - II	2	-	-	2
Total No. of Credits				27	7	-	23

THIRD SEMESTER

Course Components	Course Code	Category	Subjects	L	T	P	C
Part – I	14L13AC	G	Language Paper – III	5	1	-	4
Part – II	14E13AC	G	English Paper – III	5	1	-	3
Part – III	14M243E	MC	Core 5 : Differential Equations and Laplace Transforms	4	2	-	4
Part – III	14M243G	MC	Core 6 : Mathematical Statistics	4	1	1	4
Part – III	14C243C	AS	Allied : Cost and Management Accounting – I	5	1	-	4
Part – IV	14S63AC	SK	Skill Based Course - III	2	-	-	2
Total No. of Credits				25	6	1	21

FOURTH SEMESTER

Course Components	Course Code	Category	Subjects	L	T	P	C
Part – I	14L14AD	G	Language Paper – IV	4	2	-	4
Part – II	14E14AD	G	English Paper – IV	4	2	-	3
Part – III	14M244H	MC	Core 7 : Vector Calculus, Fourier Series and Fourier Transforms	5	1	-	4
Part – III	14M244J	MC	Core 8 : Mechanics	5	1	-	4
Part – III	14C244D	AS	Allied : Cost and Management Accounting – II	4	2	-	4
Part – IV	14E64AA	VC	Environmental Studies	1	-	1	2
Part - IV	14S64AD	SK	Skill Based Course - IV	2	-	-	2
Total No. of Credits				25	8	1	23

FIFTH SEMESTER

Course Components	Course Code	Category	Subjects	L	T	P	C
Part – III	14M245K	MC	Core 9 : Algebraic Structures – I	5	1	-	5
Part – III	14M245L	MC	Core 10: Real Analysis - I	5	1	-	5
Part – III	14M245M	MC	Core 11: Complex Analysis – I	5	1	-	5
Part – III	14M245N	MC	Core 12: Discrete Mathematics	5	1	-	5
Part – III	14A245A	MC	Core 13: Elective – Operations Research - I	5	1	-	4
Part – IV	14V66AG	VC	Value Education	2	-	-	1
Total No. of Credits				27	5	-	25

SIXTH SEMESTER

Course Components	Course Code	Category	Subjects	L	T	P	C
Part – III	14M246P	MC	Core 14 : Algebraic Structures – II	5	1	-	5
Part – III	14M246Q	MC	Core 15 : Real Analysis – II	5	1	-	5
Part – III	14M246R	MC	Core 16 : Complex Analysis – II	5	1	-	5
Part – III	14M246S	MC	Core 17 : Graph Theory	5	1	-	5
Part – III	14A246B	MC	Core 18 : Elective – Operations Research - II	4	2	-	4
Part – V		Extension	Extension Activities: NSS/NCC/Rotract/Red Cross	-	-	-	1
Total No. of Credits				24	6	-	25

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M241A	CORE-1 ALGEBRA AND ANALYTICAL GEOMETRY (2D)	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Theory of Equations: Polynomial Equations – Imaginary and irrational roots – Symmetric functions of roots in terms of coefficients – Sum of r th powers of roots – Reciprocal Equations
UNIT 2	Transformations of Equations: Descarte's rule of signs – Approximate solutions of rates of polynomials by Newton – Raphson method – Horner's method; Cardon's Method of solutions of a cubic polynomial.
UNIT 3	Summation of Series: Summation of Series using Binomial, Exponential and Logarithmic Series
UNIT 4	Parabola – Ellipse
UNIT 5	Hyperbola, Rectangular Hyperbola and Conjugate Hyperbola

Reference Books:

- 1) Manickavasagam Pillai T.K. & Others, Algebra, Vol.2, S.Viwanathan (Printers and Publishers) Pvt. Ltd, 2008
- 2) Duraipandian P, Analytical Geometry (2D), Emerald Printing house Pvt. Ltd, Chennai, 1983.
- 3) Vittal P.R and V.Malini, Algebra and Trigonometry, Margham Publications, Chennai
- 4) Sudha S, Algebra, Analytical Geometry (2D) and Trigonometry, Emerald Publishers.
- 5) Manickavasagam Pillai T.K & T.Natarajan, A textbook of analytical Geometry (part I – 2 Dimension), S.Viwanathan (Printers and Publishers) Pvt. Ltd, 2006

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M241B	CORE-2 CALCULUS AND TRIGONOMETRY – I	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Successive differentiations, Leibnitz Theorem (without proof) and its applications – Partial differentiation – Total differentiation – Jacobians – Maxima and Minima of two independent variables – necessary and sufficient conditions (without proof) – Simple Problems on these concepts
UNIT 2	Introduction to integration - Methods of Integration – Integration by parts – Bernoulli's formula
UNIT 3	Properties of definite integrals – Reduction formulae for standard integrals
UNIT 4	Expansion of $\cos nx$, $\sin nx$, $\tan nx$, $\cos^n x$, $\sin^n x$ – Expansion of $\sin x$, $\cos x$, $\tan x$ in terms of x .
UNIT 5	Hyperbolic functions and Inverse Hyperbolic functions.

Reference Books:

1. Narayanan S & others, Calculus, Vol.I, S.Viwanathan (Printers and Publishers) Pvt. Ltd, 1983.
2. Sudha S, Calculus.
3. A.Singaravelu and R.Ramaa, Algebra and Trigonometry, Meenakshi Agency, 2003.
4. Duraipandian P, Calculus.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14N624A	NON MAJOR: FUNCTIONAL MATHEMATICS – I	2	-	-	2

UNIT	SYLLABUS
UNIT 1	Ratio and Proportion
UNIT 2	Percentage
UNIT 3	Profit and Loss
UNIT 4	Simple Interest and Compound Interest
UNIT 5	Solutions of simultaneous equations problems on ages and two digit number (Simple Problems from all Units)

Text Book:

1. Agarwal R.S, Quantitative Aptitude, Revised Ed., S.Chand & Co, Ltd., New Delhi.

Unit I: Pages: 294 – 310

Units II: Pages: 208 – 250

Unit III: Pages: 251 – 293

Unit IV: Pages: 445 – 486

Unit V: Pages: 161 – 194

Reference Books:

1. Agarwal R.S, Quantitative Aptitude, Revised Ed., S.Chand & Co, Ltd., New Delhi.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M242C	CORE – 3: ALGEBRA AND ANALYTICAL GEOMETRY (3D)	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Matrices – Symmetric, Skew-Symmetric; Hermitian, Skew-Hermitian, Orthogonal and Unitary Matrices – Rank of a Matrix – Consistency of Linear Equations and Solutions.
UNIT 2	Cayley Hamilton theory - Eigen Values – Eigen Vectors – Similar Matrices – Diagonalization of Matrix
UNIT 3	Plane – general equation of a Plane – equation of a Plane Passing through three points – Coplanar plane – intercept form – normal form – angle between two planes – condition of perpendicularity and parallelism – Perpendicular distance from a point to a given plane – equation of a plane passing through the line of intersection of two planes – ratio in which the plane divides the line joining the two points – Simple problems.
UNIT 4	Straight line – General equation of a straight line – symmetric form – transformation – angle between a plane and line – Conditions of a line parallel to a plane and to lie in a plane – Coplanar lines – Intersection of two given lines – Skew lines – Shortest distance between the lines – Simple problems.
UNIT 5	Sphere – equation of a sphere – section of a Sphere by a plane – Equation of a circle – Equation of a Sphere through a given circle – Intersection of a Sphere and a line – Equation of a tangent plane – Angle of intersection of two spheres – condition for the orthogonality of two spheres – Radical Plane, line and centre – Coaxial system of spheres – Simple problems.

Reference Books:

- 1) Manickavasagam Pillai T.K & Others, Algebra, Vol 2, S.Viswanathan (Printers & Publishers) Pvt. Ltd, 2008
- 2) Venkataraman M.K, Engineering Mathematics, Vol. 3, 3rd ed., National Publishing Co, Madras, 1995
- 3) Kandhasamy P & Others, Engineering Mathematics, Vol. 3, S.Chand & Co, New Delhi, 1996.
- 4) Shanti Narayan, Analytical Solid Geometry, S.Chand & Co. Ltd, 1990.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M242D	CORE – 4: CALCULUS, DIFFERENTIAL GEOMETRY AND TRIGONOMETRY II	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Beta and Gamma functions – Properties – Recurrence formula for gamma function, Relation between beta and gamma functions – Simple problems.
UNIT 2	Double integrals – Changing the order of integration – triple integrals – Application to area, surface area and volumes – simple problems.
UNIT 3	Curvature – Cartesian formula for radius of curvature – The coordinates of the centre of curvature – Evolute and involute – Simple problems.
UNIT 4	Radius of curvature in polar coordinates – p-r equation – Envelopes (definition and problems only) – Linear asymptotes (definitions and simple problems only)
UNIT 5	Logarithms of Complex Numbers: Sums of Sines and Cosines of n angles which are in A.P. Summation of Series using telescopic and C+iS method.

Reference Books:

- 1) Narayanan S & Others, Calculus, Revised Ed., S.Viswanathan (Printes & Publishers) Pvt. Ltd, Chennai, 1984.
- 2) Sharma H.S and S.S.Seth, Text book of Trigonometry, Shiva Lal Agarwala & Co, educational publishers, Agra.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14N624B	NON MAJOR: FUNCTIONAL MATHEMATICS – II	2	-	-	2

UNIT	SYLLABUS
UNIT 1	Time and Work
UNIT 2	Time and Distance
UNIT 3	Area
UNIT 4	Volumes and surface area
UNIT 5	Stocks and Shares (Sample problems from all units)

Reference Books:

R.S. Agarwal, Quantitative Aptitudes, Revised ed, S.Chand & Co, Ltd, New Delhi.

Unit I: Pages: 341-370
Unit II: Pages: 384-404
Unit III: Pages: 499-548
Unit IV: Pages: 549-587
Unit V: Pages: 605-612

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M243E	CORE – 5: DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS	4	2	-	4

UNIT	SYLLABUS
UNIT 1	First order but of higher degree equations – solvable for p, solvable for x, solvable for y, Clairaut's form – Simple Problems Second Order Equations with constant coefficients with Particular integrals for e^{ax} , x^m , $e^{ax}\sin mx$, $e^{ax}\cos mx$.
UNIT 2	Second order differential equations with variable coefficients of the type $ax^2 \frac{d^2y}{dx^2} + bx \frac{dy}{dx} + cy = q(x)$ Method of variation of parameters; Total differential equations, simple problems.
UNIT 3	Formation of P.D.E. by eliminating arbitrary constants and arbitrary functions; Complete integral; Singular Integral; General Integral; Charpit's Method and the standard types $f(p,q)=0$, $f(x,p,q)=0$, $f(y,p,q)=0$, $f(z,p,q)=0$, $f(x,p)=f(y,q)$; Clairaut's form and Lagranges Equation $Pp+Qq=R$ – Simple Problems
UNIT 4	Laplace Transforms; Inverse Laplace Transform (Usual types)
UNIT 5	Applications of Laplace transform to solution of first and second order Linear differential equations with Constant Co-efficients and simultaneous linear differential equations – Simple Problems

Reference Books:

1. Narayanan and Others, Calculus, Revised 15th ed., S.Viswanathan (Printes & Publishers) Pvt. Ltd, Chennai, 1984.
2. Kandasamy P and others, Engineering Mathematics Volume 3, 4th Ed., S.Chand & Co, New Delhi, 2008
3. M.K.Venkataraman, Engineering Mathematics Volume 3, 3rd Ed., National Publishing Co, Madras, 1995.
4. Deepak Chatterjee , Integral Calculus and differential equations, Tata Mc.Graw Hill Publishing Co Ltd.
5. Erwin Kreyszig, Advanced Engineering Mathematics, 5th Ed., New Age International Pvt. Ltd, New Delhi, 1996

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M243G	CORE – 6: MATHEMATICAL STATISTICS	4	1	1	4

UNIT	SYLLABUS
UNIT 1	Concept of sample space – Events – Definition of probability (Classical, Statistical & Axiomatic) – Addition and Multiplication laws of Probability for 2 events – Extension of Addition and Multiplication laws of events (Statement only) – Independence – Conditional Probability – Baye's theorem – Simple problems
UNIT 2	Binomial, Poission, Normal distributions – Simple Problems
UNIT 3	Correlation – Rank Correlation – Regression – Simple problems
UNIT 4	Large Samples – Z Test - Test of significance of a single mean, difference of two means, Single proportion and difference of proportions. Small samples – t test – Test for a single mean, difference of means, Paired t-test.
UNIT 5	Small Samples – F test – Test for equality of population variance – Analysis of Variance – One-way classification – Two-Way Classification – simple Problems Chi-Square Test – Goodness of Fit – Independence of attributes – Simple Problems

Text Book:

Vittal P.R, Mathematical Statistics, Margham Publishers, Chennai.

Unit I : Chapter 1

Unit II : Chapter 12,13,16

Unit III: Chapter 8,9

Unit IV: Chapter 24,25

Unit V : Chapter 26,27

Reference Books:

1. Gupta S.C & V.K.Kapoor, Elements of Mathematical Statistics, 3rd Ed., Sultan Chand & Sons, 2002.
2. Gupta S.P, Statistical Methods, 7th Ed., Sultan Chand & Sons, 1976.

COURSE CODE	COURSE TITLE	L	T	P	C
14M244H	CORE – 7: VECTOR CALCULUS, FOURIER SERIES AND FOURIER TRANSFORMS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Vector Differentiation, Gradient, Divergence, Curl, Directional Derivative, Unit normal to the Surface (simple problems)
UNIT 2	Vector Integration, line surface and volume integrals; theorems of Gauss, Stokes and Green (without proof) – Simple Problems
UNIT 3	Expansions of periodic function with period 2π
UNIT 4	Expansion of Even and Odd functions; half range series
UNIT 5	Infinite Fourier transform (Complex form, no derivation); sine and cosine transforms; simple properties of Fourier Transforms

Reference Books:

- 1) Duraipandian P and Laxmi Duraipandian , Vector Analysis, Emerald Publishers, 2005.
- 2) Murray Spiegel, Vector Analysis, 2nd ed., Schuam Publishing Company, New York, 1959.
- 3) Venkataraman M.K, Engineering Mathematics Volume 3, 3rd ed., National Publishing Co., Madras, 1995.
- 4) Kandasamy P and others, Engineering Mathematics Volume 3, S.Chand & Co, New Delhi, 1996.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M244J	CORE – 8: MECHANICS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Types of forces, Magnitude and direction of the resultant of two forces acting on a particle, Lami's theorem, resultant of several coplanar forces acting on a particle – Simple problems
UNIT 2	Forces on a rigid body – Moment of a force, Parallel force, Couple- Simple problems
UNIT 3	Kinematics – Resultant Velocity, relative velocity, rectilinear motion with constant acceleration, angular velocity, relative angular velocity, Simple problems
UNIT 4	Projectiles – time of flight, horizontal range, range in an inclined plane – simple problems
UNIT 5	Moment of inertia – Moment of inertia of simple bodies, theorems of parallel and perpendicular axes, moment of inertia of triangular lamina, circular lamina, circular ring, hollow and solid right circular cone, hollow and solid sphere (Book work only)

Text Books:

Duraipandian P and others, Mechanics, S.Chand & Co., New Delhi, 1987.

Unit I: Chapter 2, Sections 2.1.2, to 2.2.2.

Unit II : Chapter 4, Sections 4.1, 4.4, 4.5, 4.6, 4.7,4.9 (omit 4.2,4.3,4.8)

Unit III: Chapter 1: Sections 1.1 to 1.4

Unit IV: Chapter 13: Sections 13.1, 13.2 (omit 13.3)

Unit V: Chapter 17: Sections 17.1.1.

Reference Books:

1. Venkataraman M.K, Statics and Dynamics, Agasthiyar Publishers, Trichy, 1999.
2. Dharmapadam A.V, Statics and Dynamics, S.Viswanathan Pvt. Ltd, Madras, 1983.
3. Viswanatha Naik K and M.S.Kasi, Statics and Dynamics, Emerald Publishers, Madras, 1992.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M245K	CORE – 9: ALGEBRAIC STRUCTURES - I	5	1	-	5

UNIT	SYLLABUS
UNIT 1	Group Theory: Definition at a group – Some examples of Groups – some preliminary hemmas – Subgroups – Lagrange’s theorem – A counting principle. Chapter 2 : Section 2.1 50 2.5
UNIT 2	Group theory: Normal subgroups and Quotient Groups – Homomorphisms – Automorphisms. Chapter 2: Section 2.6 to 2.8
UNIT 3	Group Theory: Cayley’s Theorem – Permutation Groups – Simple problems. Chapter 2: Section 2.9 to 2.10
UNIT 4	Ring theory: Definition and examples of Rings – Some special classes of Rings – Homomorphisms – Ideas and Quotient Rings. Chapter 3: Section 3.1 to 3.4
UNIT 5	Ring Theory: More ideals and Quotient Rings – The Field of Quotients of an Integral Domain. Chapter 3: Section 3.5 to 3.6

Text Book:

Herstein I.N, Content and Treatment in “Topics in Algebra”, 2nd Ed., Wiley Eastern Ltd, 2010.

Reference Books:

1. Arumugam S, Algebra, 1st Ed, New gAmma Publishing Hosue, Palayamkottai.
2. John B. Fraleigh, A First Course in Algebra, 1st Ed., Additon Wesley, 1970.
3. Gopalakrishnan N S, University Algebra, New Age International publications, Wiley Eastern Ltd.
4. Balakrishnan N and N.Ramabadran, Text book of Algebra, 3rd Ed., Vikas publishing Co, New Delhi, 1979

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M245L	CORE – 10: REAL ANALYSIS - I	5	1	-	5

UNIT	SYLLABUS
UNIT 1	Sets and functions: Sets and elements - Operations on sets – Function - Real valued functions - Equivalence, countability - Real numbers - Least upper bounds. Chapter 1: Section 1.1 to 1.7
UNIT 2	Sequences of Real Numbers: Definition of sequence and subsequence - Limit of a sequence - Convergent sequences - Divergent sequences - Bounded sequences - Monotone sequences operations on convergent sequences - Operations on divergent sequences - Limit superior and limit inferior - Cauchy sequences. Chapter 2: Section 2.1 to 2.10
UNIT 3	Series of Real Numbers: Convergence and divergence - series with non-negative terms - Alternating series - conditional convergence and absolute convergence. Chapter 3: Section 3.1 to 3.4
UNIT 4	Series of Real Numbers: Test for absolute convergence - series whose terms form a non increasing sequence - The class ℓ^2 . Chapter 3: Section 3.6, 3.7, 3.10
UNIT 5	Limits and Metric Spaces: Limit of a function on the real line - Metric spaces - Limits in metric spaces. Chapter 4: Section 4.1 to 4.3

Text Books:

Richard R.Goldberg, Treatment as in “Methods of Real Analysis”, Oxford & IBH Publishing Co. Pvt. Ltd, New Delhi, 1963.

Reference Books:

1. Gupta S.L and Nisha Rani, Principles of Analysis, Vikas publishing house Pvt. Ltd, 1994.
2. Chandrasekhara Rao K and K.S.Narayanan, Real Analysis, Vol. 1 & 2, S.Viswanathan Printers & Publishers Pvt. Ltd, 2008.
3. Walter Rudin, Transforms and Partial Differential Equations, 5th Ed, McGraw Hill International edition, 1976.
4. Shanti Narayanan, M.D. Raisinghania, Elements of Real Analysis, 12th Ed., S.Chand & Co, 2011.
5. Kenneth A Ross, Modern Analysis: The Theory of Calculus, Springer, 2010.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M245M	CORE – 11: COMPLEX ANALYSIS – I	5	1	-	5

UNIT	SYLLABUS
UNIT 1	Point at infinity – Stereographic projection – Analytic functions: Function of complex variables – Mappings – Limits – Theorems on limits – continuity
UNIT 2	Derivatives – Differentiation formulas – Cauchy Riemann equations – sufficient conditions – Cauchy Riemann equations in polar form
UNIT 3	Analytic functions – Harmonic functions Definite integrals – contours – Line integrals – Examples – Cauchy's theorem (proof based upon Greens theorem) – Cauchy – Goursat theorem (Statement only)
UNIT 4	Mapping by elementary functions: Linear functions: Linear fractional transformations – Cross ratios – fixed points – special linear fractional transformations
UNIT 5	The function $1/z$ – The function $w=z^2$ – The transformation $w=e^z$ – The transformation $w=\sin z$ and $w=\cos z$ -conformal mapping: Basic Properties

Text Book:

Ruel V. Churchill/ James Ward Brown, Treatment as in Complex variables and applications, 4th Ed.

Unit 1: Chapter 1, Section 8, Chapter 2: Section 9-13

Unit 2: Chapter 2: Sections 14-18

Unit 3: Chapter 2: Sections 19 and 20, Chapter 4: Sections 29-33

Unit 4: Chapter 7: Sections 63,65 and 66

Unit 5: Chapter 7: Sections 64,67,70-72, Chapter 8: Section 74

Reference Books:

1. Manicavachagam Pillay T.K, S.P.Rajagopalan and R.Sattanathan, Complex analysis, 4th Ed., S.Viswanathan Pvt. Ltd, Chennai, 1995.

B.Sc-MATHEMATICS

2. Duraipandian P and Laxmi Duraipandian, Complex analysis, 2nd Ed., Emerald Publishers, Chennai, 1995.

COURSE CODE	COURSE TITLE	L	T	P	C
14M245N	CORE – 12: DISCRETE MATHEMATICS	5	1	-	5

UNIT	SYLLABUS
UNIT 1	Integers – Sets – Basic Properties of integers – Mathematical Induction. Chapter 1: Section 1.1 to 1.3
UNIT 2	Divisibility of Integers – Representation of positive integers – Linear Diophantine Equation in two variables Chapter 1: Section 1.4 to 1.6
UNIT 3	Boolean algebra – Two Element Boolean Algebra Disjunctive Normal form Chapter 5: Section 5.1 to 5.3
UNIT 4	Conjunctive normal form – Application – Switching Circuits – Designing of Switching Circuits Chapter 5: Section 5.4
UNIT 5	Recurrence relations and generating functions – Sequence and Recurrence relation – Linear (difference equations) Recurrence relations with constant coefficients – Generating Functions. Chapter 6: Section 6.1 to 6.3

Text Books:

Sen N.K and B.C.Chakraborty, “Contents and Treatment in Introduction to Discrete Mathematics”, 2nd Ed., Books & Allied Pvt. Ltd, Kolkatta.

Reference Books:

1. Merritt L, Abraham Kendel and T.P.Baker, Discrete mathematics for computer Science and Mathematics, Prentice Hall, India
2. John Truss, Discrete mathematics for computer science, Addison Wesley
3. Liu C.U , Elements of Discrete Mathematics, New York, McGraw Hill, 1977
4. Tremblay J.T and R.P.Manohar, Discrete Mathematical structures with applications to Computer Science, Newyork, McGraw Hill, 1975
5. Bernard Kolman, Robert C.Busby, Shron Ross, Discrete Mathematical Structures, 3rd Ed, Prentice Hall of India, New Delhi, 1988.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14A245A	CORE – 13: OPERATIONS RESEARCH – I	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Linear Programming: Formulation and Graphical method – Mathematical formulation of L.P.P – graphical method of the solution of L.P.P – Simplex methods Chapter 2 Chapter 3: 3.1
UNIT 2	Artificial Variables Techniques – Big M method – Two phase method – Duality in L.P.P and Dual simplex method Chapter 3: 3.2 Chapter 5
UNIT 3	Transportation Model – Mathematical formulation of a transportation problem – Methods for finding initial basic feasible solution – Modified distribution method (MODI) – Degeneracy in Transportation problems – Unbalanced transportation problem. Chapter 7
UNIT 4	Assignment problem – Mathematical formulation of an assignment problem – Assignment Algorithm – Unbalanced assignment problem – Restrictions in Assignment – Travelling Salesman problem. Chapter 8
UNIT 5	Sequencing problems – Processing n jobs on two Machines – Processing n jobs on three machines – Graphical method Chapter 14

Text Books:

Sundaresan V and K.S.Ganapathy Subramanian, Contents and Treatment in Resource Management Techniques, 4th Ed., A.R.Publications, Chennai.

Reference Books:

1. Kanti Swarup, P.K.Gupta, Man Mohan, Operations Research, 15th Ed., Sultan Chand & Sons, New Delhi, 2010.
2. Prem Kumar Gupta, D.S. Hira, Problems in Operations Research, 1st Ed., S.Chand, New Delhi, 2009.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M246P	CORE – 14: ALGEBRAIC STRUCTURES – II	5	1	-	5

UNIT	SYLLABUS
UNIT 1	Ring Theory: Euclidean Rings – Polynomial rings – polynomial over the rational field Chapter 3: section 3.7 to 3.10 (Omit 3.8)
UNIT 2	Vector Spaces: Elementary Basic concepts - Linear independence and Bases – Simple problems. Chapter 4: Section 4.1 and 4.2
UNIT 3	Dual spaces – Inner product spaces Chapter 4: Section 4.3 and 4.4 Chapter 6: Section 6.1
UNIT 4	Linear Transformations: The Algebra of Linear transformations Chapter 6: Section 6.1
UNIT 5	Linear Transformations: Characteristic Roots and vectors – Matrices – Simple problems Chapter 6 : Section 6.2 and 6.3

Text Book:

Herstein I.N, Content and Treatment in “Topics in Algebra”, 2nd Ed., Wiley Eastern Ltd, 2010.

Reference Books:

1. Arumugam S, Algebra, 1st Ed, New Gamma Publishing Hosue, Palayamkottai.
2. John B. Fraleigh, A First Course in Algebra, 1st Ed., Additon Wesley, 1970.
3. Gopalakrishnan N.S, University Algebra, New Age International publications, Wiley Eastern Ltd.
4. Balakrishnan R and N.Ramabadran, Text book of Algebra, 3rd Ed., Vikas publishing Co, New Delhi, 1979.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M246Q	CORE – 15: REAL ANALYSIS – II	5	1	-	5

UNIT	SYLLABUS
UNIT 1	Continuous functions on metric spaces: Functions continuous at a point on the real line - Reformulation - functions continuous on a metric space - open sets - closed sets Chapter 5: Section 5.1 to 5.5
UNIT 2	Connectedness, Completeness and Compactness: More about open sets – Connected sets – Bounded sets and totally bounded sets – Complete metric spaces. Chapter 6: Section 6.1 to 6.4
UNIT 3	Connectedness, Completeness and Compactness: Compact metric spaces – Continuous functions on compact metric spaces – Continuity of the inverse function - Uniform Continuity Chapter 6: Section 6.5 to 6.8
UNIT 4	Calculus: Sets of measure zero - Definition of the Riemann integral - Existence of the Riemann integral (Statement only) - properties of the Riemann integral Chapter 7: Section 7.1 to 7.4
UNIT 5	Calculus and Taylor Series: Derivatives - Rolle's theorem - The Law of the mean – Fundamental Theorem of calculus – Taylor's Theorem. Chapter 7: Section 7.5 to 7.8 Chapter 8: Section 8.5 Chapter 6 : Section 6.2 and 6.3

Text Book:

Richard R.Goldberg, Treatment as in “Methods of Real Analysis”, Oxford & IBH Publishing Co., Pvt. Ltd, New Delhi, 1963

Reference Books:

1. Gupta S.L and Nisha Rani, Principles of Analysis, Vikas publishing house Pvt. Ltd, 1994.
2. Chandrasekhara Rao K and K.S.Narayanan, Real Analysis, Vol. 1 & 2, S.Viswanathan Printers & Publishers Pvt. Ltd, 2008.
3. Walter Rudin, Transforms and Partial Differential Equations, 5th Ed, McGraw Hill International edition, 1976.
4. Shanti Narayanan, M.D. Raisinghania, Elements of Real Analysis, 12th Ed., S.Chand & Co, 2011.
5. Kenneth A Ross, Modern Analysis: The Theory of Calculus, Springer, 2010.

B.Sc-MATHEMATICS

COURSE CODE	COURSE TITLE	L	T	P	C
14M246R	CORE – 16: COMPLEX ANALYSIS – II	5	1	-	5

UNIT	SYLLABUS
UNIT 1	Simply and Multiply connected domain – Cauchy – Goursat theorem on multiply connected domains. Antiderivatives and independence of path- Cauchy's integral formula.
UNIT 2	Derivatives of analytic functions – Morera's theorem, Maximum moduli functions – Liouville's theorem and Fundamental theorem of algebra.
UNIT 3	Taylor series – Observations and examples – Laurent series – Examples – Zeros of analytic functions – Poles and zeors – essential singular points.
UNIT 4	Number of zeors and poles – Argument principle – Rouche's theorem Residues and poles: residues – residue theorem – Principal part of a function – Residue at poles.
UNIT 5	Evaluation of improper Real integrals: Integrals of the form (i) $\int_{-\infty}^{\infty} \frac{p(x)}{q(x)} dx$ (ii) $\int_{-\infty}^{\infty} \frac{p(x)}{q(x)} \sin x dx, \int_{-\infty}^{\infty} \frac{p(x)}{q(x)} \cos x dx$ (iii) $\int_{-\infty}^{2\pi} F(\sin \theta, \cos \theta) d\theta$

Text Book:

Ruel V. Churchill and James Ward Brown, Treatment as in: Complex variables and applications, 4th ed.

Chapter 4: Sections 36-38

Chapter 4: Sections 39-42

Chapter 5: Sections 44-46, 52 and 53

Chapter 12: Sections 106-107

Chapter 6: Sections 54-57

Chapter 12: Sections 108-109

Chapter 6: Sections 59-61

Reference Books:

- 1) Manicavachagam Pillay T.K , S.P. Rajagopalan and R. Sattanathan Complex Analysis, 4th Ed., S.Viswanathan Pvt. Ltd., Chennai, 1995.
- 2) Duraipandian P and Laxmi Duraipandian, Complex Analysis, 2nd Ed., Emerald Publishers, Chennai, 1995.

COURSE CODE	COURSE TITLE	L	T	P	C
14M246S	CORE – 17: GRAPH THEORY	5	1	-	5

UNIT	SYLLABUS
UNIT 1	Graphs and Sub Graphs: Definition and Examples – Degrees – Subgraphs – Isomorphism – Independent Sets and Coverings – Intersection Graphs and line graphs – matrices – Operations on Graphs. Chapter 1: Section 2.1 to 2.9 (omit 2.5)
UNIT 2	Degree Sequences – Graphic Sequences Chapter 3: Section 3.1 and 3.2
UNIT 3	Connectedness: Walks – Trails and Paths – Connectedness and Components - Blocks – Connectivity – Simple Problems Chapter 4: Section 4.1 to 4.4
UNIT 4	Eulerian and Hamiltonian Graphs – Eulerian graphs – Hamiltonian graphs Chapter 5: Section 5.1 to 5.2
UNIT 5	Trees and Planarity: Trees - Definition and Properties – Simple Problems. Chapter 6: Section 6.1, 6.2 and 8.1

Text Books:

Arumugam S and S.Ramachandran, Content and treatment as in Invitation to Graph Theory
Scitech Publications (India) Pvt. Ltd., Chennai, 2001

Reference Books:

1. John Clark, A first book at graph theory, Allied Publishers.
- 3.Choudum S.A, A first course in Graph theory, Macmillan India Ltd, 1987.
4. Robin J. Wilson, Introduction to Graph Theory, Pearson Education, 4th Ed., 2004, Indian Print.

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COURSE CODE	COURSE TITLE	L	T	P	C
14A246B	CORE – 18: ELECTIVE - OPERATIONS RESEARCH – II	4	2	-	4

UNIT	SYLLABUS
UNIT 1	PERT and CPM – Ford and Fulkerson's Rule Network computations – Floats – PERT procedure – Crashing Chapter 15
UNIT 2	Queuing Models – Queuing System transient and steady states – Kendal's Notation for representing Queuing models – Model I: (M/M/1); (∞ /FCFS) - Birth and Death model Chapter 13: Section 13.1 to 13.6
UNIT 3	Queuing Models Model II: (M/M/S);(∞ /FCFS) Model III: (M/M/1):(N /FCFS) Model IV: (M/M/S):(FCFS/N) Chapter 13: Section 13.7 to 13.9
UNIT 4	Inventory models – Costs involved in Inventory Models – Deterministic Inventory models – Model I - Purchasing model with no shortages Model II – Manufacturing model with no shortages Model III – Purchasing model with shortages Model IV - Manufacturing model with shortages Chapter 12: Section 12.1 to 12.7
UNIT 5	Game theory – Two person zero Sum game - Maxmin – Minmax principle – Saddle point and value of the Game – Game without saddle point, Mixed strategies – Matrix oddment method for nxn game Dominance property Graphical method for 2xn and mx2 games Chapter 16: Section 16.1 to 16.7

Text Books:

Sundaresan V and K.S.Ganapathy Subramanian, Contents and Treatment in Resource Management Techniques, 4th Ed., A.R.Publications, Chennai.

Reference Books:

1. Kanti Swarup, P.K.Gupta, Man Mohan, Operations Research, 15th ed., Sultan Chand & Sons, New Delhi, 2010.
2. Prem Kumar Gupta, D.S. Hira, Problems in Operations Research, 1st Ed., S.Chand & Co, New Delhi, 2009.

DHANRAJ BAID JAIN COLLEGE

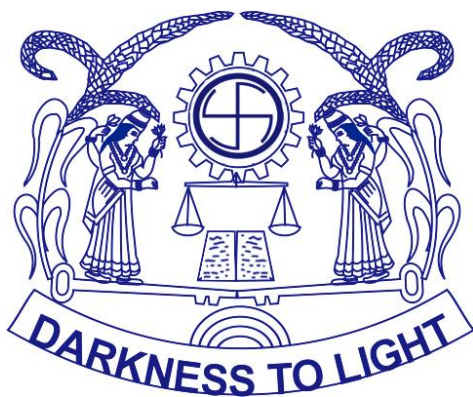
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Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF VISUAL COMMUNICATION

B.Sc. (VISCOM)



SYLLABUS

(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **132**

SCHEME OF EXMINATIONS

SEMESTER I

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Foundation Course: Tamil-I or any Language – I	5	3	100	3
II	Foundation Course: English – I	5	3	100	3
Core I	Introduction to Visual Communication	6	3	100	3
Core II	Drawing – I	6	3	100	3
Allied Subject -I	Graphic Design – I	6	3	100	3
	History of Tamil Cinema	1	3	100	2
	Soft Skill	1	3	100	2

SEMESTER II

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
I	Foundation Course: Tamil-II or any Language – II	5	3	100	3
II	Foundation Course: English – II	5	3	100	3
Core III	Communication Skills	6	3	100	3
Core IV	Drawing – II	6	3	100	3
Allied Subject -II	Graphic Design – II	6	3	100	3
	Understanding Radio	1	3	100	2
	Soft Skill	1	3	100	2

SEMESTER III

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
	Foundation Course: Tamil-III or any Language – III	6	3	100	3
	Foundation Course: English – III	6	3	100	3
Core V	Advertising	6	3	100	4
Core VI	Elements of Film	5	3	100	4
Allied - III	Computer Graphics I [Practical]	6	3	100	5
	Personality Enrichment	1	3	100	3

SEMESTER IV

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
	Foundation Course: Tamil-IV or any Language – IV	5	3	100	3
	Foundation Course: English – IV	5	3	100	3
Core VII	Basic Photography	6	3	100	4
Core VIII	Practical Photography[Practical]	5	3	100	4
Allied – IV	Computer Graphics II [Practical]	5	3	100	5
	Environmental Studies	2	3	100	2
	Computing Skill	2	3	100	3

SEMESTER V

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
IX	Media, Culture and Society	6	3	100	4
X	Television Production	6	3	100	4
XI	Web Publishing [Practical]	6	3	100	4
XII	Advertising Photography [Practical]	6	3	100	5
	Project [Phase 1]	6	3	100	5

SEMESTER VI

Paper No.	Subjects	Instructional Hours Per week	Exam Duration Hours	Total Marks	Credits
XIII	Media Organization	6	3	100	4
XIV	Production Practice [Practical]	5	3	100	5
XV	3 D Animation [Practical]	6	3	100	4
	Project [Phase 2]	6	3	100	5
	Project [Phase 3]	6	3	100	5
	Value Education	1	3	100	2
	Extension Activities				1

COURSE CODE	COURSE TITLE	L	T	P	C
14471A	INTRODUCTION TO VISUAL COMMUNICATION	-	-	-	3

UNIT	SYLLABUS
UNIT 1	Need for and the Importance of Human and Visual Communication. Communication a expression, skill and process, Understanding Communication: SMRC-Model
UNIT 2	Communication as a process. Message, Meaning, Connotation, Denotation Culture/Codes etc Levels of communication: Technical, Semantic, and Pragmatic. The semiotic landscape: language and visual communication, narrative representation
UNIT 3	Fundamentals of Design: Definition. Approaches to Design, Centrality of Design, Elements/Elements of Design: Line, Shape, Space, Color, Texture. Form Etc. Principles of Design: Symmetry. Rhythm, Contrast, Balance Mass/Scale etc. Design and Designers (Need, role, process, methodologies etc.)
UNIT 4	Principles of Visual and other Sensory Perceptions. Color psychology and theory (some aspects) Definition, Optical / Visual Illusions Etc Various stages of design process- problem identification, search for solution refinement, analysis, decision making, implementation.
UNIT 5	Basics of Graphic Design. Definition, Elements of GD, Design process-research, a source of concept, the process of developing ideas-verbal, visual, combination & thematic, visual thinking, associative techniques, materials, tools (precision instruments etc.) design execution, and presentation.

REFERENCES

1. Lester, E (2000) Visual Communications: Images with Messages. Thomson Learning
2. Schildgen, T (1998). Pocket Guide to color with digital applications. Thomsom Learning
3. Picture this: Media Representation of Visual Arts and artists. University of Luton Press
4. Palmer, Frederic: Visual Elements of Art and Design,1989, Longman
5. Porter, Tom and Goodman, Sue: Manual of Graphic Technique 2: For Architects,
6. Graphic Designers, and Artists,1982, Astragal Books. London
7. Palmer. F: Visual Awareness (Batsford, 1972)

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M472B</u>	COMMUNICATION SKILLS	-	-	-	3

UNIT	SYLLABUS
UNIT 1	Interpersonal communication: Theories and Models - Transactional analysis etc.
UNIT 2	Group communication: Theories and Models - Decision making process, leadership, team work communication patterns in group context
UNIT 3	Public communication: Rhetoric Model, Persuasion Models
UNIT 4	Non-verbal Communication: Theories and Models, Types of non-verbal behavior Kinesics
UNIT 5	Case Studies in communications skills, Ideation and Creative Thinking - Lateral Thinking. Designing Messages for different audiences

REFERENCES

1. Wood, Julia T: Communication Mosaics: An Introduction to the Field of Communication, 2001. Wadsworth
2. Larson, Charles U; Persuasion: Reception and Responsibility. Wadsworth, 2001.

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4711</u>	DRAWING – I (PRACTICAL)	-	-		5

UNIT	SYLLABUS
	* Geometrical shapes * Patterns, Surface textures etc. * Perspectives * Overlapping objects * Light and shade

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4722</u>	DRAWING – II (PRACTICAL)	-	-		5

UNIT	SYLLABUS
-	• Forms - humans, animals, birds • Live models • Landscapes • Monuments • Environmental Exposure

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14C4711</u>	GRAPHIC DESIGN 1 (PRACTICAL)	-	-	-	5

UNIT	SYLLABUS
-	* Lines of different thickness * Curves of different thickness * Shapes of different forms * Patterns-of different kinds * Distortion-of different kinds * Lettering(fonts) Alphabets * Fonts Numbers

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14C4722</u>	GRAPHIC DESIGN 2 (PRACTICAL)	-	-	-	5

UNIT	SYLLABUS
-	• Logo design • Letterhead • Visiting Cards • Brochures • Print Advertisements - Black & White, Colour

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M47C</u>	ADVERTISING	-	-	-	3

UNIT	SYLLABUS
UNIT 1	Definition, Nature and Scope of advertising. Roles of Advertising: Societal, Communication, Marketing and Economic. Functions of advertising.
UNIT 2	Based on target audience, geographical area, Media & Purpose. Corporate and Promotional Advertising. Web Advertising.
UNIT 3	Environment, Components -Advertiser, Advertising agency & Media. Consumer behavior. Latest trends in advertising –(India and abroad). Ad Agency –Structure of small, medium & big agencies, functions. Types of agencies – in-house, Independent, Full-service & Specialized. Legal aspects & ethical issues.
UNIT 4	Client Brief, Account Planning, Creative Strategy and Brief, Communication Plan, Brand Management - Positioning, brand personality, brand image, brand equity. Case studies.
UNIT 5	Conceptualization and Ideation, Translation of ideas into campaigns, Visualization Designing & Layout, Copy writing – Types of headlines, body copy base lines, slogans, logos, & trademarks. Typography, Writing styles, Scripting. Story board. Advertising campaign—from conception to execution.

REFERENCES

1. Sandage, Fryburger and Rotzoll(1996) Advertising Theory and Practice. AAITBS Publishers
2. Stansfield, Richard: Advertising Managers Handbook. UBBSPD Publications. Third Edition
3. Advertising Handbook: A Reference Annual on Press TV , Radio and Outdoor Advertising. Different Years ATLANTIS Publications
4. Mohan: Advertising Management: Concepts and Cases. Tata McGraw- Hill
5. Jewler, E (1998): Creative Strategy in Advertising. Thomson Learning

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M473D</u>	ELEMENTS OF FILM	-	-	-	3

UNIT	SYLLABUS
UNIT 1	Indian (Hindi, Tamil & other languages), Film form and film History: Early Cinema (1893-1903). Development of Classical Hollywood cinema (1903-1927). German expressionism (1919-1924). French Impressionism and Surrealism (1917-1930). Soviet Montage (1924-1930). The Classical Hollywood Cinema after the coming of sound. Italian neo-realism (1942-1951). The French New wave (1959-1964). Japanese cinema. Cinema in the third world. Contemporary trends.
UNIT 2	Planning, pre-production- Concept / Story development, Scripting / Screen play writing, Budgeting, Casting, Locations, Financing. Production –Shooting, Direction & Cinematography. Post production- Editing, Sound recording, Dubbing, Special effects, Graphics & Final mixing. Distribution & Exhibition.
UNIT 3	Mise-en-scene-Realism, the power of mise-en-scene, aspects of mise-en-scene, space and time, narrative functions of mise-en-scene. Cinematographer properties- the photographic image, framing, duration of the image, montage and long take. Editing- dimensions of film editing, continuity editing, alternative to continuity editing. Sound- the powers of sound, fundamentals of film sound, dimensions of film sound, functions of film sound.
UNIT 4	The concept of form in films, principles of film, narrative form, non-narrative form, dividing a film into parts and Genres (language, style, grammar, syntax.)
UNIT 5	Style as a formal system, narrative unity, ambiguity, a non-classical approach to narrative films, space and time, disunity, form, style and ideology.

REFERENCES

1. Thoraval, Yves(2000) The Cinema of India(1896-2000)
2. Roberge, Gaston: the Subject of Cinema
3. Roberge, Gaston (1977): Films for an ecology of Mind
4. Halliwell,;: The Filmgoers Companion 6th Edition
5. Arora: Encyclopedia of Indian Cinema
6. Baskar, Theodor: Eye of the Serpent

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M474E</u>	BASIC PHOTOGRAPHY	3	-	-	3

UNIT	SYLLABUS
UNIT 1	Human Eye and Camera. Basics of Camera.(aperture, shutter speed, focal length, f-stop, depth of field etc.) Camera operations. Types of Camera.Types of Lenses.Visual Perception. Experiencing equipment— different types of cameras, lenses, filters, bellows, converters etc.,
UNIT 2	Understanding lighting—indoor and outdoor, Exposing and Focusing, Types of lighting, Natural and Artificial Lights, Controlling lights, Exposure Meters, Differential focus, Filters, Flashes. Designing with light.
UNIT 3	Types of Film -Sensitivity, Temperature, Speed etc., Reversal Films. Manipulation of Colour and Light. Black and white and colour photography—negatives, colour materials, processing and printing.
UNIT 4	Basic Requirements, Equipments. Developing Process. Control Factors- Fixing, Washing, Drying. Negative (ideal, identifying faults). Printing (paper, chemicals, Enlarger) etc. Special effects techniques—motion pictures etc., manipulation of image, framing& trimming.
UNIT 5	Some basic Principles.Aesthetics. Basics of photo-journalism, Photo-features, Photo -essays, Writing captions, Visual story telling. Photography for advertising—Consumer and industrial. Planning a shoot-studio, location, set props and casting.

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4743</u>	PRACTICAL PHOTOGRAPHY (PRACTICAL)	3	-	-	3

UNIT	SYLLABUS
-	• Landscape (scenic, people, birds/animals, monuments) • Portraits • Photo feature, photo language • Environnemental exposure – • Silhouette • Freezing movement • Panorama • Montage • Indoor photography • Industrial photography • Special effects

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4733</u>	COMPUTER GRAPHICS -1 (PRACTICAL)	-	-	-	5

UNIT	SYLLABUS
-	Design a four-color advertisement for promoting the image of any one of the following organizations a) Advertising agency b) g. Commercial organization c) h. Non-profit organization d) Government agency e) j. Service industry

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4744</u>	COMPUTER GRAPHICS -2 (PRACTICAL)	-	-	-	5

COURSE	UNITS
-	• Design a 'logo' for an • Advertising agency • Commercial organization • Non-profit organization • Government agency • Service industry

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14475H</u>	TELEVISION PRODUCTION	3	-	-	3

UNIT	SYLLABUS
UNIT 1	Introduction of visualization, Different approaches to visualization - TV, Films, and Ad films. Types of telecasting, Production standards NTSC, PAL, Secam etc. Television Crew, an overview of direction, art direction, floor management- indoor & outdoor, production management, budget preparation.
UNIT 2	Principles of script writing, creative writing, script formats. Planning of Story, story board, discussions, screen play, dialogue writing, selection of cast, costumes, locations, set & design, Research. Locations: In-door, set, On-sights sets, -- Outdoor on-sight sets, blue matte. Etc.,
UNIT 3	Camera techniques & operation, Types of camera, Video formats (VHS, SVHS, U-MATIC, BETA, DIGITAL), framing, shots & movements (wide, medium, close ups, shadow, zoom, pan, tilt, aerial etc.), usage of various types of camera lenses (Normal, Tele, Zoom etc.), usages of various filters (day, night, colour correcting filter, diffusion filter), objectives TV lighting, various types of Lights (baby, Junior, Senior, etc.,) colour temperature, lighting for different situations (interviews, indoor, out-door), types of lighting (Back, Front, full, semi, etc.,)
UNIT 4	Video recording format - Audio on line or off line . Usage of various kinds of mics (Dynamic mic, condenser mic, ribbon mic, Uni-directional, Bi-directional, omni-directional mics, Hand mic, Head set mic, quadraphonic mic and wireless mic, lapel etc.,) Knowledge about audio recording (mono, stereo, surround sound, etc.,).
UNIT 5	Editing procedure, assembling shots, symbolic editing and editing errors. The language of editing and shooting—sound in editing—categories of sound, post-synchronization, voice-over or narration, music and dubbing, Video Editing – linear, non-linear, types of editing modes (assemble mode, insert mode, on line mode) computer editing - time code roll editing, etc., Television graphics & titling and specials effects, Audio – Dubbing, Background Music, synchronizing of video and audio, voice Over (narration) etc. Presentation skills, recording live programmes.

REFERENCES

1. Millerson, G. H (1993) Effective TV Production. Focal Press
2. Holland, P (1998). The Television Handbook. Routledge

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M475G</u>	MEDIA CULTURE AND SOCIETY	3	-	-	3

UNIT	SYLLABUS
UNIT 1	Why study media? Understanding mass media.Characteristics of mass media.Effects of mass media on individual, society and culture – basic issues.Power of mass media.Media in Indian society.Definition, nature and scope. Function of mass media.
UNIT 2	Media Audience analysis (mass, segmentation, product, social uses).Audience making. Active Vs Passive audience: Some theories of audience - Uses and Gratification, Uses and Effects, etc.
UNIT 3	Media as text. Approaches to media analysis - Marxist, Semiotics, Sociology, Psychoanalysis. Media and realism (class, gender, race, age, minorities, children, etc.)
UNIT 4	Media as consciousness Industry.Social construction of reality by media.Rhetoric of the image, narrative, etc. Media myths (representation, stereotypes, etc.) -- Cultural Studies approach to media, audience as textual determinant, audience as readers, audience positioning, establishing critical autonomy
UNIT 5	Media and Popular culture — commodities, culture and sub-culture, popular texts, popular discrimination, politics and popular culture, popular culture Vs people's culture, celebrity industry- personality as brand name, hero-worship, etc. Acquisition and transformation of popular culture

REFERENCES

1. Silverstone, Rogers (1999). Why Study Media? Sage Publications
2. Potter, James W (1998). Media Literacy. Sage Publications
3. Grossberg, Lawrence et al (1998). Media-Making: Mass Media in a Popular Culture. Sage Publications
4. Evans, Lewis and hall, Stuart (2000). Visual Culture: The Reader. Sage Publications
5. Berger, Asa (1998). Media Analysis Techniques. Sage Publications

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M476K</u>	MEDIA ORGANIZATION	3	-	-	3

UNIT	SYLLABUS
UNIT 1	Media Organization and Design: Some Conceptual Issues. Media as Business and Social Institution. Media entrepreneurship, Greiner's Development Model of a company.
UNIT 2	Behavior in media Organization and Organizational Behavior. Nature and Structure of different Media Organizations—AIR/DD, Private Satellite Channels, Production Houses, employment opportunities in Indian Media industry, Group Behavior, Innovation and Creativity, Culture of organization
UNIT 3	Economics of Media—Relationship between supplier and buyer, Leisure time activity, Cost Factors, Revenue Models, Market Factors, State of the Industry today.
UNIT 4	Project Management in Media--Production Project Cycle (PPC), Management themes in production Process, Project Planning, Production Strategies, PPC in Practice—Initiation (Ideas, Evaluation and Assessment), Risk and Impact Assessment, Pre-production, Production Team, Project Specification, Project work plan, Sources of Funds, Budgeting (tools etc.) Project Responsibility, Production Process (status Report, Assessment, Negotiation, Completion, Follow-up.
UNIT 5	Programming Strategies, Audience Rating—Analyzing Programming and Audience Trends Marketing Programs and selling space and time. Different kinds of contracts and legal arrangements, Project Management.

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4754</u>	PRACTICAL- WEB PUBLISHING (PRACTICAL)	3	-	-	3

UNIT	SYLLABUS
-	• Web Publishing Tool, FrontPage or Dream Weaver and MM Flash • HTML and XML Programming • Creation of the Home Page of a Web Site with proper links

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4755</u>	ADVERTISING PHOTOGRAPHY (PRACTICAL)	3	-	-	3

UNIT	SYLLABUS
-	1. Visual of the product alone (photograph against plain backdrop) 2. Visual of the product in a setting where it is used. 3. Visual in use. 4. Visual of a benefit from using the product. 5. Visual showing the loss or disadvantage resulting from not using the advertised product. 6. Dramatization of the headline. 7. Dramatization of the evidence. 8. Dramatizing a detail (in the product) 9. Comparison between two brands. 10. Contrast between before and after using the product. 11. Visuals using Trade Characters. 12. Symbolism. 13. Abstract illustration (logo) 14. Continuity strip 15. Mood setting visual. 16. Visual of the product in the package. 17. Visual of the product ingredients or raw materials. 18. Special effects (freezing movements) 19. Montage 20. Visual with models.

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4766</u>	PRODUCTION PRACTICE (PRACTICAL)	3	-	-	3

UNIT	SYLLABUS
	Students should write original scripts for different formats like documentary and TV commercial (five exercises) — these should be submitted as a separate Record Shoot a Short story or Documentary—duration not to exceed 5 Minutes, and Shoot a Commercial— 15 or 20 second spots Each student should do individual projects containing the record and the program. Final practical examination will test students on their ability to prepare a complete script and story board on any of the above-mentioned format.

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M4767</u>	3D ANIMATION (PRACTICAL)				3

UNIT	SYLLABUS
-	Project work (walk-through, animated logo, etc.) should contain record containing advanced animation works done by the student. At least FIVE concepts for animations should be included as a part of the record. Each student to provide individual CD-ROMs with all the exercises done during the year with proper dates. Students should be given adequate orientation on basic design and usability concepts. The web pages should contain objects created by the students only. No objects/elements downloaded from the Internet should be used. If static images are to be included, then the student is expected to create her/his own images using appropriate software like PhotoShop. All exercises should be accompanied by “paper-design” in record form along with the original file containing the exercises.

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M476J</u>	PROJECT (PHASE 1)	-	-	5	5

COURSE	UNITS
-	ELECTIVE

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M476I</u>	PROJECT (PHASE II)	-	-	5	5

UNIT	SYLLABUS
-	The students have to work with any media organization

COURSE CODE	COURSE TITLE	L	T	P	C
<u>14M476M</u>	PROJECT (PHASE III)	-	-	5	5

UNIT	SYLLABUS
-	ELECTIVE

DHANRAJ BAID JAIN COLLEGE

(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras



DIPLOMA COURSE
SYLLABUS

DIPLOMA IN STOCK MARKET

PAPER 1 : MARKET OF NEW ISSUES

Course Objectives

To make the students to get the knowledge

- about the a “new issue market”, also current trends in public issue
- concept of mutual fund and its functioning and investment patterns
- the financial services in merchant banking and the management of merchant banking

SYLLABUS

UNIT 1 : Market of new issues – Need for floating capital – Public Offer - Private Placement – Rights Issue – Equity and Debt – Recent trends in public issues.

UNIT 2: Mutual Funds – Concept and Classification – Growth and Importance

UNIT 3 :Merchant Banking – Concept – Merchant Banking in India Pre issue Management – Post Issue Management

Course Outcomes

Student will

- a) understand the functions of primary markets, floating capital and recent trends in public issues
- b) Learn the concepts of Mutual funds and apply their generalizations towards classification of mutual fund and its necessity.
- c) View the merchant Banking in Indian scenario on both Indian pre issue and post issue management

PAPER 2: SECONDARY MARKETS

Course Objectives

This chapter provides insight to the students about

- securities contract regulation Act and its role on secondary market
- trading methods and requirements of secondary markets
- sensex and enable them to understand the procedures to fixation of employees

SYLLABUS

UNIT 1:Trading in Security – Securities Contract Regulation Act, 1956

UNIT 2:Instruments of Trading – Trading Methods – Trading Ring, On-line Trading, Carry Forward Systems – Risk Management – Investor Protection

UNIT 3:Securities Market Indicators – Sensex – Study of fixation of indices

Curse Outcomes

At the end of this unit the student will

- Understand the legal framework pertaining to securities contract regulation act 1956.
- Apply the methodology of trading in secondary market instruments like trade ring, online trading
- Analyze the risk factor associated with these
- Understand the methods of fixation of indices and functioning of regulatory agencies in commodity market.

DIPLOMA IN TRAVEL & TOURISM

PAPER I :TRAVEL & TOURISM INDUSTRY

Course Objectives

Students will get insight about the

- meaning, nature and basic components of tourism
- reasons for the drastic growth of tourism in domestic and international levels.
- role of state in promoting social tourism
- demand and supply in tourism related products and its assessment.
- the role played by travel agencies

SYLLABUS

UNIT 1: Growth & Development of Modern Tourism – Meaning & Nature of Tourism – Basic Components of Tourism – Elements of Tourism – Causes of Rapid Growth.

UNIT 2: Motivation for Travel – Basic Travel Motivators – Role of State in promoting Social Tourism – Evaluation of Demand – Factors Influencing the Growth of Tourism

UNIT 3:Tourism Planning and Development – Planning for Tourism – Assessment of Tourist Demand and Supply – Basic Infrastructure – Financial Planning – Tourism Marketing – Role of Travel Agencies in India

Course Outcomes

At the end of this unit the student will

- Understand the nature of tourism and explore the reasons for the rapid growth of tourism
- View how the travel motivators promote social tourism
- apply the concept to explore the demand
- factors influencing tourism

PAPER 2: TOURISM MANAGEMENT

Course Objectives

This enables the students to have a knowledge about

- maintenance of tourism products in India and abroad
- meaning, types and concepts of itinerary and methods to develop a ideal itinerary and function of tour managers.
- understand the concept of tour packages, types of tour, tour designing process and its importance.

SYLLABUS

- 1. Organized Travel** - Defining Tourist & Tourism viz: inbound, outbound, domestic, maintenance of tourism products, Alternative tourism, Mass tourism, Special Interest Tourism.
- 2. Itinerary Development** - Introduction, meaning and definition, types of itineraries, how to develop an effective itinerary, functions of tour managers and planning tools for an itinerary.
- 3. Tour Packaging Management** - Concept, Origin and development of Tour Packaging, Types of Tour, Component of a Standard Package Tour, Factors affecting Tour Formulation, Tour Designing Process, Significance of Package Tour, Tour Brochure.

Course Outcomes

At the end of this unit the student will

- Understand and explore maintenance of tourism products in India and abroad
- provide information about tour packages
- Assert and apply the methods to develop an ideal itinerary and function of tour managers.

DIPLOMA IN COMMUNICATION AND PUBLIC SPEAKING

PAPER 1 – COMMUNICATION SKILLS

Course Objectives

To enable students

- to learn aspects of non verbal communication and principles of effective communication
- to understand the skill requirements in reading, notes making, precise writing
- role played by Audio Visual aids in communication
- to get knowledge about traditions, spelling rules, proof reading and its related skills

SYLLABUS

1.Introduction – Basics – Nonverbal Communication – Barriers to Communication – Seven C's of the Effective Communication

2.Required Skills – Reading Skills – Note-Making – Precis Writing – Audio Visual Aids – Oral Communication

3.Mechanics of Writing – Transitions – Spelling Rules – Hyphenation - Transcribing Numbers - Proof Reading

Course Outcomes

At the end of the unit the student will acquire

- the skills in reading, notes making, precis writing, role played by Audio Visual aids in communication
- knowledge about traditions, spelling rules, proof reading and related skills

PAPER 2 PUBLIC SPEAKING

Course Objectives

To enable the students

- Acquire speaking and learning skills
- Makes the students to get information about presentation aids and get an idea about the language using styles
- This activity enables students to excel themselves in public speaking in positive perspectives

SYLLABUS

UNIT 1:Introduction Speeches – Understanding Speaking – Listening – Speaking Ethics - Transforming Ideas into Speech Points - Audience Analysis

UNIT 2:Practical – Learners should give a talk on either ‘Speak about a film, or book that you have enjoyed recently’ or ‘About your College’, etc.

UNIT 3:Informative Strategies – How to organize points – Connectives – Presentation Aids – Language Styles – Attention and Interest

UNIT 4:Student Assignment – Research the background of a cutting from a newspaper or magazine. Give a prepared talk that expresses your opinion on the topic.

Course Outcomes

At the end of this unit

- Students will be able to demonstrate their ability in speaking and learning skills.

DIPLOMA IN HOTEL MANAGEMENT (DIHM)

PAPER 1- HOSPITALITY AND HOTEL INDUSTRY

Course Objectives

Students get

- The fundamental knowledge about history and evolution of hospitality and hotel industry
- skills for front office management and its attributes in relation to large scale hotels.
- responsibilities of housekeeping and qualities of keeping staffs and coordinating with housekeeping department.

SYLLABUS

UNIT 1:Introduction – Historical background of hospitality industry – Growth of Hotel Industry in India – Classification of Hotels – Levels of Service – Types of Room

UNIT 2:Front Office Operation – Importance of Front Office – Layout – Hierarchy of Front Office staff for medium and large size hotels – Duties and responsibilities of front office staff – Attributes of front office staff

UNIT 3:Role of House Keeping – Duties & responsibilities of housekeeping staff – Housekeeping personnel – Personal Qualities of Housekeeping staff – Layout of Housekeeping Department – Co- ordination of Housekeeping with other departments.

Course Outcomes

The student will be able to

- Understand and apply their generalizations in front office management practices
- Align their skills on housekeeping.

PAPER 2 – HOTEL ENGINEERING, MAINTENANCE AND SERVICE

Course Objectives

The student will

- understand “Preventive Maintenance” “Contract Maintenance”, and “Service Contracts”
- acquire knowledge on room arrangements, reservations, receiving of guests and registering and use of gestures as a means communication

SYLLABUS

UNIT 1:Introduction – Types of Maintenance – Preventive and Breakdown, Comparisons, Contract Maintenance, and Service Contract – Circumstances under which equipment is generally replaced.

UNIT 2:Waste Disposal & Pollution Control – Disposal of waste various methods – Sewage Treatment Plans – Water Pollution – Sewage Pollution – Air Pollution and Noise Pollution related to Hotel industry.

UNIT 3:Basic Front Office Operation Services – Forecasting of Rooms – Taking Reservations – Receiving and Registering Guests – Basic Etiquettes, Body language and Communication

Course Outcomes

At the end of this module

- the students get a functioning knowledge about various methods of waste disposal to avoid pollution.
- The students get exposed towards the receiving of guests, reserving rooms and using gestures in communication.

DIPLOMA IN HUMAN RESOURCES MANAGEMENT (DIHRM)

PAPER 1 – HUMAN RESOURCES MANAGEMENT

Course Objectives

The attitudes will be

- Able to understand the concepts of Human resources Management and its scope.
- It provides the selection process steps and job description details.
- Able to grasp the concept and importance of training and development.

SYLLABUS

UNIT 1:Introduction – Concept, function, Scope of HRM, Power and Responsibilities of personnel Manager.

UNIT 2:Recruitment – Sources of Recruitment, Steps in Selection Process – Placement and Induction - Job Description

UNIT 3:Training and Development – Concept and Importance, Training Programmes,

UNIT 4:Performance Appraisal: Purpose of Appraisal, appraisal Criteria.

Course Outcomes

At the end of this unit the learner will be able to

- define the purposes and scope of Human resources Management
- evaluate the various methods of training and development available

PAPER 2 – PRINCIPLES OF MANAGEMENT

Course Objectives

The student will understand

- the significance of management process
- the functions of management
- Helps to comparative analysis of authority and power

SYLLABUS

UNIT 1:Introduction – Meaning, Concept, nature, process and significance of management

UNIT 2:Functions of Management – Planning, Organizing, Coordinating, Controlling, Staffing, and Motivating.

UNIT 3:Authority – Delegation – Decentralization – Difference between authority and power – Uses of authority

Course Outcomes

- To demonstrate an understanding of the difference between various functions of HRM
- To evaluate the linkage between HRM and Goals of business

DIPLOMA IN CUSTOMER RELATIONSHIP MANAGEMENT (DICRM)

PAPER 1 – INTRODUCTION TO CRM

Course Objectives

The student will be able to understand

- the concepts of customer relationship management and its types
- the success factors of customer relationship management brought to the students knowledge
- It provides the significance of customer satisfaction helps to measure customer satisfaction with valuable parameters
- Able to understand various ways of service quality dimensions
- impact of customer expectation and perception.

SYLLABUS

UNIT 1 ;Fundamentals - CRM Definitions, Emergence of CRM practice, Significance of CRM, Types of CRM, Success Factors in CRM, CRM Implementation

UNIT 2:Customer Satisfaction - Meaning, Definition, Significance of Customer Satisfaction, Components of Customer Satisfaction, Measuring Customer Satisfaction, and Customer Satisfaction Practices.

UNIT 3 :Service Quality - Concept of Quality, Meaning and Definition of Service Quality, Factors influencing customer expectation and perception, Types of Service Quality, Service Quality Dimensions, Service Quality Gaps.

Course Outcomes

At the end of the unit, the student will be able to

- Identify strategically the significant markets of Customers
- Use generated database to critically analyze the requirements of the organizations to increase profitability

PAPER 2 – CONSUMER BEHAVIOUR AND LOYALTY

Course Objectives

The students will be able

- to understand the concept of consumer behavior
- to analyze the influencing factors for consumer buying decision.
- the significance of customer loyalty, retention of brand loyalty.

to analyze of behavioral loyalty, attitudinal loyalty and cognitive loyalty.

UNIT 1:Overview of Consumer Behaviour - Understanding Consumer Behavior - Meaning and Concept of Consumer and Customer, Different Models in Consumer Behavior – Factors Influencing Consumer Buying Decision

UNIT 2:Customer Loyalty Comprehension - Meaning and definition of customer loyalty, Significance of Customer Loyalty - Customer retention and Brand Loyalty - Factors affecting customer loyalty formation

UNIT 3:Customer Loyalty Outcomes - Characteristic Features of Behavioral Loyalty, Attitudinal Loyalty and Cognitive Loyalty – Customer Engagement

Course Outcomes

At the end of this unit the student will be

- able to design CRM strategy to gain competitive advantage over retaining customer loyalty
- apply their skills on analyze of behavioral loyalty, attitudinal loyalty and cognitive loyalty.

DIPLOMA IN CYBER LAW

PAPER 1 CYBER CRIMES

Course Objectives

1. Students learn about different types of cybercrimes and analyze legal frameworks.
2. Familiarity with Laws governing cyberspace and analyze the role of Internet Governance in framing policies for Internet security.
3. Importance of jurisdictional boundaries and identify the measures to overcome cross jurisdictional cybercrimes.
4. Learn Intellectual property right issues in the cyberspace and design strategies to protect your intellectual property.
5. **Recognize** the the importance of ethics in legal profession and determine the appropriate ethical and legal behavior according to legal frameworks.
6. **Assess** the legal issues with online trading, and analyze applicable e-contracting and taxation regulations.

SYLLABUS

UNIT 1: Introduction

- Overview of Computer and Web Technology
- Need for Cyber Law
- Cyber Jurisprudence at International and Indian Level

UNIT 2: Jurisdictional Aspects in Cyber Law

- Issues of jurisdiction in cyberspace
- Types of jurisdiction
- The Test evolved
 - Minimum Contacts Theory
 - Sliding Scale Theory
 - Effects Test and International targeting
- Jurisdiction under IT Act, 2000.

UNIT 3: Cyber Crimes& Legal Framework

- Cyber Crimes against Individuals, Institution and State
- Hacking
- Digital Forgery
- Cyber Stalking/Harassment

- Cyber Pornography
- Identity Theft & Fraud
- Cyber Terrorism
- Cyber Defamation
- Right to Privacy and Data Protection on Internet
 - Concept of privacy
 - Threat to privacy on internet
 - Self-regulation approach to privacy
 - Ingredients to decide confidentiality of information
 - Breach of sensitive personal information and confidentiality under IT Act and penalties for the same.
 - Right of Interception under IT Act.
- Different offences under IT Act, 2000

Course Outcomes

1. Students will be familiar with Cyber World, Internet and online resources, Security of information and Digital signature.
2. Examine the areas of cyber space, Regulation of cyber space – introducing cyber law, Scope of Cyber laws – e-commerce.
3. Illustrate online contracts; IPRs (copyright, trademarks and software patenting), e-governance and cyber crimes
4. Cyber law in India with special reference to Information Technology Act, 2000.
5. Students will be able to understand Cyber threats,
6. Data security strategies and Legal aspects .

PAPER II: DATA PROTECTION

Course Objectives

1. Students learn about concepts of digital signature.
2. Familiarity with E-Contract and types.
3. Importance of E-Commerce and its features.
4. Recognize the the importance of Intellectual Property Issues in Cyber Space.
5. Assess Trademarks and domain related issues

SYLLABUS

UNIT 1: Digital signature and Electronic Signature and Data Protection

- Concept of public key and private key
- Certification authorities and their role
- Creation and authentication of digital signature
- Concept of electronic signature certificates

UNIT 2:Electronic Governance

- Concept of electronic records and electronic signatures
- Rules for attribution, acknowledgement and dispatch of such records

UNIT 3: E Contracting

- Salient features of E-contract
- Formation of E-contract and types
- E-mail Contracting
- Indian Approach on E-contracts

UNIT 4: E Commerce

- E-commerce-Salient Features and advantages
- Models of E-commerce like B2B, B2C
- Indian Laws on E-commerce

UNIT 5: Intellectual Property Issues in Cyber Space

- Interface with Copyright Law
- Interface with Patent Law
- Trademarks &Domain Names Related issues
- Dispute Resolution in Cyberspace

Course Outcomes:

Students who successfully complete this course will be able to:

1. **Identify** intellectual property right issues in the cyberspace and design strategies to protect your intellectual property
2. **Assess** the legal issues with online trading, and analyze applicable e-contracting and taxation regulations
3. **Create** security policy to comply with laws governing privacy and develop the policies to ensure secure communication
4. **Recognize** the importance of digital evidence in prosecution and compare laws of different countries that govern Standard Operating Procedures (SOP) for handling evidence

DIPLOMA IN GOODS AND SERVICES TAX (GST)

Course Objectives

1. To understand The Constitutional Framework Time and Place of Supply Input Tax Credit.
2. Introduction to the Centre (Central GST), and the other levied by the States (State GST).
3. Develop an understanding of the fundamental principles of tax law, including income tax, GST and fringe benefit tax law as it applies to a wide variety of different business types such as companies, trusts, partnerships and sole proprietors.
4. Familiar with GST Registration, Concept of Negative List, Concept of Declared List, Impact of Bundled Services, Exemption to Small Service Provider, E-Payment of GST Tax and E-Filing of Returns.
5. Learn GST Legal Provisions, Anti-Profiteering, GST Provisional Assessments Recovery
6. GST Audit and Appeals in GST.

SYLLABUS

UNIT 1: Overview of Goods and Services Tax

- ☐ Overview of GST
- ☐ Implementation of GST
- ☐ Liability of the Tax Payer
- ☐ GST Network
- ☐ GST Council
- ☐ SelfExamination Questions

UNIT 2 : Levy of an Exemption from Tax

- ☐ Levy of GST– Introduction
- ☐ Composition Scheme
- ☐ Remission of Tax / Duty
- ☐ SelfExamination Questions

UNIT 3 : Registration

- ☐ Introduction
- ☐ Registration Procedure
- ☐ Important Points
- ☐ Special Persons
- ☐ Amendments / Cancellation
- ☐ SelfExamination Questions

UNIT 4: Meaning and Scope of Supply

- ☐ Taxable Supply
- ☐ Supply of Goods and Supply of Services
- ☐ Course or Furtherance of Business
- ☐ Special Transactions
- ☐ SelfExamination Questions

UNIT 5: Time of Supply

- ☐ Time of Supply- Goods
- ☐ Time of Supply–Services
- ☐ Other Points
- ☐ SelfExamination Questions

UNIT 6 :Valuation in GST

- ☐ Transaction Value
- ☐ Valuation Rules
- ☐ SelfExamination Questions

UNIT 7 :Payment of GST

- ☐ Introduction
- ☐ Time of GST Payment
- ☐ How to make payment
- ☐ Challan Generation & CPIN
- ☐ TDS & TCS
- ☐ SelfExamination Questions

UNIT 8: Electronic Commerce

- ☐ Introduction
- ☐ Tax Collected at Source (TCS)
- ☐ Procedures for E-commerce Operator
- ☐ SelfExamination Questions

UNIT 9 : Job Work

- ☐ Introduction
- ☐ Part II
- ☐ SelfExamination Questions

UNIT 10 : Input Tax Credit

- ☐ Introduction
- ☐ Important Points
- ☐ Job Worker
- ☐ Case Studies– Part I
- ☐ Case Studies– Part I
- ☐ SelfExamination Questions

UNIT 11 :` Input Service Distributors

- ☐ Concept of Input Service Distributor
- ☐ Legal Formalities for an ISD
- ☐ Distribution of Credit
- ☐ Sdf-Examination Questions

UNIT 12 :Matching of Input Tax Credit

- ☐ Returns
- ☐ GSTR-2
- ☐ Other Taxable Persons
- ☐ Annual Return
- ☐ SelfExamination Questions

UNIT 13 : Overview of the IGST Act

- ☐ Overview
- ☐ Other Provisions
- ☐ SelfExamination Questions

UNIT 14 : Place of Supply of Goods & Services

- ☐ Introduction
- ☐ Registered and Unregistered Persons
- ☐ Case Studies– Part I
- ☐ Case Studies– Part II
- ☐ SelfExamination Questions

UNIT 15 :GST Portal

- ☐ Introduction
- ☐ GST Eco-system
- ☐ GST Suvidha Provider (GSP)
- ☐ Uploading Invoices
- ☐ SelfExamination Questions

Revised Model GST Law – Highlights

Course Outcomes

1. Students will understand Direct and Indirect Tax,GST Challenges, Benefits and GST Models.
2. Assess destination Consumption and Origin-based GST
3. Identification of types of GST, Deposit Chain or Flow and calculating GST.
4. Gain working knowledge on GST and application of the same in the organizations.
5. Understand and make use of knowledge of GST rules in taking managerial decisions in various tax related matters
6. Students will be able to understand and assimilate the new taxation structure, associated compliances and the changes in business processes emanating there from.
7. Identification of Registration and Need GSTIN,GST Registration Forms,Amendment to GST Registration GSTIN Cancellation and Revocations Migration for Central Excise/Service Tax Assesses,GSTIN New Registration and GST Transition Provision.

DIPLOMA IN TALLY (ERP 9)

Course Objectives

1. The students are introduced to computerized accounting environment.
2. Knowledge of Tally, computerized accounting software is imparted to the students.
3. To train the students in preparations of final accounts and other financial statements in Tally.

SYLLABUS

UNIT 1: Basics of accounting

Types of Accounts, Golden Rules of Accounting, Accounting Principles, Concepts and conventions, Double Entry System of Book keeping, Mode of Accounting, Financial Statements, Transactions, Recording Transactions.

UNIT 2: Fundamentals of Tally.ERP 9

- Getting Functional with Tally.ERP 9
- Creation / Setting up of Company in Tally.ERP 9

UNIT 3 : Accounting Master in Tally.ERP 9

- F11: Features
- F12: Configurations
- Setting up Account Heads

UNIT 4: Inventory in Tally.ERP 9

- Stock Groups
- Stock Categories
- Godowns / Locations
- Units of Measure
- Stock Items
- Creating Inventory masters for National Traders

UNIT 5: Voucher Entry in Tally.ERP 9

- Accounting Vouchers
- Inventory Vouchers
- Invoicing

UNIT 6 : Advanced Accounting in Tally.ERP 9

- Bill-wise Details
- Cost Centers and Cost Categories
- Voucher Class and Cost centre Class
- Multiple Currencies
- Bank Reconciliation
- Interest Calculations
- Budgets & Controls
- Scenario Management

UNIT 7: Advanced Inventory in Tally.ERP 9

- Order Processing
- Recorder Levels
- Tracking Numbers
- Batch-wise Details
- Additional Cost Details
- Bill of Materials (BoM)
- Price Levels and Price Lists
- Stock Valuation
- Zero valued Entries
- Inventory Ageing Analysis
- Different Actual and Billed Quantities

UNIT 8: Value Added Tax (VAT)

- Configuring VAT in Tally.ERP 9
- Creating Masters
- Entering Transactions
- Accounting for Return of Goods
- Rate Difference in Purchase / sales
- Accounting for Interstate Transactions

- Exempt Transaction under VAT
- Purchases from Unregistered Dealers
- Claiming ITC on Capital Goods
- Inter-State Branch Transfers
- VAT Reports
- VAT for Composite Dealers

UNIT 9: Central Sales Tax (CST)

- Basic of Central Sales Tax (CST)
- Enabling CST in Tally.ERP 9
- Recording Interstate Transactions in Tally.ERP 9
- Payment of CST
- CST Reports

UNIT 10: Point of Sale (PoS)

- Features of Point of Sale (PoS) in Tally.ERP 9
- Configuring point of sale in Tally.ERP 9
- Entering POS Transactions
- POS Reports

UNIT 11: Job Costing

- Configuring Job Costing in Tally.ERP 9
- Creating Master for Job Costing
- Recording Transactions
- Job Costing Reports

UNIT 12: Multilingual Capabilities

- Configuring Tally.ERP 9 for Multilingual Capabilities
- Creating Masters
- Entering Transaction in Multiple Languages
- Transliteration
- Generating Reports

UNIT 13:Technological Advantages of Tally.ERP 9

- Tally Vault
- Security control
- Tally Audit
- Backup and Restore
- Split Company Data
- Export and Import of Data
- ODBC Connectivity
- Web Enabled, Print Preview and Online Help

UNIT 14:Tally.NET and Remote Capabilities

- Overview of Tally.NET
- Configure Tally.NET Features
- Connect Company on Tally.NET
- Create Remote Users
- Authorize Remote Users
- Remote Access

UNIT 15:Application Management and Controls

- Concepts of Control Centre
- Installing & Activating Tally.ERP 9
- Logging to Control Centre
- Managing Accounts using Control Centre

UNIT 16:Online Help and Support

- Features of Support Centre
- Accessing the Support Centre
- Using Support Centre

UNIT 17:Service Tax

- Basics of Service Tax
- Configuring Tally.ERP 9 for service Tax
- Creating Masters
- Entering Transactions

- Accounting for Advance Receipts
- Accounting for Opening Service Tax Credit
- Payment of service Tax
- Service Tax Reports

UNIT 18: Tax Deducted at Source

- Basic concepts of TDS
- Configuring TDs in Tally.ERP 9
- Creation of Masters
- Processing Transactions
- -TDS Reports

UNIT 19: Tax Collect at Source

- Basic concepts of TCS
- Configuring Tally.ERP 9 for TCS
- Creating Masters
- Entering Transactions
- TCS Reports

Course Outcomes

1. Students learn the basics of tally and importance of tally in today's computerized environment.
2. Students learn how to create company accounts using tally and about function keys and shortcut keys.
3. To know about voucher entry, payment voucher, receipt voucher, credit and debit note.
4. Students learn how to create single and multiple ledgers, group creation, budget, inventory groups and other functions.
5. Students learn to prepare final accounts in tally along with cash flow statements and inventory analysis reports.

DEPARTMENT OF ENGLISH

PART – II ENGLISH

FIRST SEMESTER – PAPER – I

PROSE, EXTENSIVE READER & LANGUAGE STUDY

SEMESTER: I

CODE: 17E11AA

CREDIT: 3

UNIT – I My Vision for India – Dr. A.P.J. Abdul Kalam

Night of the Scorpion – Nissim Ezekiel

Article & Preposition

UNIT – II Science, Humanities and Religion – Dr. Radhakrishnan

The Road not Taken – Robert Frost

Sentence & its kinds

UNIT – III My Stupid Suicide Plan – Chetan Baghat

Hawk Roosting – Ted Hughes

Question Tags

UNIT – IV Silent Valley – (Source: The State of India's Environment, 1982)

Coromandel Fishes – Sarojini Naidu

Verbs & Tenses

UNIT – V My Greatest Olympic Prize – Jesse Owens

Woman Work – Maya Angelou

Active & Passive Voice

DEPARTMENT OF ENGLISH

PART – II ENGLISH

SECOND SEMESTER – PAPER – II

PROSE, POETRY& LANGUAGE STUDY

SEMESTER: II

UNIT – I The Three Questions – Leo Tolstoy

 If – Rudyard Kipling

 Letter Writing

UNIT – II Education for India – C. Rajagopalachari

 Where the mind is without fear – Rabindranath Tagore

 Spotting Errors

UNIT – III Technological Engine – Alvin Toffler

 Once Upon a Time – Gabriel Okara

 Hints Developing

UNIT – IV How Children Learn – John Holt

 Yussouf – James Russell Lowell

 Dialogue Writing

UNIT – V The Power of Prayer – Dr. A.P.J. Abdul Kalam

 The Solitary Reaper – William Wordsworth

 Precis Writing

DEPARTMENT OF ENGLISH

PART – II ENGLISH

THIRD SEMESTER – PAPER – III

DETAILED & NON – DETAILED STUDY & COMMUNICATION SKILLS

SEMESTER: III

DETAILED STUDY

Selected scenes from Shakespeare plays

1. Julius Ceaser
2. Macbeth

Lamb's Tale from Shakespeare

3. The Tempest

NON – DETAILED STUDY

Short stories

1. A cup of tea – Katherine Mansfield
2. Refugee – Pearl S Buck
3. God sees the truth but waits – Leo Tolstoy

COMMUNICATION SKILLS

1. Comprehension
2. Speaking Skills
3. Trans Coding
4. General Essay

DEPARTMENT OF ENGLISH

PART – II ENGLISH

FOURTH SEMESTER – PAPER – IV

DETAILED & NON – DETAILED STUDY & JOB SKILLS

SEMESTER: IV

I DETAILED STUDY

Ethics & Values

- a) What is Ethics? – Swami Vivekananda
- b) Adam & Eve Teasing – A. K. Raju

Nature and Environment

- a) She Spokes for nature
- b) Polluting the world – An extract
- c)

Great Speeches

- a) President speaks - John F Kennedy
- b) Goal Setting – Shiv Khera

II NON DETAILED STUDY

Water!

III JOB SKILLS

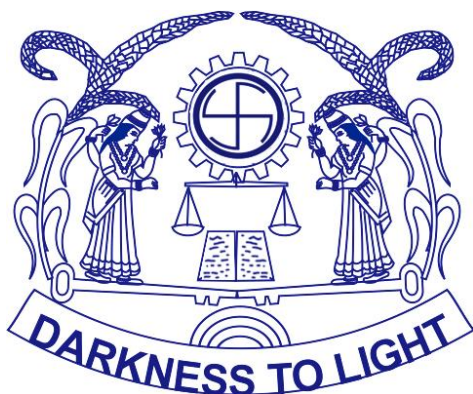
1. Interview skills
2. Resume writing
3. Group Discussion
4. Fax & E- Mail

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF ECONOMICS
M.A. (Business Economics)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: 4

Total No. of Credits: 90

SCHEME OF EXAMINATIONS**SEMESTER – I**

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Indian Economic Development & Policies – I	6	3	100	4
2	Micro Economic Theory – I	6	3	100	4
3	Statistics for Economists	6	3	100	4
4	Principles of Management	6	3	100	4
5	Principles of Business Accounting	6	3	100	4
6	Soft Skill I		3	100	2

SEMESTER – II

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Indian Economic Development & Policies – II	6	3	100	4
2	Micro Economic Theory – II	6	3	100	4
3	Research Methodology	6	3	100	4
4	Strategic Business Management	6	3	100	3
5	Accounting for Managerial Decisions	6	3	100	3
6	Soft Skill II		3	100	2

SEMESTER – III

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Macro Economic Theory – I	6	3	100	4
2	Public Economics – I	6	3	100	4
3	International Economics – I	6	3	100	4
4	Managerial Economics	6	3	100	4
5	Financial Management	6	3	100	5
6	Soft Skill – III		3	100	2

SEMESTER – IV

Paper No	Subjects	Instructional Hours Per Week	Exam Duration Hours	Total Marks	Credits
1	Macro Economic Theory – II	6	3	100	4
2	Public Economics – II	6	3	100	4
3	International Economics – II	6	3	100	4
4	Human Resources Management	6	3	100	4
5	General Financial Services	6	3	100	5
6	Soft Skill IV		3	100	2
7	Internship				2

COURSE CODE	COURSE TITLE	L	T	P	C
14P511A	Indian Economic Development & Policies – I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Development and under development – Characteristics of less developed and developing economics – Economic and non – economic factors impeding economic development concept
UNIT 2	Planning in India – Concept of Mixed Economy – Objectives of planning – perspective planning – Evaluation and appraisal of five year plans
UNIT 3	Agriculture: Institutional and technological policies given revolution – agricultural price policy – agricultural credit – intersectoral terms of trade
UNIT 4	Industry: Evolution of industrial policy, licensing, production and distribution controls, pattern of industrial growth productivity trends, modernization, Small Vs large industry
UNIT 5	The strategy of Economic development – the theory of balanced growth and theory of unbalanced growth – theory of big – push – Investment criteria in economic development

Reference Books:

1. J Bhagwati and S Chakravorthy: Indian Economic Analysis: A Survey
2. A.K.Das Gupta: Planning and Economic Growth
3. Bhagwati and P.Desai: Planning for Industrialisation
4. A N Agarwal – Indian Economy
5. Jhingan M L – Economics of Development & Planning

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P511B	Micro economic theory-I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Consumer's behaviour: Cardinal utility analysis diminishing marginal utility, consumers equilibrium – Indifference curve analysis – Marginal rate of substitution – Consumer Equilibrium – Consumer's Surplus - Marshall, Hicks concept
UNIT 2	Demand function – Market demand function – Network externalities Bandwagon Effect and Snob effect – Elasticity of demand
UNIT 3	Revealed preference theory of demand – Hicks logical ordering theory of demand, Individual choice under risk and uncertainty concept – St. Petersburg paradox and Bernoulli's hypothesis – Neumann – Morgenstern utility – risk aversion and insurance
UNIT 4	Production function – production function with one variable – Law of variable proportion – Production function with two variable – Cobb Douglas production function – Euler's theorem returns to scale
UNIT 5	The concept of costs, theory of costs – Cost function Economies of scale – Internal & External Economies and cost curve – Modern development in cost theory

Reference Books:

1. Richard A.Bilas – Micro Economic Theory
2. A Koutsoyiannis – Modern Micro Economics
3. Cohen and Cyert – The Theory of the firm
4. H L Ahuja – Principle of Micro Economics
5. H S Agarwal – Micro Economics

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P511C	Statistics for Economists	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Probability and probability distributions: Introduction – Meaning of probability – Probability rules - Calculus of Mathematical Expectations – Some probability distributions – Binomial distribution – Normal distribution
UNIT 2	Sampling and sampling distribution: Need for sampling – Types of sampling – Error in sampling – Sampling and non – sampling errors – sampling distribution of Mean and proportion – Central limit theorem using sampling distribution for inference
UNIT 3	Chi – Square test and ANOVA: Introduction – test of multinomial experiment – contingency table – Introduction to analysis of variance – One way analysis of variance – independent sample
UNIT 4	Statistical estimations: Concept of estimation point and interval estimation of population mean with known population variance estimation of population with only known sample variance estimation of population proportion with known population variance and known sample variance
UNIT 5	Time Series analysis: Introduction – Components of time series – time series models – moving average – exponential estimate – trend estimate – measuring cyclical effects – Measuring seasonal effects – forecasting using Index Number – Laspeyre's – Passche's – Fisher's index numbers – Consumer's Price Index

Reference Books:

1. D.N.Elhance – Fundamentals of Statistics
2. R.G.D.Allen – Statistics for Economists – Macmillan India
3. Crompton F B and Cowden D J – Applied General Statistics
4. S.P.Gupta – Statistical Methods
5. R.S.N. Pillai and V.Bhagwati – Statistics

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P512G	Indian Economic Development & Policies – II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Trade Policies – Import substitution and import liberalism – technology transfer – role of foreign capital
UNIT 2	Poverty and income distribution: public policies relating to asset distribution and its impacts – Employment and poverty and measurement of poverty lines – parallel economy
UNIT 3	Economic dynamics: trade cycles – meaning and economic impact; Inflation – meaning, types and effects; Economic reforms – Privatization, Liberalization and Globalization
UNIT 4	Infrastructure in the Indian Economy – Energy – Power – Transport (Road – Railways, civilization) – Waterways – communication science and technology – private investment
UNIT 5	Unemployment – Nature – trends – structure – types – policies – recent employment promotion programmes of the Central and State Government

Reference Books:

1. J Bhagwati and S Chakravorthy: Indian Economic Analysis: A Survey
2. A.K.Das Gupta: Planning and Economic Growth
3. Bhagwati and P.Desai: Planning for Industrialisation
4. A N Agarwal – Indian Economy
5. Jhingan M L – Economics of Development & Planning

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P512H	Micro Economics-II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Market Structure – Perfect competition, Imperfect Competition (Monopoly – Monopolistic – Oligopoly)
UNIT 2	Critique of the neo – classical theory of the firm – Hall and Hitch report
UNIT 3	Managerial theories of the firm – Baumol, Williamson and Marris Model – Behavioural Model of Cyert and March
UNIT 4	Theory of distribution – Marginal productivity theory Clark’s version, Marshall – Hicks version – Pricing of factors in competitive market – Pricing of factors in imperfectly competitive market
UNIT 5	General equilibrium analysis – Welfare economics - Pareto Welfare Economics – Kaldor – Hicks welfare criterion Market failure, Externalities and public goods – Arrow’s impossibility theorem

Reference Books:

1. Richard A.Bilas – Micro Economic Theory
2. A Koutsoyiannis – Modern Micro Economics
3. Cohen and Cyert – The Theory of the firm
4. H L Ahuja – Principle of Micro Economics
5. H S Agarwal – Micro Economics

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P512J	Research Methodology	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Introduction: Aims – Objectives – Scope of Social Research – The nature of theory and data (fact) and their relevance for social research – Basic concepts used in social research – Operational definition – Parameters
UNIT 2	Stages in Research Process: Selection of a research problem – Theoretical framework – Formulation of Hypothesis
UNIT 3	Research Design – Formulation – Descriptive Experimental and Evaluation research
UNIT 4	Sampling – Need for sampling - Census Vs Surveys – Sampling Errors – Techniques of data Collection – Observation Methods – Questionnaire and Schedule Methods – Scaling techniques
UNIT 5	Importance and scope of Social Surveys – Editing, Processing and Analysis of data – Research presentation – Aims and objectives of presentation rule for arrangement of text, diagrams – Reference etc., - Preparation of Bibliography

Reference Books:

1. Goode W J and Hatt P K – Methods in Social Research
2. Robbin L – The Nature & Significance of Economic Science
3. Kurien C T – A Guide to research in Economics
4. Sankar U and J.Lakshmanasamy – Methodology of Applied Economic Research
5. Kothari C R – Research Methodology

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P513M	Macro Economics Theory-I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	National Income components, concepts, measurement problems – Concepts of social accounting – Classical macro economics – Say's Law
UNIT 2	Role of money in the classical system - Monetary and fiscal policy in the Classical scheme of things
UNIT 3	Keynesian Macro Economics – Determinants of Consumption - Investment
UNIT 4	Model of three sectors using IS – LM Curves – Real Balance effect – Patinkin's contribution
UNIT 5	Developments in Consumption function – Absolute income, relative income, permanent income and life cycle hypothesis – empirical studies and policy implication

Reference Books:

1. G.Ackely: Macro Economic Theory, Collier Mac Millan
2. E.Shapiro: Macro Economic Analysis
3. Samuel A Morley: Macro Economics
4. Jhingan M L – Macro Theory
5. Seth M L – Macro Economics

COURSE CODE	COURSE TITLE	L	T	P	C
14P513N	Public Economics -I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Government in Mixed Economy – Public and Private Sectors – Co-operation or competition – Role of Public Enterprises in India – Pricing policies of public enterprises – Administered prices – Peak load pricing – Marginal cost pricing
UNIT 2	Welfare foundation of public economies – Pareto Optimality – Arrow’s Social Welfare function
UNIT 3	Theory of social goods – Market failures – imperfection – decreasing cost condition – collective consumption – externalities – correction of externalities
UNIT 4	Public expenditure – Wagner’s Law – Wiseman – Peacock Hypothesis – Structure and growth of Public Expenditure – Development Vs Non – development expenditure – Evaluation of public expenditure – Cost Benefit analysis – Shadow prices – Discount rate – Reforms in public expenditure – Budgeting – Performance – Programmes budgeting – Zero base budgeting – Appraisal of public expenditure policy in India
UNIT 5	Taxation – Theories of taxation – Benefit and ability to pay – Principles – Concept of excess burden of taxes – Classical and modern views – Impact and incidence of taxation

Reference Books:

1. Musgrave R A and Musgrave P A (1976) – Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo
2. Chelliah R (1971) – Fiscal Policy in Under – developed Countries, George Allen and Unwin, Mumbai
3. Muller D C (1979) – Public Choice, Cambridge University Press, Cambridge
4. Tyagi B P - Public Finance
5. Bhatia H L – Public Finance

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P513P	International Economics-I	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Theoretical basis of trade – Classical: Adam Smith – Ricardo – J.S.Mill – Haberler – Modern Theory Hecksher – Ohlin – Trade Model – Leontiff Paradox
UNIT 2	Trade indifference curves – Offer curves – Factor prices under trade – factor price – Equalisation theories – Factor intensity reversal – Rybeznsky's theorem
UNIT 3	Terms of trade and gains from trade – Trade and growth – Johnson model – Technological progress and trade
UNIT 4	Tariff & Quotas: Tariff – Optimum tariff – Stolper Samuelson theorem – Effective rate of protection – Quotas – Dumping – Cartels - Subsidies and distribution of market conditions
UNIT 5	Factors influencing International Trade – Vent of Surplus theory – Transport costs – Customs union - Regional Economic Cooperation – E.E.C

Reference Books:

1. Kindliberger C P – International Economics
2. Krugman P R and Obstgeld – International Economics
3. Kenan P B – The International Economy
4. Jhingan M L – International Economics
5. Gupta K R – International Economics

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P513Q	Managerial economics	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Nature and scope of Managerial Economics – Economic theory and Managerial Economics – Managerial Economics role and responsibility
UNIT 2	Demand and demand function – Elasticity of demand – Consumer behaviour – Demand forecasting
UNIT 3	Market Structure and price output determination under perfect and imperfect competition – Non price competition – Price discrimination, Managerial theory of firm
UNIT 4	Profit management – Nature, measuring accounting profit, profit policy, profit planning and forecasting, Capital budgeting – Cost of Capital
UNIT 5	Macro Economics for Management – Macro Economic Policies – Macro Economic aggregator affecting business decision – Consumption saving and investment Monetary and fiscal policies – Business Cycle and Business Policies

Reference Books:

1. Baumol William J – Economic theory & Operation Analysis
2. Dean, Joel – Managerial Economics
3. Haugue D C – Managerial Economics
4. Varshney R L and Maheswari K L – Managerial Economics
5. Sankaran S – Managerial Economics

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P514S	Macro Economics Theory-II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Investment function – Theory of Multiplier – Accelerator theory – Profit theory – financial theory – Neo Classical theory
UNIT 2	Demand for money – Classical, Keynesian and Post Keynesian (Friedman and James)
UNIT 3	Trade Cycle – Inflation: Types, Sources – Philips Curves
UNIT 4	Balance of payment and trade – Equilibrium of balance of payment – Foreign exchange – free trade – protection – Foreign direct investment
UNIT 5	Economic stabilization – Macro Economic policy - Monetary and Fiscal Policy

Reference Books:

1. G.Ackely: Macro Economic Theory, Collier Mac Millan
2. E.Shapiro: Macro Economic Analysis
3. Samuel A Morley: Macro Economics
4. Jhingan M L – Macro Theory
5. Seth M L – Macro Economics

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P514T	Public Economics-II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Tax structure in India – Particular taxes – Personal income tax corporation – Income tax – Capital gain tax – Union excise duties – VAT, MODVAT
UNIT 2	Public debt – theories of public debt – classical and modern theories – concept of burden of public debt – growth and composition of public debt in India – Debt Management
UNIT 3	Fiscal policy – Fiscal and Monetary policies – Budgetary, fiscal deficit and its measurement – Fiscal policy for stabilization – fiscal policy for liberalization
UNIT 4	Fiscal federalism – principles of federal finance – fiscal federalism in India – assignment of functions and sources of revenue – logic of the constitutional scheme – Finance commission and planning commission – Recent finance commission report - Resource transfer mechanism in India – backwardness and other criteria – Union State financial relations – problems of State indebtedness
UNIT 5	Local finances – finance for local bodies – Panchayat Raj Institutions – State Finance Commission Report and its recommendations

Reference Books:

1. Musgrave R A and Musgrave P A (1976) – Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo
2. Chelliah R (1971) – Fiscal Policy in Under – developed Countries, George Allen and Unwin, Mumbai
3. Muller D C (1979) – Public Choice, Cambridge University Press, Cambridge
4. Tyagi B P - Public Finance
5. Bhatia H L – Public Finance

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P514U	International Economics-II	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Trade and National Income – Foreign Trade Multiplier – Foreign Exchange Market – Exchange Control
UNIT 2	Balance of Payment's Adjustment Mechanism – Devaluation – Theories of Balance of Payments – Income, Absorption Elasticity and Monetary Approaches
UNIT 3	Determination of Exchange Rate – Fixed and Flexible Exchange rates Currency Convertibility – Internal and External Equilibrium – Swar diagram – Mundell's Analysis
UNIT 4	International Monetary System – I.M.F and International Liquidity S.D.R – Euro – Dollar Market – New International Monetary System and features – World Bank – I.D.A.I.F.C – MIGA (Multilateral Investment Guarantee Agency)
UNIT 5	Exim Policy – Foreign capital and its role – Role of Multinational trade or Aid – UNCTAD – GATT – WTO – ADB – SAARC – New International Economic Order – Impact of Globalization and New Economic Policy International Trade

Reference Books:

1. Krugman P R and Obstfeld – International Economics
2. Salvatore D L – International Economics
3. Sodersten B O – International Economics
4. Jhingan M L – International Economics
5. Gupta K R – International Economics

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P514V	Human Resource Management	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Human Resource Management: Concept, Significance, - Features – Functions: Planning, Organising, Directing, Controlling and Managerial Functions – Qualities of HR Manager – Emerging Challenges in HRM
UNIT 2	Recruitment, Selection, Training Methods, Job Design – Job Analysis
UNIT 3	Performance Appraisal: Description of Traditional and Modern Methods – Job Evaluation
UNIT 4	Maintaining Human Resources – Individual and Group (Formal and informal groups)
UNIT 5	Motivation – Concept - Theories of Motivation (1) Maslow (2) Herzberg (3) Alderfer (4) Vroom – Safety and Health Management

Reference Books:

1. David A De, Cenzo – Personnel / Human Resources Management
2. Hemmeman, Schwat – Personnel / Human Resources Management
3. Aswatha Ppaa – Human Resources Management
4. Dr.V.Balu – Human Resources Management
5. L M Prasad – Human Resources Management

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P511D	Principal of Management	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Management – Nature and scope meaning – definition – Nature – Definition between Administration and Management – Management as a profession – both science and an art. Importance of management – Levels Nature and Significance of Managerial Economics – Levels of management – Functions of management
UNIT 2	Planning meaning – Definition – Interrelationship between forecasting, planning and decision making – nature of planning, Importance of planning – stages in planning process and decision making
UNIT 3	Organisation – Nature, Scope and principle – process organization – Types of organization – Line organization – Line and staff organization – Functional organization – Committee organization – Project organization matrix – organization – Formal and informal organization Delegation and decentralization
UNIT 4	Coordination – need types, Techniques Directing – Principles – Importance Good leadership
UNIT 5	Supervision & control – Suspension – meaning – function and span of supervision – control – meaning importance control process and types of control.

Reference Books:

1. Principles Management J.Jaya Sankar Margam Publication, Chennai.
2. Principles Management Dr. Premavathy Vishnu Publication, Chennai.
3. Business Organisation and Management C.B. Jupta Sultan Chand & Sons, New Delhi

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P511E	Principles of Business Accounting	6	-	-	4

UNIT	SYLLABUS
UNIT 1	Introduction to Accounting – Meaning – Objectives, Functions, Branches of Accounting, Advantages, limitations – Accounting Principles. Bases of Accounting, Systems of Accounting – Single Entry system, Double entry systems. Accounting concepts – Accounting Conventions.
UNIT 2	Journal, Ledger, Trial Balance, Preparation of Final Accounts – Trading and profit and loss Account, Balance sheet.
UNIT 3	Single Entry system : Introduction, Defects – Difference between Double entry system and single entry system – Computation of Profit – Statement of Affairs method, conversion method (Simple Problems).
UNIT 4	Partnership Accounts introduction – Definition, Nature of Partnership Firm – Fixed and fluctuating capitals – Interest on drawings. Interest on capital – Admission and Retirement of partner.
UNIT 5	Company Accounts: Introduction, meaning, Definition, features. Kinds of companies, Shares – Meaning, Kinds of shares – Issue of shares. Accounting treatment – Issue of shares at premium and discount, forfeiture of shares, reissue of forfeited shares.

Books for Reference:

1. Fundamental of Accounting – R.L.Gupta, V.K.
2. Advance Accounts – M.C. Shukla & T.S.Grewal – Sultan Chand & Co
3. Financial Accounting – T.S. Reddy – Margam Publication.

COURSE CODE	COURSE TITLE	L	T	P	C
14P512K	Strategic Business Management	6	-	-	3

UNIT	SYLLABUS
UNIT 1	Process of Strategic Management: Concept, Nature Importance, Dimensions of strategy, levels of strategy, Aspects of Corporate strategy. Strategy implementation. Process of strategic planning and Management. Strategic Management, Benefits of strategic Management
UNIT 2	Social Aspect of Strategic Management, Concept of social Responsibility. The classical & modern view of social responsibility. Dimensions of Social Responsibilities
UNIT 3	Implementation of strategy – Elements of strategy implementation – Role of Top management in strategic affairs – Corporate Governance – leadership and organization climate.
UNIT 4	Customer Relationship Management – Introduction – Meaning – Types of CRM Programs.
UNIT 5	Supply chain strategy and management in a business enterprise: Introduction – supply chain strategy design – planning – Supply chain Management process methodology – logistics Management a key to SCM operations

Books for Reference:

1. Strategic Business Management and Baking – An Sankar – Deep & Deep Publication Pvt. Ltd. New Delhi.
2. Strategic Planning and Management – P.K. Ghosh – Sultan chand & com – New Delhi.
3. Strategic Management – John A Pearce II Richard B. Rolingson .JR – All India traveler book seller – New Delhi.

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P512L	Accounting for Managerial Decisions	6	-	-	3

UNIT	SYLLABUS
UNIT 1	Management Accounting – definition function, scope, importance & limitation management Accounting Vs Cost Accounting, Management Accounting Vs financial Accounting
UNIT 2	Analysis and Interpretation of financial Statements – nature, Objectives, Tools, methods – Comparative, common size statement, trend Analysis.
UNIT 3	Ratio Analysis – meaning, Advantages, Limitations – Profitability, Liquidity and Turnover ratios.
UNIT 4	Budgets and Budgetary Control – types of Budgets – Production, Cash, flexible, Sales – material costing (excluding decision making)
UNIT 5	Fund flow statement - Cash flow statements.

Books for Reference:

1. T.S. Reddy Y. Hari Prasad Reddy, Management Accounting – Margam Publication.
2. Dr. S.N.Maheswari, Management Accounting, sultan chand & Sons.
3. Jain & Narang, Management Accounting, Kalyani Publishers.

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P513R	Financial Management	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Financial Management: Definition – Objectives – Functions of a finance manager – Financial Planning – Time value of money – Measuring Return and Risk.
UNIT 2	Capital Structure: Sources of long term finance – Factors influencing capital structure – Importance of Capital Structure – Capital Structure Theories.
UNIT 3	Cost of Capital: Measurement and Significance – Cost of Debt – Cost of Preference Capital – Cost of Equity – Cost of retained earnings – Weighted average cost of Capital.
UNIT 4	Capital Budgeting Decisions: Nature of Investment Decisions – Investment Evaluation Criteria – Payback Period – Accounting rate of return – Discounted Pay back Period – Net Present Value – Internal Rate of Return – Profitability Index.
UNIT 5	Working Capital Management: Sources of short term finance – Concept of Opening / Working Capital Cycle – Determinants of Working Capital – Estimation of Working Capital. Cash management Techniques (Lock Box System, Concentration Banking, Collection centers and Factoring). Receivables management : Ageing schedule – Credit policy alternatives (Credit period, credit limit, discounts, collection efforts and credit standards)

Books for Reference:

1. Financial Management – S.N.Maheswari
2. Financial Management – Prasanna Chandra
3. Financial Management – I.M.Pandey

M.A.-ECONOMICS

COURSE CODE	COURSE TITLE	L	T	P	C
14P514W	General Financial Services	6	-	-	5

UNIT	SYLLABUS
UNIT 1	Financial Services – meaning – financial services and economic environment – legal and regulatory framework – financial institutions and other participants in the financial services sector – capital and money market – instrument – Government securities market – SWAP analysis.
UNIT 2	Introduction to leasing – Legal and tax aspects – lease evaluation – Merits, Accounting and Reporting for lease – lease funding – Types and lease agreement – Hire purchase Vs Lease – Legal aspects of Hire purchase Vs Lease Legal aspects of Hire purchase – right and duties of hire vendor and hire purchaser
UNIT 3	Factoring – Types and features of factoring agreement – factoring Vs Bills discounting – Service of factor – consumer finance and credit card services – forfeiting.
UNIT 4	Venture capital – Meaning and Characteristics – Criteria for assistance – schemes and guidelines infrastructure financing – assessment of risk – legal aspects
UNIT 5	Mutual Fund – SEBI Guidelines – Features and Types – Management structure and performance evaluation – Growth and recent trends – Investor services – Credit rating agencies – CRISIL – CARE – ICRA – Services – Criteria for rating – symbols.

Books for Reference:

1. Merchant Banking and Financial Services – Dr. V. Balu.
2. Financial Services – B. Santhanam
3. Financial Services and System – Dr.S.Gurusamy

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

PG DEPARTMENT OF COMPUTER SCIENCE
M.C.A. (Computer Application)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **6**

Total No. of Credits: **143**

**SCHEME OF EXAMINATIONS
FIRST SEMESTER**

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
1	Core – 1	Problem solving and Programming	4	3	20	80
2	Core – 2	Data Structures	4	3	20	80
3	Core – 3	Computer Organization	4	3	20	80
4	Core – 4	Practical-I: C Programming Lab	2	3	20	80
5	Core – 5	Practical-II: Data Structure lab	2	3	20	80
6	Non-Major Elective – I	Mathematical foundation and numerical analysis	4	3	20	80
7	Soft skill - I	Language and Communication	2	3	20	80

IA- Internal Assessment ; EA- External Assessment

SECOND SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
8	Core – 6	Operating System	4	3	20	80
9	Core – 7	Object oriented Programming With C++	4	3	20	80
10	Core – 8	Software Engineering	4	3	20	80
11	Core – 9	Practical-III: Object oriented Programming with C++	2	3	20	80
12	Core - 10	Practical-IV: Operating System Lab	2	3	20	80
13	Non-Major Elective – II	Optimizations techniques	4	3	20	80
14	Soft skill – II	Spoken and Presentation Skills	2	3	20	80

THIRD SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
15	Core – 11	Java Programming	4	3	20	80
16	Core – 12	Database Management System	3	3	20	80
17	Core – 13	Visual Programming	3	3	20	80
18	Core – 14	Cloud Computing	3	3	20	80
19	Non-Major Elective – III	Accounting and Financial Management	3	3	20	80
20	Core-15	Practical – Java Programming Lab	2	3	20	80
21	Core-16	Practical – Visual programming and RDBMS	2	3	20	80
22	Soft skill-III	Personality Enrichment	2	3	20	80

IA- Internal Assessment ; EA- External Assessment

FOURTH SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
23	Core – 17	Data Communication and Networking	4	3	20	80
24	Core – 18	Computer Graphics	3	3	20	80
25	Core – 19	Elective-I	3	3	20	80
26	Core – 20	Data mining and Data Warehousing	3	3	20	80
27	Core – 21	C# Programming	3	3	20	80
28	Core - 22	Practical – Data Mining and Data warehousing	2	3	20	80
29	Core- 23	Practical – C# Lab	2	3	20	80
30	Soft skill-IV	Foreign Language	2	3	20	80

IA- Internal Assessment ; EA- External Assessment

FIFTH SEMESTER

S.No.	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks	
					IA	EA
31	Core – 24	Internet Programming	4	3	20	80
32	Core – 25	Soft Computing	4	3	20	80
33	Core – 26	Elective – II	4	3	20	80
34	Core – 27	Elective – III	4	3	20	80
35	Core – 28	Practical – Internet Programming	2	3	20	80
36	Core - 29	Mini Project	2	3	20	80
37		Internship Training	3		20	80

IA- Internal Assessment EA- External Assessment

SIXTH SEMESTER

S.No.	Course Components	Paper Title	Credit	Max. Marks			Hours
				Internal	External	Total	
38	Core -30	Project	20	60	240	300	3

Elective-I

1. Mobile and Pervasive Computing
2. Software Testing
3. Human Resource Management
4. Artificial Intelligence

Elective-II

1. Knowledge Management
2. Information Security
3. Digital Image Processing
4. Supply chain Management

Elective-III

1. Professional Ethics and Human Values
2. Object Oriented Analysis and Design
3. Cyber Crime
4. E-Commerce

COURSE CODE	COURSE TITLE	L	T	P	C
14P611A	Problem solving and Programming	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to computer Problem Solving Introduction – The problem solving aspect – Top down Design – Implementation of algorithms- Program Verifications – Efficiency of Algorithms – Analysis of algorithms
UNIT 2	Introduction – Exchanging the values – counting – Factorial Computation – SINE Computation – Base conversion – Factoring methods – Array Techniques
UNIT 3	Overview of C – Constants, variables and data types – Operators and expressions – Managing Input/Output Operations – Formatted I/O – decision making – Branching – IF, Nested IF – Switch – Goto – Looping – While, do, for statements
UNIT 4	Arrays – Dynamic and multi-dimensional arrays – Character arrays and strings – String handling functions – User Defined functions – Categories of functions – Recursion – Structures and Unions – Array of Structures – Structures and functions
UNIT 5	Pointers – Declaration, Accessing a variable, character strings, pointers to functions and structures – File management in C – Dynamic memory allocation – Linked lists – Pre processors.

TEXTBOOKS

1. R.G. Dromey, “How to solve it by computer”, PHI, 1998
2. E.Balagurusamy, “Programming in Ansi C”, Tata McGraw Hill, 2004

REFERENCES:

1. Deitel and Deitel, “C How to program”, Addison Wesley, 2001
2. Brian W Kernighan & Dennis Ritchie, “C Programming Language”, PHI, 1990
3. Byron S Gottfried, “Schaum’s Outline of Programming with C”, 2nd ed., 1996.

COURSE CODE	COURSE TITLE	L	T	P	C
14P611B	Data Structures	5			4

UNIT	SYLLABUS
UNIT 1	Abstract data types – asymptotic notations – complexity analysis – Arrays – representation of arrays – operations on arrays – ordered lists – polynomials.
UNIT 2	Linked lists: Singly linked list – circular linked lists – doubly linked lists – general lists – stacks queues – circular queues – Evaluation of expressions.
UNIT 3	Trees – Binary Trees – Binary Tree Traversals – Binary Tree Representations – Binary Search Tree – Threaded Binary Trees – Application of Trees (Sets) – Representation of Graphs – Graph Implementation – Graph Traversals – Application of Graph Traversals – Minimum Cost Spanning Trees – Shortest Path Problems.
UNIT 4	Internal Sorting – Optimal Sorting Time – Sorting Large Objects – Sorting with Tapes – Sorting with Disk.
UNIT 5	Hashing – AVL Trees – Red Black Trees – Splay Trees – B Trees.

BOOKS FOR STUDY AND REFERENCE:

1. E. Horowitz, S, Sahni and Mehta – Fundamentals of Data Structures in C++ - Galgotia 2006.
2. Gregory L. Heileman – Data Structures, Algorithms and Object Oriented Programming – Mc Graw Hill International Editions 1996
3. A.V. Aho, J.D. Ullman, J.E. Hopcraft: Data Structures and Algorithms –Pearson
4. Sahni, Data Structure, algorithms and application, McGraw Hill, 2001.

COURSE CODE	COURSE TITLE	L	T	P	C
14P611C	COMPUTER ORGANIZATION	5			4

UNIT	SYLLABUS
UNIT 1	Number Systems and Conversions – Boolean Algebra and Simplification – Minimization of Boolean Functions – Karnaugh Map, Logic Gates – NAND – NOR Implementation
UNIT 2	Design of Combinational Circuits – Adder / Subtractor – Encoder – Decoder – MUX / DEMUX – Comparators, Flip Flops – Triggering – Master – Slave Flip Flop – State Diagram and Minimization – Counters – Registers.
UNIT 3	Functional units – Basic operational concepts – Bus structures – Performance and Metrics – Instruction and instruction sequencing – Addressing modes – ALU design – Fixed point and Floating point operation .
UNIT 4	Processor basics – CPU Organization – Data path design – Control design – Basic concepts – Hard wired control – Micro programmed control – Pipeline control – Hazards – Super scalar operation.
UNIT 5	Memory technology – Memory systems – Virtual memory – Caches – Design methods – Associative memories – Input/Output system – Programmed I/O – DMA and Interrupts – I/O Devices and Interfaces - Multiprocessor Organization – Symmetric multiprocessors – Cache Coherence – Clusters: Non Uniform Memory Access- Vector Computation.

REFERENCES:

1. Morris Mano, “Digital Design”, Prentice Hall of India, Fourth Edition 2007
2. Carl Hamacher, Zvonko Vranesic, Safwat Zaky and Naraig Manjikian, “Computer organization and Embedded Systems”, Sixth Edition, Tata McGraw Hill, 2012.
3. William Stallings, “Computer Organization & Architecture – Designing for Performance” 9th Edition 2012.
4. Charles H. Roth, Jr., “Fundamentals of Logic Design”, Jaico Publishing House, Mumbai, Fourth Edition, 1992.
5. David A. Patterson and John L. Hennessy, “Computer Organization and Design: The Hardware/Software Interface”, Fourth Edition, Morgan Kaufmann / Elsevier, 2009.

COURSE CODE	COURSE TITLE	L	T	P	C
14P612E	OPERATING SYSTEM	5			4

UNIT	SYLLABUS
UNIT 1	Introduction - Multiprogramming - Time sharing - Distributed system - real-time Systems - I/O structure - Dual-mode operation - Hardware protection - General system architecture - Operating system services - System calls - System programs - System design and implementation. Process Management: Process concept - Concurrent process - scheduling concepts - CPU scheduling
UNIT 2	Process Management contd.: Scheduling algorithms, Multiple processors Scheduling - Critical section - Synchronization hardware - Semaphores, classical problem of synchronization, Interprocess communication. Deadlocks: Characterization, Prevention, Avoidance and Detection.
UNIT 3	Storage management - Swaping, single and multiple partition allocation - paging - segmentation - pages segmentation, virtual memory - demand paging - page replacement and algorithms, thrashing. Secondary storage management - disk structure - free space management - allocation methods - disk scheduling - performance and reliability improvements - storage hierarchy.
UNIT 4	Files and protection - file system organisation - file operations - access methods - consistency semantics - directory structure organisation - file protection - implementation issues - security - encryption.
UNIT 5	Case Studies: MS-DOS and UNIX operating systems.

Books for study:

1. A. Silberschatz and P.B. Galvin - Operating System Concepts - Addison-Wesley Publishing Company.
2. A.S. Godbole – Operating Systems – Tata McGraw Hill – 1999.

COURSE CODE	COURSE TITLE	L	T	P	C
14P612G	OBJECT ORIENTED PROGRAMMING WITH C++	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to OOP – Overview of C++ - Classes – Structures – Union – Friend Functions – Friend Classes – Inline functions – Constructors – Destructors – Static Members – Scope Resolution Operator – Passing objects to functions – Function returning objects.
UNIT 2	Arrays – Pointers – this pointer – References – Dynamic memory Allocation – functions overloading – Default arguments – Overloading Constructors – Pointers to Functions – Ambiguity in function overloading.
UNIT 3	Operator Overloading – Members Operator Function – Friend Operator Function – Overloading some special operators like [], (), a comma operator – Inheritance – Types of Inheritance – Protected members – Virtual base class – Polymorphism – Virtual functions – Pure virtual functions.
UNIT 4	Class templates and generic classes – Function templates and generic functions – Overloading a function templates – power of templates – Exception Handling – Derived class Exception – overhandling generic functions – Exception handling functions – terminate() unexpected() – Uncaught – exception();
UNIT 5	Streams – Formations I/O with ios class functions and manipulators – creating own manipulator – overloading << and >> - File I/O – Name spaces – conversion functions – Array based I/O – Standard Template Library (STL).

BOOKS FOR STUDY AND REFERENCE:

1. Herbert Schildt, C++ - The Complete Reference, Third Edition – Tata McGraw Hill – 1999.
2. J.P. Cohoon and J.W. Davidson, C++ Program Design – An Introduction to Programming and Object-oriented Design – 2nd Edition – McGraw Hill 1999.
3. Johnson, C++ programming today, PHI 2002.

COURSE CODE	COURSE TITLE	L	T	P	C
14P612J	SOFTWARE ENGINEERING	5			4

UNIT	SYLLABUS
UNIT 1	The Product – The Process – Project Management Concepts – Software Projects and Project Metrics.
UNIT 2	Software Project Planning – Risk Analysis and Management – Project Scheduling and Tracking Software Quality Assurance.
UNIT 3	Software Configuration Management – System Engineering – Analysis Concepts and Principles – Analysis Modeling.
UNIT 4	Design Concepts and Principles – Architectural Designs – User Interface Design
UNIT 5	Component Level Design – Software Testing Techniques – Software Testing Strategies – Techniques – Metrics for Software.

BOOKS FOR STUDY AND REFERENCES:

1. R S Pressman – Software Engineering A Practitioner's Approach – 5th Edition – McGraw Hill.
2. Ian Sommerville – Software Engineering – 5th Edition – Addison Wesley.

COURSE CODE	COURSE TITLE	L	T	P	C
14P613K	JAVA PROGRAMMING	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to Java – Features of Java – Object Oriented Concepts – Lexical Issues – Data Types – Variables – Arrays – Operators – Control Statements. Classes – Objects – Constructors – Overloading method – Access Control – Static and fixed methods – Inner Classes – String Class – Inheritance – Overriding methods – Using super – Abstract class.
UNIT 2	Packages – Access protection – Importing Packages – Interfaces – Exception Handling – Throw and Throws – Thread – Synchronization – Messaging – Runnable Interface – Inter thread Communication – Deadlock – Suspending, Resuming and Stopping threads – Multithreading.
UNIT 3	I/O Streams – File Streams – Applets – Events Handling – String Objects – String Buffer – Char Array – Java Utilities – Code Documentation.
UNIT 4	Network basics – Socket Programming – Proxy Servers – TCP / IP Sockets – Net Address – URL – Datagrams – Working with windows using AWT Classes – AWT Controls – Layout Managers and Menus, JDBC connectivity.
UNIT 5	Servlets – Environment and Role – Architectural Role for servlets – HTML support – Generation – Server side – Installing Servlets – Servlets APT – servlet life cycle – HTML to servlet communication.

BOOKS FOR STUDY AND REFERENCES:

1. Cay S. Horstmann, Gary Cornell – Core Java 2 Volume I – Fundamentals – Addison Wesley, 1999.
2. P Naughton and H Schildt – Java 2 (The Complete Reference) – Third Edition. TMH, 1999.
3. D R Callaway, Inside Servlets, Addison Wesley.
4. Karl Moss, Java Servlets, TMH Edition.
5. Web using java 2 PHI, 2000.

COURSE CODE	COURSE TITLE	L	T	P	C
14P613L	DATABASE MANAGEMENT SYSTEMS	5			3

UNIT	SYLLABUS
UNIT 1	Database Concepts – ER Model – Basic Concepts – Constraints – Keys ER Diagram – Reduction of ER Schema – UML – Design of an ER Database Schema – Relational Model – Relational Algebra – Views – Tuple Relational Calculus – Domain Relational Calculus – Relational Database – SQL – Basic Structure – Set Quotation – Sub Queries – Join Relation – DDL – DML – Embedded SQL, QBE.
UNIT 2	Integrity & Security – Domain Constraints – Referential Integrity – Assertion – Triggers – Authorization – in SQL – Relational Database Design – 1 st , 2 nd , 3 rd , 4 th , BCNF normal forms – Decomposition.
UNIT 3	Object Relational Data Model – Nested Relations – Complex types – Inheritance – Reference – types – Querying with complex types – Functions & Procedures – Object Oriented Versus Object Relational – Introduction to XML concepts – Storage and File Structure – Physical Storage Media – File Organization, Data Dictionary Storage, Storage for Object Oriented Database, Organization of records in files.
UNIT 4	Indexing and Hashing – Basic Concepts – Static Hashing – Dynamic – Multiple Key Access – Query Processing – Selection Operation – Sorting – Join Operation Transaction – Concepts – State – Atomicity & amiability – Serializability – Transaction Definition in SQL – Concurrency Control – Protocols – Deadlock Handling.
UNIT 5	Database System Architecture – Centralized & Client Server Architecture – Server System Architecture – Parallel Systems – Networks Types – Distributed Database – Homogeneous & Heterogeneous Database – Distributed Data Storage – Case Study – Oracle.

BOOKS FOR STUDY AND REFERENCES:

1. A. Silbersehatz, H.F. Korth and Sudharsan, Database System Concepts – 4th Edition, McGraw Hill International Edition.
2. Jeffrey D. Ullman: Principles of Data Base Systems, Galgotia Publishers, 1988.
3. C.J. Date, An Introduction to Data Base Systems, 3rd Edition, Narosa (1985)

COURSE CODE	COURSE TITLE	L	T	P	C
14P613M	VISUAL PROGRAMMING	5			3

UNIT	SYLLABUS
UNIT 1	Customizing a Form – Writing Simple Programs – Toolbox – Creating Controls – Name Property – Command Button – Access keys – Image Controls – Text Boxes – Labels – Message Boxes – Grid Editing Tools – Variables – Data Types – String – Numbers.
UNIT 2	Displaying Information – Determinate Loops – Indeterminate Loops – Conditionals – Built-in functions – Functions and Procedures
UNIT 3	Lists – Arrays – Sorting and Searching – Records – Control Arrays – Combo Boxes – Grid Control – Projects with Multiple forms – Do Events and Sub Main – Error Trapping.
UNIT 4	VB Objects – Dialog Boxes – Common Controls – Menus – MDI Forms – Testing, Debugging and Optimization – Working with Graphics.
UNIT 5	Monitoring Mouse activity – File Handling – File System Controls – File System Objects – COM/OLE Automation – DLL Servers – OLE Drag and Drop.

BOOKS FOR STUDY AND REFERENCE:

1. Gary Cornell – Visual Basic 6 from the Ground up – Tata McGraw Hill, 1999.
2. Noel Jerke – Visual Basic 6 (The Complete Reference) - Tata McGraw Hill, 1999.

COURSE CODE	COURSE TITLE	L	T	P	C
14P613M	CLOUD COMPUTING	5			3

UNIT	SYLLABUS
UNIT 1	Cloud Computing – History of Cloud Computing – Cloud Architecture – Cloud Storage – Why Cloud Computing Matters – Advantages of Cloud Computing – Disadvantages of Cloud Computing – Companies in the Cloud Today – Cloud Services .
UNIT 2	Web-Based Application – Pros and Cons of Cloud Service Development – Types of Cloud Service Development – Software as a Service – Platform as a Service – Web Services – On-Demand Computing – Discovering Cloud Services Development Services and Tools – Amazon Ec2 – Google App Engine – IBM Clouds
UNIT 3	Centralizing Email Communications – Collaborating on Schedules – Collaborating on To-Do Lists – Collaborating Contact Lists – Cloud Computing for the Community – Collaborating on Group Projects and Events – Cloud Computing for the Corporation.
UNIT 4	Collaborating on Calendars, Schedules and Task Management – Exploring Online Scheduling Applications – Exploring Online Planning and Task Management – Collaborating on Event Management – Collaborating on Contact Management – Collaborating on Project Management – Collaborating on Word Processing - Collaborating on Databases – Storing and Sharing Files .
UNIT 5	Collaborating via Web-Based Communication Tools – Evaluating Web Mail Services – Evaluating Web Conference Tools – Collaborating via Social Networks and Groupware – Collaborating via Blogs and Wikis

REFERENCES

1. Michael Miller, Cloud Computing: Web-Based Applications That Change the Way You Work and Collaborate Online, Que Publishing, August 2008.
2. Haley Beard, Cloud Computing Best Practices for Managing and Measuring Processes for On-demand Computing, Applications and Data Centers in the Cloud with SLAs, Emereo Pty Limited, July 2008

COURSE CODE	COURSE TITLE	L	T	P	C
14P614Q	DATA COMMUNICATION AND NETWORKING	5			4

UNIT	SYLLABUS
UNIT 1	Introduction to data communication, network protocols & standards and standard organization line configuration – topology – Transmission mode – Classification of network – OSI model – layer of OSI model.
UNIT 2	Parallel and serial Transmission – DTE/DCE/such as EIA-449, EIA-202 and X21 interface – Interface standards – Modems – Guided Media – Unguided Media – Performance – types of Error – Error Detection – Error corrections
UNIT 3	Multiplexing – Types of Multiplexing – Multiplexing Application – Telephone system – Project 802 – Ethernet – Token Bus – Token Ring – FDDI – IEEE 802.6 – SMDS – Circuit Switching – Packet Switching – Message switching – Connection Oriented and Connectionless services.
UNIT 4	History of Analog and Digital Network – Access to ISDN – ISDN Layers – Broadband ISDN – X.25 Layers – Packet Layer Protocol – ATM – ATM Protocol.
UNIT 5	Repeaters – Bridges – Routers – Gateway – Routing algorithms – TCP/IP Network, Transport and Application Layers of TCP/IP – World Wide Web .

BOOKS FOR STUDY:

1. Behrouz and forouzan - Introduction to Data Communication and Networking – 2nd Edition – TMH- 2001.
2. Jean Walrand – Communication Networks (A first Course) – Second Edition – WCB/McGraw Hill – 1998.

COURSE CODE	COURSE TITLE	L	T	P	C
14P614R	COMPUTER GRAPHICS	5			3

UNIT	SYLLABUS
UNIT 1	Video Display Devices – Raster Scan Systems – Input Devices – Hard Copy Devices – Graphics Software – Output Primitives.
UNIT 2	Two-Dimensional Transformation – Clipping – Window-view port mapping.
UNIT 3	User dialogue – Input of Graphical Data – Input Functions – Input Device Parameters – Picture Construction Techniques – Virtual Reality Environments.
UNIT 4	Three Dimensional Concepts – 3D Transformations – 3D Viewing
UNIT 5	Visible – Surface Detection: Back – Face Detection – Depth – Buffer Method – Scan Line Method – A Buffer Method – Properties of light – Infinitive Color Concepts – RBG Color Models – Computer Animation.

BOOKS FOR STUDY AND REFERENCES:

1. D Hearn and M P Baker – Computer Graphics – 2nd Edition – PHI – 1998.
2. W M Neumann and R F Sproull – Principle of Interactive Computer Graphics – McGraw Hill – 1979.
3. Foley, Van Dam, Hughes – Computer Graphics – Addison Wesley – 2000.
4. Steven Harrington – Computer Graphics, McGraw Hill, 1989.

COURSE CODE	COURSE TITLE	L	T	P	C
14P614S	DATA WAREHOUSING AND DATA MINING	5			3

UNIT	SYLLABUS
UNIT 1	Introduction: Data Mining Tasks – Data Mining versus Knowledge Discovery in Databases – Relational Databases – Data Warehouses – Transactional Databases – Object Oriented Databases – Spatial Databases – Temporal Databases – Text and Multimedia Databases – Heterogeneous Databases - Mining Issues – Social Implications of Data Mining.
UNIT 2	Data Preprocessing: Reasons for Preprocessing the Data – Data Cleaning – Data Integration – Data Transformation – Data Reduction – Data Discretization.
UNIT 3	Data Mining Techniques: Association Rules-Frequent Pattern Mining – The Apriori Algorithm – Multilevel Association Rules – Multidimensional Association Rules – Constraint based Association Mining.
UNIT 4	Classification and Prediction: Issues regarding Classification and Prediction – Decision Tree Induction – Bayesian Classification – Backpropagation – Other Classification Methods – Prediction – Classifier Accuracy.
UNIT 5	Clustering Techniques: Cluster Analysis – Clustering Methods – Hierarchical Methods – Density based Methods – Outlier Analysis – Spatial Mining , Multimedia Mining, Text Mining and Web Mining

TEXTS BOOK:

1. J. Han and M. Kamber, “Data Mining : Concepts and Techniques”, 2nd Edition, Morgan Kaufmann, 2006.

REFERENCE BOOKS:

1. M. H. Dunham, “Data Mining : Introductory and Advanced Topics” , Pearson Education, 2006
2. Paulraj Ponnaiah, “Data Warehousing Fundamentals”, Wiley , 2001.
3. S.N. Sivananda and S. Sumathi, “Data Mining : Concepts, Tasks and Techniques” , Thomson , 2006.
4. G.K Gupta, “Introduction to Data Mining with Case Studies”, PHI, 2006.

COURSE CODE	COURSE TITLE	L	T	P	C
14P614T	C# PROGRAMMING	5			3

UNIT	SYLLABUS
UNIT 1	Introduction to C # - Overview of C#: Programming structure of C#, - Literals, variables and data types - scope of variables, boxing and unboxing.- Operators and expression -Decision making and branching -Decision making and looping - Methods in C# : declaring methods, the main method, invoking methods, nesting of methods, methods parameters, pass by value, pass by reference, the output parameters, variable arguments list, method overloading.
UNIT 2	Arrays - String handling - Classes and Objects : Basic principles of OOP's, class, objects, constructors, static members, static constructors, private constructors, copy constructors, destructors, member initialization, the this reference, nesting of classes, constant members, read only members, properties, indexers.
UNIT 3	Inheritance and polymorphism : classical inheritance, containment inheritance, defining a subclass, visibility control, defining subclass constructors, multilevel inheritance, hierarchical inheritance, overriding methods, hiding methods, abstract classes, abstract methods,sealed classes : Preventing inheritance, sealed methods, polymorphism.
UNIT 4	Interfaces : Multiple Inheritance : defining an interface, extending an interface, implementing interface, interface & inheritance, explicit interface implementation, abstract class and interface. - Operator overloading : overloadable operators, need for operator overloading, defining Operator overloading, overloading unary operators, overloading binary operators, overloading comparison operator.
UNIT 5	Managing Errors and Exceptions : Types of errors, exceptions, syntax of exception handling code, multiple catch statement, the exception hierarchy, general catch handler, using final statement, nested try blocks, throwing our own exceptions, checked and unchecked operators,using exceptions for debugging.

Books for References

- 1.C# programming by Balguruswamy.
2. Pro C# 2008 and the .NET 3.5 Platform, Fourth Edition (Windows.Net) Author: Andrew Troelsen
3. Illustrated C# 2008 (Windows.Net) Author: Daniel Solis
4. Professional C# 2008,Authors: Christian Nagel, Bill Evjen, Jay Glynn, and Morgan Skinner
5. Microsoft Visual C# 2008 Step by Step,Author: John Sharp

COURSE CODE	COURSE TITLE	L	T	P	C
14P614ZA	SOFTWARE TESTING	5			3

UNIT	SYLLABUS
UNIT 1	Introduction : Purpose – Productivity and Quality in Software –Testing Vs Debugging – Module for Testing – Bugs – Types of Bugs – Testing and Design Style
UNIT 2	Flow/Graphs and Path Testing – Achievable paths – Path instrumentation – Application – Transaction Flow Testing Techniques – Data Flow Testing Strategies
UNIT 3	Domain Testing : Domains and Paths – Domains and Inter face Testing – Linguistic – Metrics – Structural Metric – Path Products and Path Expressions.
UNIT 4	Syntax Testing – Formats – Test Cases – Logic Based Testing – Decision Table – Transition Testing – States, States Graph, State Testing.
UNIT 5	Verification and Validation – Fundamental Tools- Levels of Testing – Testing Approaches – Types of Testing – Test Plan –Software Testing Tools: WinRunner –Skill Test

Recommended Texts

- i) B.Beizer, 2003, Software Testing Techniques, II Edn., Dream Tech India., New Delhi.
- ii) K.V.KK.Prasad, 2005,Software Testing Tools, DreamTech. India, New Delhi.

Reference Books

- i) I. Burnstein, 2003,Practical Software Testing , Springer International Edn.
- ii) E. Kit, 1995, Software Testing in the Real World: Improving the Process, Pearson Education, Delhi.
- iii) R.Rajani, and P.P.Oak,2004, Software Testing, Tata Mcgraw Hill, New Delhi.

COURSE CODE	COURSE TITLE	L	T	P	C
14P615U	INTERNET PROGRAMMING	5			4

UNIT	SYLLABUS
UNIT 1	Internet Basic – Introduction to HTML – List – Creating Table – Linking document – Frame Graphics to HTML Doc – Style sheet basic – Add style to document - Creating style sheet rules – Style sheet properties – Font – Text – List – Color and background color – box – displaying properties
UNIT 2	Introduction to JavaScript – Advantage of JavaScript – JavaScript Syntax –Datatype -variable – Array – Operator and Expression – Looping Constructor – Functions – Dialog box - DOM
UNIT 3	Introduction to .Net Framework - Introducing ASP .NET – Creating and deploying ASP .NET applications – Web forms – Web controls – working with events – Rich web controls – Custom web controls – Validation controls – Debugging ASP .NET pages.
UNIT 4	Introduction to web services – Web services Infrastructure – SOAP – Building a web service – Deploying and publishing web services – Finding web services – Consuming web services
UNIT 5	Basics of ADO .NET – Changes from ADO – Data Table – Data Views – Data Set – Data Relation Type – ADO .NET Managed Providers – OleDb and SQL Managed Providers – OleDb Data Adapter Type.

References Books

- 1.HTML Java Script,DHTML and PHP by Ivan Bayross
- 2.HTML,XHTML,CSS by Steven M.Schafer.
- 3.Java Script Demystified by Jim Keogh
- 4.Complete Reference ASP.Net by Mac Donald.

COURSE CODE	COURSE TITLE	L	T	P	C
14P615V	SOFT COMPUTING	5			4

UNIT	SYLLABUS
UNIT 1	Evolution of Computing - Soft Computing Constituents – From Conventional AI to Computational Intelligence - Machine Learning Basics .
UNIT 2	Introduction, Building block hypothesis, working principle, Basic operators and Terminologies like individual, gene, encoding, fitness function and reproduction, Genetic modeling: Significance of Genetic operators, Inheritance operator, cross over, inversion & deletion, mutation operator, Bitwise operator, GA optimization problems, JSP (Job Shop Scheduling Problem), TSP (Travelling Salesman Problem), Differences & similarities between GA & other traditional methods, Applications of GA.
UNIT 3	Machine Learning using Neural Network, Adaptive Networks – Feed Forward Networks – Supervised Learning Neural Networks – Radial Basis Function Networks - Reinforcement Learning – Unsupervised Learning Neural Networks – Adaptive Resonance Architectures – Advances in Neural Networks
UNIT 4	Fuzzy Sets – Operations on Fuzzy Sets – Fuzzy Relations – Membership Functions- Fuzzy Rules and Fuzzy Reasoning – Fuzzy Inference Systems – Fuzzy Expert Systems – Fuzzy Decision Making
UNIT 5	Adaptive Neuro-Fuzzy Inference Systems – Coactive Neuro-Fuzzy Modeling – Classification and Regression Trees – Data Clustering Algorithms – Rule base Structure Identification – Neuro-Fuzzy Control – Case Studies.

REFERENCES:

1. Jyh-Shing Roger Jang, Chuen-Tsai Sun, Eiji Mizutani, “Neuro-Fuzzy and Soft Computing”, Prentice-Hall of India, 2003
2. Kwang H.Lee, “First course on Fuzzy Theory and Applications”, Springer-Verlag Berlin Heidelberg, 2005.
3. George J. Klir and Bo Yuan, “Fuzzy Sets and Fuzzy Logic-Theory and Applications”, Prentice Hall, 1995.
4. James A. Freeman and David M. Skapura, “Neural Networks Algorithms, Applications, and Programming Techniques”, Pearson Edn., 2003.
5. David E. Goldberg, “Genetic Algorithms in Search, Optimization and Machine Learning”, Addison Wesley, 2007.

COURSE CODE	COURSE TITLE	L	T	P	C
14P61ZC	<i>INFORMATION SECURITY</i>	5			4

UNIT	SYLLABUS
UNIT 1	Introduction: Security- Attacks- Computer criminals- Method of defense Program Security: Secure programs- Non-malicious program errors- Viruses and other malicious code- Targeted malicious code- Controls against program threats.
UNIT 2	Operating System Security: Protected objects and methods of protection- Memory address protection- Control of access to general objects- File protection mechanism- Authentication: Authentication basics- Password- Challenge-response- Biometrics.
UNIT 3	Database Security: Security requirements- Reliability and integrity- Sensitive data- Inference- Multilevel database- Proposals for multilevel security.
UNIT 4	Security in Networks: Threats in networks- Network security control- Firewalls- Intrusion detection systems- Secure e-mail- Networks and cryptography- Example protocols: PEM- SSL- Ipsec.
UNIT 5	Administering Security: Security planning- Risk analysis- Organizational security policies- Physical security - Legal- Privacy- and Ethical Issues in Computer Security - Protecting programs and data- Information and law- Rights of employees and employers- Software failures- Computer crime- Privacy- Ethical issues in computer society- Case studies of ethics.

Recommended Texts

1. C. P. Pfleeger, and S. L. Pfleeger, Security in Computing, Pearson Education, 4th Edition, 2003
2. Matt Bishop, Computer Security: Art and Science, Pearson Education, 2003.

COURSE CODE	COURSE TITLE	L	T	P	C
14P61ZB	PROFESSIONAL ETHICS AND HUMAN VALUES	5			4

UNIT	SYLLABUS
UNIT 1	Morals, Values and Ethics – Integrity – Work Ethic – Service Learning – Civic Virtue – Respect for Others – Living Peacefully – caring – Sharing – Honesty – Courage – Valuing Time – Co-operation – Commitment – Empathy – Self-Confidence – Character – Spirituality
UNIT 2	Senses of 'Engineering Ethics' - variety of moral issued - types of inquiry - moral dilemmas - moral autonomy - Kohlberg's theory - Gilligan's theory - consensus and controversy – Models of Professional Roles - theories about right action - Self-interest - customs and religion - uses of ethical theories.
UNIT 3	Engineering as experimentation - engineers as responsible experimenters - codes of ethics - a balanced outlook on law - the challenger case study
UNIT 4	Safety and risk - assessment of safety and risk - risk benefit analysis and reducing risk - the three mile island and chernobyl case studies. Collegiality and loyalty - respect for authority - collective bargaining - confidentiality - conflicts of interest - occupational crime - professional rights - employee rights - Intellectual Property Rights (IPR) - discrimination.
UNIT 5	Multinational corporations - Environmental ethics - computer ethics - weapons development - engineers as managers-consulting engineers-engineers as expert witnesses and advisors -moral leadership-sample code of Ethics like ASME, ASCE, IEEE, Institution of Engineers(India), Indian Institute of Materials Management, Institution of electronics and telecommunication engineers(IETE),India, etc.

TEXT BOOKS

1. Mike Martin and Roland Schinzinger, “Ethics in Engineering”, McGraw-Hill, New York 1996.
2. Govindarajan M, Natarajan S, Senthil Kumar V. S, “Engineering Ethics”, Prentice Hall of India, New Delhi, 2004.

REFERENCES

1. Charles D. Fleddermann, “Engineering Ethics”, Pearson Education / Prentice Hall, New Jersey, 2004 (Indian Reprint)

2. Charles E Harris, Michael S. Protchard and Michael J Rabins, “Engineering Ethics – Concepts and Cases”, Wadsworth Thompson Learning, United States, 2000 (Indian Reprint now available)
3. John R Boatright, “Ethics and the Conduct of Business”, Pearson Education, New Delhi, 2003.
4. Edmund G Seebauer and Robert L Barry, “Fundamentals of Ethics for Scientists and Engineers”, Oxford University Press, Oxford, 2001.

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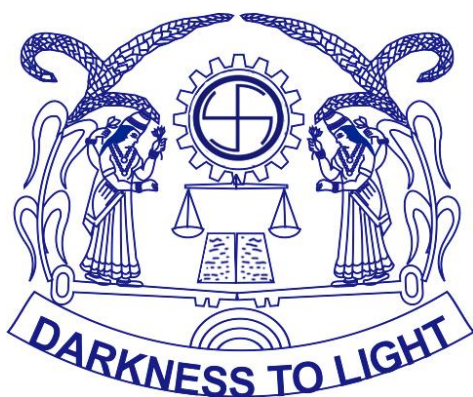
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Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COMMERCE

M.Com. (Commerce)



SYLLABUS

(Choice Based Credit System)

Total No. of Semesters: 4

Total No. of Credits: 72

**SCHEME OF EXAMINATIONS
FIRST YEAR**

SEMESTER – I

PAPER NO	SUBJECTS	INSTRUCTIONAL HOURS PER WEEK	EXAM DURATION HOURS	TOTAL MARKS	CREDITS
1	ADVANCED FINANCIAL MANAGEMENT	6	3	100	4
2	ADVANCED CORPORATE ACCOUNTING	6	3	100	4
3	ADVANCED MARKETING MANAGEMENT	6	3	100	3
4	SECURITIES & PORTFOLIO MANAGEMENT	6	3	100	3
5	<u>ALLIED:</u> MANAGERIAL ECONOMICS	6	3	100	2

SEMESTER – II

PAPER NO	SUBJECTS	INSTRUCTIONAL HOURS PER WEEK	EXAM DURATION HOURS	TOTAL MARKS	CREDITS
6	CORPORATE LAWS	6	3	100	4
7	ADVANCED COST & MANAGEMENT ACCOUNTING	6	3	100	4
8	SERVICES MARKETING MANAGEMENT	6	3	100	4
9	BUSINESS POLICY AND STRATEGY	6	3	100	3
10	<u>ALLIED:</u> OPERATION RESEARCH	6	3	100	3

SECOND YEAR**SEMESTER – III**

PAPER NO	SUBJECTS	INSTRUCTIONAL HOURS PER WEEK	EXAM DURATION HOURS	TOTAL MARKS	CREDITS
11	ENTREPRENEURIAL DEVELOPMENT	6	3	100	4
12	FUNDAMENTALS OF INFORMATION TECHNOLOGY	6	3	100	4
13	DIRECT TAXES	6	3	100	4
14	HUMAN RESOURCES MANAGEMENT	6	3	100	3
15	BUSINESS RESEARCH METHODS	6	3	100	3

SEMESTER – IV

PAPER NO	SUBJECTS	INSTRUCTIONAL HOURS PER WEEK	EXAM DURATION HOURS	TOTAL MARKS	CREDITS
16	ORGANISATIONAL BEHAVIOUR	6	3	100	4
17	INDIRECT TAXES	6	3	100	4
18	FINANCIAL MARKETS AND SERVICES	6	3	100	4
19	MARKETING RESEARCH AND CONSUMER BEHAVIOUR	6	3	100	3
20	PROJECT REPORT & VIVA-VOCE MAXIMUM MARKS FOR PROJECT: REPORT : 80MARKS VIVA-VOCE : 20 MARKS	6	3	200	5

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Course Code	COURSE TITLE	L	T	P	C
16P811A	ADVANCED FINANCIAL MANAGEMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	Nature of Financial Management – Objectives – Scope and Functions - Time value of money.
UNIT 2	Capital Structure – Factors influencing capital structure – Theories – Cost of Capital – Significance – various sources of finance – Weighted Average Cost of Capital. (Theory & Problems)
UNIT 3	Leverages – Financial and Operating leverages – Utilities and limitations – Financial Ratios and implications. (Theory & Problems)
UNIT 4	Capital budgeting decisions – techniques – Capital Rationing – Risk analysis and Capital Budgeting. (Theory & Problems) Working Capital Management – Concepts – determinants – sources of working capital – Management of cash, inventory and receivables. (Theory & Problems)
UNIT 5	Dividend Policy and retained earnings – Factors affecting dividend decisions – Theories, dividend payment – procedure – Stock dividend and stock splits. (Theory & Problems)

REFERENCE BOOKS:

1. Financial Management – I M Pandey
2. Financial Management – S C Kuchal
3. Fundamentals of Financial Management – James C Vanhorne

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Course Code	COURSE TITLE	L	T	P	C
14P811B	ADVANCED CORPORATE ACCOUNTING	6	-		4

UNIT	SYLLABUS
UNIT 1	Issue of Shares, Debentures, Underwriting, Valuation of goodwill and shares – Final Statement of Companies – Profit Prior to Incorporation and calculation of Managerial Remuneration.
UNIT 2	Acquisition, Amalgamation, Absorption and Internal & External Reconstruction – Liquidation of companies (Excluding Statement of Affairs).
UNIT 3	Consolidated financial Statement of Holding and Subsidiary companies – Intercompany holdings and Owings – Treatment of Dividend (Excluding Consolidated Profit and Loss account).
UNIT 4	Final Statement of Banking and Insurance companies – Accounting for Price level changes – Social Responsibility Accounting – Human Resource Accounting.
UNIT 5	Basic Principles of accounting theory and practice – Mandatory Accounting Standards issued by ICAI.

REFERENCE BOOKS:

1. M C Shukla and T S Grewal – Advanced Accounts
2. R L Gupta and M Radhaswamy – Advanced Accounts
3. S P Jain and K L Narang – Advanced Accounts
4. T S Reddy and murthy – Corporate Accounting

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Course Code	COURSE TITLE	L	T	P	C
16P811C	ADVANCED MARKETING MANAGEMENT	6	-		3

UNIT	SYLLABUS
UNIT 1	Marketing – Advanced Definition – Concept – Marketing as a Managerial function – Relationship Marketing - Marketing mix – Marketing environment.
UNIT 2	Market segmentation and targeting and positioning – Targeting strategies – Product management – PLC conditions and strategies in phases – Emerging issues in product policy -Internet and new product development.
UNIT 3	Pricing – Meaning – Price decision frame work – Pricing tactics – Internet and pricing – E-auctions - Distribution function – Impact of internet on distribution – Major distribution alternatives, logistics management.
UNIT 4	Advertising Management – Advertising Decision – Evaluating advertising effectiveness – On line advertising - Sales promotion & Brand image – Personality and motivation profit of an effective sales person.
UNIT 5	Direct marketing – Global marketing – Impact of ICT in Global Marketing – Green marketing mix and strategy – Strategies for Customer Loyalty Development.

REFERENCE BOOKS:

1. Philip Kotler: Principles of Marketing , Pearson Education
2. Marketing management – Rajansaxena Mc Graw Hill Education (India) Private Ltd., New Delhi.
3. Marketing Management – M. Vidhya – MJP Publishers
4. Marketing – J. Jayasankar – Margham Publications
5. Marketing Management – C.B. Gupta – Sultan Chand & Sons
6. Marketing – Dr. N. Rajan Nair – Sultan Chand & Sons

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Course Code	COURSE TITLE	L	T	P	C
14P811D	SECURITIES & PORTFOLIO MANAGEMENT	6	-		3

UNIT	SYLLABUS
UNIT 1	Introduction to securities – Market for securities – Securities returns and risks – Economic forecasting and stock investment decisions.
UNIT 2	Bonds - The Strategic role of bonds – Major factors of bond rating –Options & Futures. Stock rights – Warrants – Convertible securities.
UNIT 3	Technical analysis – Market indicators – Forecasting and individual stock performance – Efficient market hypothesis.
UNIT 4	Portfolio Analysis – Why portfolios? – Effects of combining securities – Portfolio selection – Risk and investors preferences – Selecting best portfolio.
UNIT 5	Capital market theory – Capital – Asset Pricing model – Test the Capital – Asset Pricing Model classification of managed portfolios – Management performance evaluation.

REFERENCE BOOKS:

1. Security Analysis & portfolio Management – Donald E. Fischer & Ronald J. Jordon – Prentice – Hall of India Private Ltd., New Delhi.
2. Security Analysis and portfolio management – Punithavathy Pandian.
3. Portfolio Management – Kevin S
4. Investment Management security Analysis – Natarajan L

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Course Code	COURSE TITLE	L	T	P	C
14P811E	<u>ALLIED:</u> MANAGERIAL ECONOMICS	6	-		2

UNIT	SYLLABUS
UNIT 1	Nature and Significance of Managerial Economics – Risk – Uncertainty and probability analysis – Approach of Managerial decision making and theory of firm.
UNIT 2	Supply and Demand Analysis – Basic concepts – Tools of analysis for demand forecasting for consumer durable and capital goods.
UNIT 3	Cost analysis; Break even analysis, Short run and Long run Cost function, Production function – cost, Price –Output relations, Capital Investment analysis.
UNIT 4	Market structure, Pricing, and Output, General equilibrium, Product policy rates, Promotion and Market strategy – Advertisement rates model – Advertisement Budget.
UNIT 5	Pricing Methods – Pricing new product – Price regulation – Profit & Profit management – Profit planning and forecasting.

REFERENCE BOOKS:

1. D.N. Dwivedi – Managerial Economics, New Delhi – Vikas Publication
2. Peterson – Managerial Economics, 4th Edition Persons Education, New Delhi, 2002.
3. Mote and Paul – Managerial Economics, TMH, New Delhi.

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Course Code	COURSE TITLE	L	T	P	C
16P812G	CORPORATE LAWS	6	-		4

UNIT	SYLLABUS
UNIT 1	SEBI Regulations – Corporate Governance – Clause 49 A – Transparency – Disclosures relating to accounting treatment, Risk Management – Application of Funds.
UNIT 2	Competition Act, 2002 – Important provisions – Foreign Exchange Management Act (FEMA) 1999 – Legal definitions and Important Provisions.
UNIT 3	Intellectual Property Rights – Patents Act 1970 – Copy Rights – Information Technology Act 2000 – Legal definitions and Important Provisions.
UNIT 4	The Environment Protection Act, 1986 – Important terms – Legal definitions and Important Provisions relating to the Prevention and control of Environmental Pollution.
UNIT 5	Consumer protection act, 1986 – Legal definitions and Important Provisions - MRTP Act - Legal definitions and Important Provisions relating to Restrictive Trade Practices and unfair Trade Practices.

REFERENCE BOOKS:

1. Corporate Laws – J. Jayasankar – Margham Publications
2. Gulshan, S.S.A Hand Book of Corporate Laws, S. Chand & Co, New Delhi.
3. Kuchhal, M.C. Mercantile Law, Vikas Publishing House, New Delhi.
4. M.C. Shukla – A Manual of Mercantile Law, S. Chand & Co., New Delhi.

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Course Code	COURSE TITLE	L	T	P	C
14P812H	ADVANCED COST AND MANAGEMENT ACCOUNTING	6	-		4

UNIT	SYLLABUS
UNIT 1	Installation of costing system and Records required to be maintained trader the companies act – Management Control and information system – Cost Reduction and Cost Control Techniques – Control over wastage, Scrap, Spoilage and Defective.
UNIT 2	Costing method – Process costing – Treatment of Equivalent production / units – Contract costing – Operating costing JIT costing – Treatment of joint product and by products.
UNIT 3	Standard costing and variance analysis – Material, Labour, Overhead, Variance – Budgeting and Budgets.
UNIT 4	Cost Volume profit analysis – Decision making under marginal costing techniques.
UNIT 5	Financial statement analysis – Funds flow and cash flow statement.

REFERENCE BOOKS:

1. S.N. Maheswari : Cost and Management Accounting – Sultan Chand & Sons
2. S.P. Jain and Narang : Cost and Management Accounting – Kalyani Publishers
3. T.S. Reddy and Y. Hariprasad Reddy : Cost and Management Accounting - Margham
4. Choudary Anu Prasad Roy & Aristava Bhattachang : Cost & Management Accounting.

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Course Code	COURSE TITLE	L	T	P	C
16P812J	SERVICES MARKETING MANAGEMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	Introduction – Definition – Nature of Services – Characteristics of services – Need for services marketing.
UNIT 2	Service marketing mix (7Ps) – Service Product – Development – Service Pricing – Objectives – Pricing Decision – Special issues of pricing in services sector – Service Distribution – Direct distribution indirect distribution - Franchising.
UNIT 3	Service Promotion – Advertising media for services – Sales Promotion – Major decision – Personal selling – Personal selling process.
UNIT 4	People Mix – Developing Customer -Conscious Employees – Service Process – Designing Service Process – Physical Evidence – Service Quality – Dimension Of Service Quality – Service Quality Management.
UNIT 5	Marketing of services with special reference to: Financial Services - Health Services - Hospitality Services including Travel, Hotels and Tourism - Professional Services

REFERENCE BOOKS:

1. Harsh Varma : Services Marketing, Pearson Education.
2. Valerie Zeithaml& Mary Jo Bitner: SERVICES MARKETING, McGraw Hill.
3. Christopher H. Lovelock: SERVICES MARKETING: PEOPLE, TECHNOLOGY, STRATEGY, PearsonEducation Asia.
3. Zcithaml, Parasuraman& Berry: DELIVERING QUALITY SERVICE; The Free Press, Macmillan.
4. Audrey Gilmore: Services marketing and Management. Response Books, Sage Publications.
5. Ron Zemke& Dick Schaaf: THE SERVICE EDGE.
6. Raghu &VasanthiVenugopal: SERVICES MARKETING
7. L. Natarajan - SERVICES MARKETING, Margham Publications.

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Course Code	COURSE TITLE	L	T	P	C
16M431A	BUSINESS POLICY AND STRATEGY	6	-		4

UNIT	SYLLABUS
UNIT 1	Business and its Environment – Environmental Forecasting – Scanning – Environmental threat and opportunity profile
UNIT 2	Social Responsibility – Corporate Governance – Social audit – Ecological and Environmental issues – Man Concept – Gandhiji, Friedman Views.
UNIT 3	Economic Reforms – LPG – Privatization in India – Advantages of Liberalization and Globalization – Reforms made to adopt Liberalization and Globalization and the impact of LPG in different sectors – MNCs.
UNIT 4	GATT & WTO – Functions of WTO, TRIPS – TRIMS – Their implications to India.
UNIT 5	Business Ethics – Consumer protection Legislations – MRTP, UFTF – Consumer Protection Act – Objectives – Rights of the Consumer – Dispute redressal agencies.

REFERENCE BOOKS:

1. William Gluck and L.R Jaugh – Business policy and Strategic management MC Graw Hill 2001.
2. Kashmiazhar - Business Policy – Tata MC Graw hill, New Delhi 2002.
3. Gupta Liberalization its impact on Indian economy – MC Millian 2002.
4. Barbara parker – Introduction to Globalization & Business, Response Books, Sage Publication, New Delhi.
5. Shaikh Saleem – Business Environment, Pearson Education, Delhi

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Course Code	COURSE TITLE	L	T	P	C
16P812L	<u>ALLIED:</u> OPERATION RESEARCH	6	-		3

UNIT	SYLLABUS
UNIT 1	Introduction – Operations research Techniques – Merits and Demerits – Linear Programming Problem – Graphical method – Simplex method (Simple problem only).
UNIT 2	Transportation problem – Introduction – The Transportation Algorithm – Methods of finding initial solution – North West Corner Rule – Least Cost method – Vogel's Approximation method – Test for Optimality – MODI method (Simple problem only).
UNIT 3	Assignment problem – Introduction – Solution methods of Assignment problem- Network Analysis – CPM – PERT – Free Float – Independent Float.
UNIT 4	Game Theory – Introduction – Two Person Zero-sum Games – Pure Strategies Games with Saddle point – Mixed strategies Games without Saddle point – The rules of Dominance – Graphical method.
UNIT 5	Sequencing Problem – Introduction – Processing 'n' Jobs through two machines – Processing 'n' Jobs through three machines – Processing 'n' Jobs through 'M' machines.

REFERENCE BOOKS:

1. Introduction to Operations Research - Hera Gupta - S. Chand
2. Operations Research - KanditSwaroop& Gupta – S. Chand
3. Introduction to Operations Research - Varma
4. Operations Research - Dr. V. Balu
5. Operations Research - P.R.Vittal

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Course Code	COURSE TITLE	L	T	P	C
14P813M	ENTREPRENEURIALDEVELOPMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	Meaning, Importance, Types – Innovation – Sources – Contributions of Joseph, A. Schumpeter, Peter F Ducker, Francis A. Walker – Psychological, Social, Cultural, Political, Legal and economic factors affecting Entrepreneurial growth – Entrepreneurial Motivation – Entrepreneurial Traits.
UNIT 2	Sources and selection – Project – Meaning – Identification and Classification Constraints – Project and Feasibility reports – Project objectives – Design and appraisal – Network analysis.
UNIT 3	Institutional environment in India with reference to Entrepreneurial development – State Financial Corporations' (SFCs) TIIC, SIPCOT, ITCOT, SIDCO and DIC, SISI, IFCI, IDBI< ICICI, SIDBI, NISIET, Commercial Banks.
UNIT 4	Marketing Channel – Meaning – Channel members – Selection of a channel for consumer and industrial products – Quality Standards – ISO 9000 series.
UNIT 5	Entrepreneurial Development programmes (EDPS)-step to start a small scale industrial unit –form of organisation-registration of SSI units-Subsidies and incentives offered by state / central governments- women Entrepreneurial-export incentives.

REFERENCE BOOKS:

1. Management of Small Industries – Vasant Desai – Himalaya Publishing House, Mumbai.
2. Entrepreneurial Development – C.B. Gupta and N.P. Srinivasan – Sultan chand & Sons.

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Course Code	COURSE TITLE	L	T	P	C
14P813N	FUNDAMENTALSOF INFORMATION TECHNOLOGY	6	-		4

UNIT	SYLLABUS
UNIT 1	MS Word – Creating a word document – Editing text – Adding and Format Numbers – Getting into Print – MS Excel – Creating worksheets – Creating Graphics – MS Access – Creating tables – Creating queries – Creating forms – Creating reports – MS Powerpoint – Presentations – Credit card presentation – New introduced cosmetic item, etc.
UNIT 2	Introduction to Internet – Resources of Internet –H/W and S/W Requirements of Internet – Internet Service Providers – Creating an E-Mail account – Sending Receiving messages with attachments to our Friends account.\
UNIT 3	Internet protocols – Intranet and Extranet – Electronic Data Interchange (EDI) – EDI on the Internet – Online Payment Basics – Payment cards
UNIT 4	Security threats to E-Commerce – Internet security issues overview – Intellectual property threats – Threats to security of communication channels.
UNIT 5	Introduction to application S/W – Accounting Packages – Tally – Statistic packages – SPSS – Preparation of financial statement and statistical analysis.

REFERENCE BOOKS:

1. Computer Application in Business – SrinivasaVallabhan – Sultan chand Publications
 2. Computer Application in Business & Management – AnandhaSheshasayee, Sheshasayee – Margham Publications.
- Electronic Commerce – Gary P. Schneider, 4the Edition

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Course Code	COURSE TITLE	L	T	P	C
14P813P	DIRECT TAXES	6	-		4

UNIT	SYLLABUS
UNIT 1	Basic concepts – Definitions – Assesses – Assessment year – Previous year – Income – Residential status – Scope of Total income – Exempted income – Agricultural income – Capital income and Expenditure – Revenue Income and Expenditure.
UNIT 2	Heads of Income - Income from salaries – Income from House Property – Income from Business or Profession – Depreciation.
UNIT 3	Income under the head Capital gains – Income from other sources – Set off and carry forward of losses – Deductions from Gross Total Income.
UNIT 4	Computation of Total income – Individual – Firm – Companies – MAT – Tax Deducted at Source – Advance tax – Interest payable – PAN – Rates of Tax.
UNIT 5	Assessment procedure - Income Tax authorities – Penalties – Assessment of Fringe Benefit Tax – an outline of Wealth Tax – Computation of Net Wealth.

REFERENCE BOOKS:

1. Jayakumar A & C Dhanapal – Income Tax Theory, Law & Practice – Learnetech Press, Trichy.
2. Gaur V.P & Narang K.L – Income Tax Law & Practice – Kalyani publishers, New Delhi.
3. Dr.vinodSighania – Direct Taxes – Tax man Publication, New Delhi.
Dinkarepagare – Income Tax Law and Practice – Sultan Chand & Sons, New Delhi

M.COM.-GENERAL

Course Code	COURSE TITLE	L	T	P	C
14P813Q	HUMAN RESOURCE MANAGEMENT	6	-		3

UNIT	SYLLABUS
UNIT 1	HRM – Objectives – Functions – Qualities of Good HR Manager – Changing roles of HR Manager and challenges.
UNIT 2	HR planning – objectives – steps in HR planning – Job analysis- Job description- Job Specification
UNIT 3	HR recruitment & Selection process – Maintenance of Personnel and QNL – Rewards and Compensation.
UNIT 4	Training & Development – Principles of Training – Assessment need – Methods of training – Evaluation of training programme.
UNIT 5	Performance appraisal – process – methods of Performance appraisal – appraisal counselling – motivation process – management of grievances and discipline.

REFERENCE BOOKS:

1. L.M. Prasad Human Resource Management. New Delhi: Sultan Chand & Sons.
2. S.S. Khanka, Human Resource Management New Delhi : S. Chand & Co Ltd
3. P.C. Tripathi Human Resource Management New Delhi : S. Chand & Co Ltd

M.COM.-GENERAL

Course Code	COURSE TITLE	L	T	P	C
14P813R	BUSINESS RESEARCH METHODS	6	-		3

UNIT	SYLLABUS
UNIT 1	Research Methodology – Definition – Characteristics - Classification of research – Research process – Stages of Research process – Research problem – Steps in selecting research problem.
UNIT 2	Research design – Definition – Features of research design - Factors for appropriate research design – Steps of Research design – Types of samples design.
UNIT 3	Methods of data collection – primary data – observation method – Interview method – Survey through questionnaire – computer directed interview.
UNIT 4	Reliability – validity – practicality –scaling technology editing – coding – classification – tabulation – Analysis of data – Hypothesis – Testing – Anova – chi – Square test – ‘t’ test – ‘f’ test SPSS.
UNIT 5	Research Report – drafting – methods of report writing – Reference to foot notes – Bibliography – Index – Tables & charts.

REFERENCE BOOKS:

1. Vijay upagade& Arvind Shende, Research methodology S. Chand & Co New Delhi.
2. C.T. Kurian – A Guide to Research
3. Sharma, Prasad and Satyanarayana – Research Methods in Social Science.
4. P. Ravilochanan – Research Methodology

M.COM.-GENERAL

Course Code	COURSE TITLE	L	T	P	C
14P814S	ORGANISATIONAL BEHAVIOUR	6	-		4

UNIT	SYLLABUS
UNIT 1	Introduction OB – Foundation of OB – Personality Perception – attitude and value – Emotional Intelligence – Group dynamics.
UNIT 2	Organisational culture – Organisational effectiveness – Organisational development.
UNIT 3	Organizational communication – Principles of effective communication – Stress management.
UNIT 4	Team management – Power – Policies – leadership conflict management.
UNIT 5	Organisational change – Factor in organization change – Process of planned change – Change agents – Role of change agents.

REFERENCE BOOKS:

1. L.M. Prasad – Organisational Behaviour
2. Stephen P. Robbins – Organisational Behaviour
3. Keith Davis – Human behaviour at work
4. Arnold and Field man – Organisational Behaviour
5. Dr. SS Khanka, S Chand & Sons, New Delhi – Organisation Behaviour
6. Yogendra Singh and Ma Pandey, AITBS Publishers, New Delhi – Principles of Organisational Behaviour.
7. Archana Tyagi, Excel Books, New Delhi – Organisational Behaviour.

M.COM.-GENERAL

Course Code	COURSE TITLE	L	T	P	C
14P814T	INDIRECT TAXES	6	-		4

UNIT	SYLLABUS
UNIT 1	Indian Federal system – An overview – Important features of federal finance – Canons of Taxation Direct and Indirect Taxation – Merits and Demerits.
UNIT 2	Central Excise – Definitions: Goods, Excisable goods, Manufacture, Deemed manufacture – Basis of charge – Valuation of Excisable goods – Clearance of goods – Physical control – Compounded Levy Schemes – Self Removal Procedure – CENVAT.
UNIT 3	Customs Duties – Definitions – Goods – Imported goods – Exported goods – Levy of customs duty – Exemptions from customs duty – Baggage Rules.
UNIT 4	Authorities of customs and excise – Powers – Imposition of fines and penalties.
UNIT 5	VAT – Significance – Cascading effect of Taxes – VAT in Tamil Nadu – Rates of Tax – Exemptions from VAT – White paper on VAT.

REFERENCE BOOKS:

1. DinkerPagare, Business Taxation – Sultan Chand & Sons, New Delhi.
2. Balachandran V, Indirect Taxation - Sultan Chand & Sons, New Delhi.
3. Govindan M.S., Indirect Taxes Made Easy – Sitaraman& Co, Chennai.
4. Datey V.S., Indirect Taxes – Taxman Publications, New Delhi.
Jayakumar A, Indirect Taxes – Learntech Press, Trichy

M.COM.-GENERAL

Course Code	COURSE TITLE	L	T	P	C
14P814U	FINNACIAL MARKETS AND SERVICES	6	-		4

UNIT	SYLLABUS
UNIT 1	An Overview of Financial Markets – Legal And Regulatory Framework – SEBI, SCRA – Segments of Financial Markets – Money Market - Characteristics – Instruments
UNIT 2	Capital Market – Structure – Features – Primary and Secondary Markets – Intermediated Underwriters, Stock Brokers.
UNIT 3	Stock Market – System- Market Operations NSC, OTC – Online Trading System – SEBI Guidelines – Insider Trading – Investor Protection.
UNIT 4	Financial Services – Merchant Banking – Factoring – Leasing – Venture Capital – Mutual Funds.
UNIT 5	Derivative Markets – Trading System – Pricing Derivatives – Risk Hedging – Derivative Market in India – Its Regulation.

REFERENCE BOOKS:

1. M. Y. Khan – Financial services
2. Bhole – Financial institutions and markets
H R Machine Raju – Indian Financial System

M.COM.-GENERAL

Course Code	COURSE TITLE	L	T	P	C
14P814V	MARKETING RESEARCH & CONSUMER BEHAVIOUR	6	-		3

UNIT	SYLLABUS
UNIT 1	Marketing Research and Information System – Source and Importance of Marketing Information – Name and Scope of Marketing Research – Market Research Survey, Factors Governing Market Research Techniques and Designs.
UNIT 2	Area of Research – Measurement techniques – Qualitative research – Planning and formulating research problems – Methods of collection of data – Questionnaire Analysis – Sampling size – Validity tests.
UNIT 3	Market report – Marketing information system as an effective tool in sales promotion – Ethical issues in Marketing.
UNIT 4	Consumer Behaviour – Consumer needs, motives, personality, life styles – consumer psychographics.
UNIT 5	Consumer attitudes formation and change, group dynamics and consumer behaviour – Role of the family, social class culture, opinion leader – Consumer decision making – various theoretical models.

REFERENCE BOOKS:

1. Naresh K. Malhotra – Marketing Research an application Orientation – Pearson Publications
2. London – Consumer Behaviour – THM
3. P.C. Jain & Monika Bhatt – Consumer Behaviour in Indian context – Printice Hall India.

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

**DEPARTMENT OF CORPORATE
SECRETARYSHIP**
M.Com. (Corporate Secretaryship)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: 4

Total No. of Credits: 90

M.COM-CORPORATE SECRETARYSHIP

SUBJECT TITLES

(SEMESTER SYSTEM WITH CBCS)

SEMESTER – I

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
	14P821A	Business Law	6	4	20	80	100
	14P821B	Corporate Accounting – I	6	4	20	80	100
	14P821C	Labour & Industrial Laws	6	4	20	80	100
	14P821D	Corporate Financial Management	6	4	20	80	100
	14P821E	Research Methodology – I	6	4	20	80	100
	14S21AA	Soft Skill	2	2	20	80	100
		Total		22			

SEMESTER II

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
	14P822G	Income Tax Law & Practice – I	6	4	20	80	100
	14P822H	Corporate Accounting – II	6	4	20	80	100
	14P822J	Securities Laws and Regulations of Financial Markets	6	4	20	80	100
	14P822K	Business Environment	6	4	20	80	100
	14P822L	Research Methodology – II	6	4	20	80	100
	14S22AB	Soft skill	2	2	20	80	100
		Total		22			

M.COM-CORPORATE SECRETARYSHIP

SEMESTER III

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
	14P823M	Income Tax Law & Practice – II	6	4	20	80	100
	14P823N	Company Law & Secretarial Practice – I	6	4	20	80	100
	14P823P	Advanced Cost Accounting	6	4	20	80	100
	14P8231	Computer Application in Business	6	4	20	80	100
	14P823Q	Organisational Behaviour	6	4	20	80	100
	14S23AC	Personality Enrichment	2	2	20	80	100
		Total		22			

SEMESTER IV

Paper No.	Sub. Code	Subjects	Hours Per week	Credits	CIA	Ext. Exam	Total Marks
	14P824R	Management Accounting	6	4	20	80	100
	14P824S	Company Law & Secretarial Practice – II	6	4	20	80	100
	14P824T	Human Resources Management	6	4	20	80	100
	14P824U	Marketing Management	6	4	20	80	100
	14P824V	Project Report and Viva Voce Project Report – 100 marks Internal Viva-Voce – 50 marks External Viva-Voce – 50 marks	6	6	20	80	100
	14S24AD	Computing skill	2	2	20	80	100
	14PZ14A	Internship			20	80	100
		Total		24			

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P821A	BUSINESS LAW	6	-		4

UNIT	SYLLABUS
UNIT 1	The Indian Contract Act – Definition of Contract – Essentials of an Valid Contract – Types of Contracts – Offer, Acceptance, Consideration, Capacity and Free Consent. Performance of Contract – Contingent Contracts – Quasi Contracts – Discharge of Contracts – Remedies for Breach of Contract
UNIT 2	Broad frame work of the Constitution of India – Fundamental Rights, Directive principles of statement policy – Legislative powers of the Union and the states – Freedom of Trade, Commerce and Intercourse – Constitutional provisions relating to state monopoly – Different types of Writs – Habeas Corpus, Mandamus, Prohibition, Quo warrant and certiorari.
UNIT 3	Sale of Goods Act 1930 – Essentials of Contract of Sale – Sale and Agreement to Sell – Goods – Kinds of Goods – Price – Distinction between Conditions and Warranties – Expressed and Implied Conditions and Warranties – Caveat Emptor and its exceptions – Meaning of Unpaid Seller – Rights of an Unpaid Seller – Auction Sales.
UNIT 4	Indian Partnership Act 1932 – Definition of Partnership – Partnership Deed – Registration of Firms – Effects of Non-Registration – Rights and Duties of Partners – Types of Partners – Minor Partner and Legal Provisions – Dissolution of Firm – Limited Partnership meaning and its characteristics.
UNIT 5	Negotiable Instruments Act – Meaning – Characteristics – Promissory Note, Bills and Cheques – Distinction between Negotiation and Assignment – Dishonour of Negotiable Instrument – Noting and Protest – Arbitration – Meaning – Kinds – Advantages and Disadvantages of Arbitration.

Text Books:

1. N.D.Kapoor- “Business Law” Sulthanchand Publishers.
2. RSN Pillai & Bhagavathy Business Law, Sultan chand & Co Ltd,

Reference Books :

1. Srinivasan Business Law Margham Publishers Chennai.
2. Kuchcal, Mercantile Law, Vikas Publishing house New Delhi.
3. Commercial / Business Law – N.D. Kapoor.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P821B	CORPORATE ACCOUNTING –I	6	-		4

UNIT	SYLLABUS
UNIT 1	Accounting Standards – Relevance and Significance – National and International Accounting Standards.
UNIT 2	Accounting for Share Capital – Issue of Shares at par, at premium and discount – Forfeiture and Re-issue of Shares – Redemption of Preference Shares – Underwriting of Issue and Profits prior to Incorporation.
UNIT 3	Accounting for issue of debentures, redemption of debentures, conversion of debentures into shares.
UNIT 4	Preparation and presentation of final accounts of Joint Stock Companies as per Company Law Requirements – Provisions and Reserves – Determination of Managerial Remuneration.
UNIT 5	Accounting treatment for amalgamation – Absorption – Reconstruction of Companies – Internal Reconstruction.

Text Books:

1. R.L.Gupta – Corporate Accounting, Sultan chand.
2. Jain and Narrang - Company Accounts, Kalyani.

Reference Books :

1. Shukla and Grewal – Advanced Accounts, S.Chand
2. T.S. Reddy and A.Murthy – Corporate Accounting, Margam
3. Chakraborti- Advanced Accountancy.
1. Gupta R.L. & Radhaswamy – Corporate Accounting
2. Muckerjee A & Hanif M – Modern Accountancy, Volume II.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P821C	LABOUR AND INDUSTRIAL LAWS	6	-		4

UNIT	SYLLABUS
UNIT 1	Object – Definition – Health, Safety and Welfare provisions – Certifying surgeons appointed, duties – Working hours – employment of child, young person, women – Annual leave with wages – Concept of appointment of occupier and manager for manufacturing units.
UNIT 2	(A) PAYMENT OF WAGES ACT, 1936 Object – Definition – Rules for payment of wages – Deduction from wages maintenance of register and records. (B) WORKMEN COMPENSATION ACT, 1923 Object – Definition – Rules regarding compensation – Distribution of compensation – Notice and claims.
UNIT 3	INDUSTRIAL DISPUTES ACT, 1947 Object – Definition – Procedures and settlement of Industrial Disputes – Voluntary reference of disputes to Arbitration – Award and settlement – Strikes and lockouts – layoff and retrenchment – Transfer and closing down of undertaking – Unfair labour practices.
UNIT 4	EMPLOYEES STATEMENT INSURANCE ACT, 1948 Object – Definitions – ESI Corporation – Functions – Contribution and recovery – Benefits – Penalties for false claims.
UNIT 5	(A) EMPLOYEES PROVIDENT FUNDS AND MISCELLANEOUS PROVISIONS ACT, 1952 Object – Definitions – Provident Fund Schemes – Contribution and Recovery – Penalties and Offences. (B) PAYMENT OF GRATUITY ACT, 1972 Object – Definition – Payment and Forfeiture of Gratuity – Offences and Penalties – Super annuity and Pension – Creation of in-house trust – VRS.

TEXT BOOKS:

1. Monnappa, A. Industrial Relations. New Delhi: Tata McGraw Hill.
2. Sen, R. Industrial Relation in India. New Delhi: Macmillan India

REFERENCE BOOKS:

1. N.D.Kapoor – Mercantile Law
2. Chawla and Grag – Mercantile Law
3. Avtar Singh – Mercantile Law
4. M.C.Shukla – Mercantile Law
5. P.C.Tripathi – Industrial Law
6. K.R.Balan – Lectures on Applied Public Relations.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P821D	CORPORATE FINANCIAL MANAGEMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	Finance functions- Definition, Scope and Importance – Role of Financial Manager – Goals and Concepts in Financial Decision Making.
UNIT 2	Cost of Capital – Meaning and Significance – Specific and Overall Cost of Capital – Measurement of Capital.
UNIT 3	Capital Structure – Concept – Optimum Capital Structure – Factors influencing Capital Structure – Theories in Capital Structure – Net Income, Net Operating Income, Traditional and Modigliani Miller Theories.
UNIT 4	Management of Working Capital – Gross and Net Working Capital concepts – importance – adequacy of Working Capital – Determinants – Cost Consideration – Planning and financing working capital
UNIT 5	Merchant Banking, Venture Capital, Mutual funds, Leasing & Factoring.

REFERENCE BOOKS:

- 1) Pandey L.M. – Financial Management
- 2) Khan and Jain – Financial Management
- 3) Maheshwari S.N. – Financial Management
- 4) Vanhorne – Financial Management
- 5) Khan M.Y. – Financial Services.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P821E	RESEARCH METHODOLOGY – I	6	-		4

UNIT	SYLLABUS
UNIT 1	Research – Meaning and Significance – Objectives – Types – Research Process – Common problems encountered in research – Ethics in Research.
UNIT 2	Research Problems: Meaning – Selection and Formulation – Review of available literature – Techniques involved in defining a problem.
UNIT 3	Research Design: Meaning and need for research design – Feature of a good design – Different research design.
UNIT 4	Data Collection: Methods – Primary and Secondary Data – Observation – Interviews – Questionnaire – Constructing a Questionnaire.
UNIT 5	Sampling – Fundamentals – Types – Sampling errors and data collection errors – Sample size and its distribution – Testing the appropriateness of a sample.

REFERENCE BOOKS:

1. Kothari C.R. – Research Methodology.
2. Donal R. Cooper & Pamela S. Schindler – Business Research Methods.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14S21AA	Soft skill – I ESSENTIALS OF LANGUAGE COMMUNICATION-II	2	-		2

Objectives

- *enable* students to build a repertoire of functional vocabulary and to move from the lexical level to the syntactic level.
- *train* students to summon words, phrases relevant to the immediate communication tasks.
- *enable* students to comprehend the concept of communication.
- *teach* students the four basic communication skills- Listening, Speaking, Reading and Writing.

UNIT 1: Recap of language skills – vocabulary, phrase, clause, sentence.

UNIT 2: Fluency building.

UNIT 3: Principles of Communication.

UNIT 4: Types of Communication.

UNIT 5: LSRW in Communication.

Recommended Texts

- Monippally, Matthukutty. M. 2001. *Business Communication Strategies*. 11th Reprint. Tata McGraw-Hill. New Delhi.
- Sasikumar. V and P.V. Dhamija. 1993. *Spoken English: A Self-Learning Guide to Conversation Practice*. 34th Reprint. Tata McGraw-Hill. New Delhi.
- Swets, Paul. W. 1983. *The Art of Talking So That People Will Listen: Getting Through to Family, Friends and Business Associates*. Prentice Hall Press. New York.
- Hewings, Martin. 1999. *Advanced English Grammar: A Self-Study Reference and Practice Book for South Asian Students*. Reprint 2003. Cambridge University Press. New Delhi.
- Lewis, Norman. 1991. *Word Power Made Easy*. Pocket Books.
- Hall and Shepherd. *The Anti-Grammar Grammar Book: Discovery Activities for Grammar Teaching*. Longman

Websites

- www.tatamcgrawhill.com/digital_solutions/monippally
- www.dictionary.cambridge.org
- www.wordsmith.org

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P822G	INCOME TAX LAW AND PRACTICE – I	6	-		4

UNIT	SYLLABUS
UNIT 1	Income Tax Act 1961, Basic Concepts – Capital and Revenue – Residential Status and Incidence of Tax – Exempted from Tax.
UNIT 2	Salaries – Meaning – Definition – Characteristics of Salary – Computation of Salary Income Allowances, Perquisites, Profits In-lieu of Salary, Gratuity – Pension.
UNIT 3	House Property – Meaning – Definition – Computation of Annual Rental Value – Let Out House Property – Self-Occupied House Property – Deduction of Income from House Property.
UNIT 4	Computation of Income from Profits and Gains of Business or Profession.
UNIT 5	Computation of Income from Other Sources – Set Off and Carry Forward Losses – Clubbing of Income.

TEXT BOOKS:

1. V.B. Gaur & Narang, “Income Tax Law And Practice”, Kalayani Publishers..
2. T.S. Reddy & Y. Hari Prasad Reddy, “Income Tax Law and Practice” Margham Publications

REFERENCE BOOKS:

1. Income Tax Law & Practice – Bhagavathi Prasad.
2. Outline of Income Tax - Rupram Gupta.
3. Income Tax Law & Accounts – Vinod Singhanian.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P822H	CORPORATE ACCOUNTING –II	6	-		4

UNIT	SYLLABUS
UNIT 1	Valuation of Goodwill and Shares.
UNIT 2	Accounts for Holding and Subsidiary Companies – Preparation of Consolidated Balance Sheet.
UNIT 3	Liquidation of Companies – Accounting treatment (Including Statement of Affairs and Deficiency Accounts)
UNIT 4	Banking Companies, Preparation of profit & loss account and balance sheet.(as per new regulation)
UNIT 5	Insurance Company Accounts, Life, Fire and Marine. Preparation of Revenue account, profit & loss account and balance sheet.(as per new regulation)

TEXT BOOK:

1. T.S. Reddy & Murthy, “Corporate Finance”, Margham Publications.
2. R.L. Gupta – Corporate Accounting, Sultan Chand

REFERENCE BOOKS :

1. Shukla and Grewal – Advance Accounts, S.Chand
2. T.S. Reddy and A. Murthy – Corporate Accounting, Margam.
3. Jainand Narang – Company Accounts, Kalyani
4. R.L. Gupta – Corporate Accounting, Sultan chand

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P822I	SECURITIES LAWS AND REGULATION OF FINANCIAL MARKETS	6	-		4

UNIT	SYLLABUS
UNIT 1	Financial System Significance – Overview – Constituents development and growth of financial and capital markets in India.
UNIT 2	Financial Instruments Capital market instruments – equity shares, preference shares, sweat equity shares, non-voting shares & debentures: New instruments of the Capital Market – Global Depository Receipts – American Depository receipts. Money Market Instruments Treasury bills, Commercial bills, Certificate of Deposits.
UNIT 3	Primary Market Meaning – Significance and Scope of Primary Market – Latest developments in Primary Market. Secondary Market Meaning, Significance, Functions and Scope of Secondary Market – Stock Exchanges and their regulatory framework and control.
UNIT 4	Capital Market Introduction, meaning, significance of Capital Market – Capital Market vs. Money Market, Market players, investors and companies – Securities Laws / regulatory framework governing Indian Capital Market – E-trading in securities market - DEMAT
UNIT 5	Credit Rating Concept – Scope and Significance – Benefits to investors – Credit Rating Agencies in India. Investors Protection Meaning and significance – Regulatory measures to promote investor confidence – Role of recognized investors association.

REFERENCE BOOKS:

1. Prasanna Chandra – Financial Management
2. Balakrishnan & Warta S.S – Securities Market in India.
3. Gordon & Natrajan – Financial Services

ICSI Study Materials – Securities Laws & Regulation of Financial Markets.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P822K	BUSINESS ENVIRONMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	The Concept of Business Environment – Nature of Business Environment and Significance of Business Environment – Impact of Business and Strategic Decision.
UNIT 2	Political Environment – Government and Business Relationship in India – Effect of Political Ideologies – Dangers of Frequently Changing Political Leadership.
UNIT 3	Social and Cultural Environment – Social Attitudes – Impact of Foreign Culture – Castes and Communities – Joint Family System – Types of Social Organization – Social Responsibilities of Business.
UNIT 4	Economic Environment – Types of Economic System – Five Year Planning – Economic System and their impact on Business.
UNIT 5	Financial Environment – Role of Banks in the Economy – Development Banks – Securities and Exchange Board of India (SEBI) – Natural Environment – Pollution and benefit of Pollution Prevention.

TEXT BOOKS:

1. Francis Cherunilam, Business Environment-Himalaya Publishing House, New Delhi,2009
2. Aswathappa, Essentials Of Business Environment, Himalaya Publishing House, New Delhi.2013

REFERENCE BOOKS:

1. Sankaran S – Business Environment
2. Francis Cherunilam - Business Environment
3. Aswathappa - Business Environment
4. Dasgupta & Sengupta – Government and Business in India
5. Srinivisan K. – Productivity and social Environment.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P822L	RESEARCH METHODOLOGY -II	6	-		4

UNIT	SYLLABUS
UNIT 1	Scaling: Meaning – Important Scaling Techniques – Multidimensional Scaling.
UNIT 2	Hypothesis: Meaning – Types – Sources of Hypothesis – Testing of Hypothesis – Errors in Testing – Limitations in the testing of hypothesis.
UNIT 3	Statistical Tests: Parametric Tests – Tests of small and large sample – t-test, z-test.
UNIT 4	Chi-square test, Analysis of Variance – One way ANOVA and Two way ANOVA.
UNIT 5	Types of Reports – Contents – Features of good report – Steps in writing a report – Uses of Computers in Social research such as SPSS packages, etc.,

REFERENCE BOOKS:

1. Kothari C.R. – Research Methodology
3. Donal R. Cooper & Pamela S. Schindler – Business Research Methods.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14S22AB	Soft skill – II ESSENTIALS OF SPOKEN / PRESENTATION SKILLS-II	6	-		4

Objectives

- *train* students to become aware of their thinking style and to enable them to convert thinking into performance.
- *prepare* students to evolve mental models for intra-personal and inter-personal transactions.
- *make* students reflect and improve their use of body language – posture, gesture, facial expression, tone.

UNIT I: Thinking and Articulation – cognitive, affect, critical, creative aspects of articulation.

UNIT II: Acquisition of Oral and Aural Skills.

UNIT III: Communication Boosters – body language.

UNIT IV: Function of Cultural Codes in Presentation – etiquette.

UNIT V: Models of Presentation.

Recommended Texts

- Powell. *In Company*. MacMillan.
- Cotton, et al. *Market Leader*. Longman.
- Pease, Allan. 1998. *Body Language: How to Read Others Thoughts by their Gestures*. Sudha Publications. New Delhi.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice: A Reader*. Basic Books. New York.
- De Bono, Edward. 2000. *Six Thinking Hats*. 2nd Edition. Penguin Books.
- De Bono, Edward. 1993. *Serious Creativity*. Reprint. Harper Business.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P823M	INCOME TAX LAW AND PRACTICE – II	6	-		4

UNIT	SYLLABUS
UNIT 1	Capital Gain – Basic Concept – Procedure – Computation of Capital Gain – Exemption of Capital Gain under Section 54, 54B, 54D, 54EC, 54ED, 54F, 54G and 54H.
UNIT 2	Total Income – Variance deduction to be made in Total Income, Rebates and Reliefs in respect of Income Tax – Taxation of Individuals, Firms and Companies.
UNIT 3	Income Tax Authority – Jurisdiction and Power – Assessment and Refund – Clearance of Excisable Goods – Set Off Duties – Input Duty – Relief Schemes – VAT, MODVAT, and SENVAT – Tax Planning in Central Excise
UNIT 4	Wealth Tax 1957 – Charges of Wealth Tax – Assets – Demand Assets and Exempt Asset – Computation of Net Wealth and Return of Wealth – Appeal and Refunds.
UNIT 5	Service Tax – Levy, Taxable Service – Law and Procedures including IT Applicability to Company Secretaries in Practice and Management Service – Computation Law – Anti-dumping Law – IPR Act.

TEXT BOOKS:

1. V.B. Gaur & Narang, “Income Tax Law And Practice”, Kalayani Publishers.
2. T.S. Reddy & Y. Hari Prasad Reddy, “Income Tax Law And Practice” Margham Publications.

REFERENCE BOOKS:

1. Income Tax Law & accounts - H.C. Mehrotra
2. Income Tax Law & Practice - Bhagavathi Prasad
3. Outline of Income Tax - Rupram Gupta
4. Income Tax Law & accounts - Vinod K. Singhanian
5. Income Tax Law & Practice - Gaurand Narang.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P823N	COMPANY LAW AND SECRETARIAL PRACTICE – I	6	-		4

UNIT	SYLLABUS
UNIT 1	History of Company Legislation in India – Companies Act 1956 – Amendments – Definition of Company – Characteristics and advantages of Joint Stock Company – Corporate Veil – Corporate Personality – Lifting of Corporate Veil – Kinds of Companies – Distinction between Public and Private Limited Company – Special Privileges available to Private Company.
UNIT 2	Secretary – Definition – Types of Secretaries – Company Secretary – Legal position of Company Secretary – Statutory Qualification and Qualities required – Appointment, rights, duties and liabilities of a Company Secretary – Dismissal of a Company Secretary.
UNIT 3	Promotion and Incorporation of a Company – Promoter – Legal Position, duties of Promoter – Pre-Incorporation and Provisional Contracts – Memorandum of Association and Articles of Association – Alteration of Memorandum and Articles – Doctrine of Indoor Management and its exceptions – Doctrine of Constructive Notice – Doctrine of Ultra-Vires – Duties of Company Secretary during Incorporation of a Joint Stock Company.
UNIT 4	Prospectus – Meaning – Contents of Prospectus – Offer for Sale – Deemed Prospectus – Statement in lieu of Prospectus – Registration of Prospectus – Shelf Prospectus – Red herring Prospectus – Information Memorandum – Liability for Mis-Statement in Prospectus.
UNIT 5	Share Capital – Kinds of Share Capital – Alteration of Capital and Reduction of Capital – Buy-back of Shares – Meaning of Share – Kinds of Share – Right Issue – Bonus Issue – SEBI guidelines for Bonus Issue – Allotment of Shares – Green Shoe Option – Secretarial duties during allotment of shares – Irregular Allotment.

TEXT BOOKS:

1. N.D.Kapoor-Sultan CVhand & Sons- Company law

REFERENCE BOOKS:

1. N.D. Kapoor – Company Law And Secretarial Practice
2. P.P.S. Gogna – A Text Book Of Company Law
3. P.K. Ghosh & Dr. V. Balachandran – Outline of Company Secretary Practice
4. B.N. Tondon – Manual of Secretarial Practice.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P823P	ADVANCED COST ACCOUNTING	6	-		4

UNIT	SYLLABUS
UNIT 1	Elements of Cost – Preparation of Cost Sheets and Tenders.
UNIT 2	Material – Inventory Control – Pricing of Material Issues – Fixation of Levels and Miscellaneous Items in Materials.
UNIT 3	Labour Cost – Control – Labour Turnover – Idle Time – Overtime and Incentive Schemes.
UNIT 4	Overheads – Allocation – Absorption – Control Overheads.
UNIT 5	Methods of Costing – Operating Costing – Job, Batch and Contract Costing – Process Costing – Joint and by products – Inter-process equivalent. Reconciliation of Cost and Financial Accounts.

TEXT BOOKS:

1. M.C. Shukla, T.S. Grewal, Dr.M.P.Gupta, “ Cost Accounting”, S.Chand& Company Ltd,
2. Advanced Problems and Solutions in cost accounting- Dr. S. N. Maheswari.

REFERENCE BOOKS :

1. Cost Accounting : T.S. Reddy Y.Hari Prasad Reddy
2. Cost Accounting : Jain And Narang
3. Cost Accounting : S.P. Iyengar

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P8231	COMPUTER APPLICATION IN BUSINESS	6	-		4

UNIT	SYLLABUS
UNIT 1	MS – Office – Components of MS Office – Word, Formatting, Alignment, Indentation, Fonts, Picture and image insertion, Mail merge, template – creation of document using template.
UNIT 2	Excel, Cell Formatting, Cell Alignment, Functions, Chart creation and insertion.
UNIT 3	MS PowerPoint, slide creation and presentation, custom animation, layout.
UNIT 4	About Tally software, uses, group creation, ledger creation, stock group and stock item creation, voucher creation.
UNIT 5	SPSS – about SPSS, Statistical analysis, Statistical reports.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P823Q	ORGANIZATIONAL BEHAVIOUR	6	-		4

UNIT	SYLLABUS
UNIT 1	Introduction to Organizational Behaviour – Meaning – Elements – Need – Approaches – Models – Global Scenario.
UNIT 2	Individual Behaviour – Personality - Learning – Attributes – Perception – Motivation – relevance to organizational behaviour. Group behaviour – Group Dynamics – Group norms – Group Cohesiveness – their relevance to organizational behaviour.
UNIT 3	Organizational Dynamics – Organizational Effectiveness – Meaning, Approaches – Organizational Culture – Meaning, Significance – Organizational Climate – implications on Organizational behaviour.
UNIT 4	Leadership – Styles – Qualities – Organizational Communication – Meaning, Importance, Process, Barriers – Methods to reduce Barriers – Principles effective Communication Motivation – Early and Contemporary theories.
UNIT 5	Organizational Change – Meaning – Resistance to Change – Management of Change and Development – Stress – Meaning – Types – Stress Management – types of Management of Stress.

REFERENCE BOOKS:

- 1) Fred Luthans – Organisational Behaviour, McGraw Hill 1995
- 2) Stephen T Robbins – Organizational Behaviour, Prentice Hall, 1997
- 3) Keith Davis – Human Behaviour at Work, McGraw Hill 1991.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14S23AC	PERSONALITY ENRICHMENT	2	-		2

UNIT	SYLLABUS
UNIT 1	Definition of Personality, Components of Personality – Structural and Functional aspects, Determinants of Personality – Biological, Psychological and Socio-Cultural factors. Assessment of Personality – Observation, Interview and Psychological Tests Misconceptions and Classification, Need for Personality Development.
UNIT 2	Self Awareness and Self Motivation Self Analysis through SWOT and Johari window, Elements of Motivation, Seven rules of Motivation, Techniques and Strategies for Self Motivation. Motivation Checklist and Goal Setting based on the principles of SMART. Self Motivation and Life.
UNIT 3	General Knowledge and Current Affairs Regional, National and International events, Geographical, Political and Historical facts, Information on sports and other recreational activities. Basic knowledge with regard to health and health promotion.
UNIT 4	Memory, Decision Making and Study Skills Definition and Importance of Memory, Causes of Forgetting. How to forget (thought stopping), how to remember (techniques for improving memory), The technique of passing exams. The rational decision making process. Improving creativity in decision making and components of creativity.
UNIT 5	Power of Positive Thinking Thinking power – seven steps for dealing with doubt Traits of positive thinkers and high achievers Goals and techniques for positive thinking Enhancement of concentration through positive thinking Practicing a positive life style.

PRACTICAL TRAINING – The course would include the following practical exercises

- Ice Breaking
- Brainstorming
- Stimulation Exercises
- Thought Stopping
- Memory
- Study Skills Training

REFERENCES

1. Mile, D J (2004), Power of Positive Thinking, Delhi, Rohan Book Company.
2. Pravesh Kumar (2005), All about Self-Motivation, New Delhi, Goodwill Publishing House
3. Dudley, G A (2004), Double your Learning Power, Delhi, Konark Press, Thomas Publishing Group Ltd.,
4. Lorayne, H (2004), How to develop a super power memory, Delhi, Konark Press, Thomas Publishing Group Ltd.,
5. Hurlock, E B (2006), Personality Development, 28th Reprint, New Delhi, Tata McGraw Hill.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P824R	MANAGEMENT ACCOUNTING	6	-		4

-

UNIT	SYLLABUS
UNIT 1	Management Accounting – Nature and Scope – Analysis and interpretation of Financial Statements – Ratio Analysis.
UNIT 2	Cash Flow and Funds Flow Statement.
UNIT 3	Budget and Budgetary Control – Procedure and Utility – Various types of Budgets including Flexible Budgets – Standard Costing and Variance Analysis – Material – Labour – Overhead – Sales Variances.
UNIT 4	Capital Budgeting – Methods of Project Appraisal.
UNIT 5	Marginal Costing – Cost Volume Profit relationship – Break-Even Analysis – Profit planning and Pricing.

TEXT BOOKS:

1. I.M. Pandey, “Management Accounting”, Vikas Publishing.
2. M Y Khan, PK Jain, “Management Accounting”, Tata McGraw hill.

REFERENCE BOOKS:

1. Management Accounting - T.S.Reddy, Y.Hari Prasad Reddy – Margam Publication.
2. Dr.S.N.Maheswari, Management Accounting, Sultan Chand & Sons.
3. Jain & Narang, Management Accounting. Kalyani Publishers.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P824S	COMPANY LAW AND SECRETARIAL PRACTICE – II	6	-		4

UNIT	SYLLABUS
UNIT 1	Members and Shareholders – Modes of acquiring membership – Cessation of membership – Rights and liability of members – Transfer of shares – Statutory provisions – Transmission of shares – Distinction between transfer and transmission of shares – Duties of Secretary during transfer of shares.
UNIT 2	Dividends – Statutory provisions relating to dividends – Interim dividend – Dividend Warrant – Duties of Secretary during payment of dividend – Mortgages and Charges – Fixed Charge and Floating Charge – Registration of Charges – Debentures – Kinds of Debentures.
UNIT 3	Meetings of Company – Meetings of members – Statutory Meeting and Statutory Report – Annual General Meeting – Secretarial work related to Annual General Meeting – Extraordinary Meeting – legal provisions – Board Meetings – Class Meetings – Notice of Meetings – Quorum, Proxy and Minutes – Resolutions – Kinds of Resolutions.
UNIT 4	Directors – Appointment – Position of Directors – Restriction of Appointment of Directors – Qualification and Disqualification of Directors – Duties and liabilities of Directors – Managing Director – Appointment – Power and Duties – Statutory Books – Annual Accounts – Auditors – Appointment and Removal of Auditors – Power and duties of Auditors. Corporate Governance and Corporate Social Responsibility (CSR) – Meaning – Corporate Governance, Concept and Significance – Measures – CSR Mechanism
UNIT 5	Winding Up – Meaning – Kinds of Winding Up – Winding Up by Court – Grounds for compulsory Winding Up – Consequences of Winding Up Order – Liquidator – Duties and Powers – Contributory – Duties of Secretary in respect of Compulsory Winding Up – Voluntary Winding Up – Provisions applicable to members voluntary winding up and creditors winding up – Duties of Secretary in respect of voluntary winding up.

TEXT BOOKS:

1. N.D.Kapoor-Sultan CVhand & Sons- Company law

REFERENCE BOOKS:

1. N.D. Kapoor – Company Law And Secretarial Practice
2. P.P.S. Gogna – A Text Book Of Company Law
3. P.K. Ghosh & Dr. V. Balachandran – Outline of Company Secretary Practice
4. B.N. Tondon – Manual of Secretarial Practice.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P824T	HUMAN RESOURCE MANAGEMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	Introduction: Concept, function, Scope of HRM, Personnel administration, Power and Responsibilities of personnel Manager.
UNIT 2	Procurement: Job description, Sources of Recruitment, Steps in Selection Process Selection of Managerial, Technical and blue collared, personnel, Placement and Induction, Orientation and Socialization.
UNIT 3	Training and Development: Concept and Importance, Training Programmes, Management Development Programmes, Performance Appraisal: Purpose of Appraisal, appraisal Criteria, Formal and informal Appraisal.
UNIT 4	Compensation: Job Evaluation, Base and Supplementary compensation, Linkages of Compensation with Procurement and low turnover of employees, promotion, Transfer, Demotions and Separations: Concepts and Strategies.
UNIT 5	Organizational Culture: Promoting an appropriate organization culture, making staff work.

TEXT BOOKS:

1. L.M.Prasad , Human Resource Management., sultan chand.
2. C. B. Mamoria ,Personnel Management,Himalaya Publishing.

REFERENCE BOOKS:

1. V.S.P. Rao – Human Resource Management
2. Ashwathappa – Human Resource Management
3. Garry Deseler – Human Resource Management
4. L.M. Prasad – Human Resource Management
5. Tripathi – Human Resource Management.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P824U	MARKETING MANAGEMENT	6	-		4

UNIT	SYLLABUS
UNIT 1	INTRODUCTION - Meaning-Definition and Importance of Marketing-Difference between Selling and Marketing-Approaches to the study of Marketing-Marketing concept-Market Segmentation-Basis for segmenting the consumer market-Buyer Behaviour.
UNIT 2	Product-Meaning and Definition-Product Policy-Classification of Products-New Product Development-Product life cycle-Product mix-product line strategies-Branding.
UNIT 3	Pricing-Importance of Price-Objectives of Pricing-Factors affecting Price determination-Pricing Policies-kinds of Pricing-Pricing of New products-Discounts and Allowance-Resale-Price maintenance. Channels of Distribution-Factors influencing the choice of a channel- channel of Distribution for consumer and Industrial goods-Middlemen-Kinds of Wholesalers and retailers and their functions.
UNIT 4	Promotion-Promotional mix-Factors determining promotional mix-Sales promotion-Objectives-Types-Advertising Budget-Personal Selling-Kinds of Advertising-Benefits-Advertisement copy, Advertising Budget-Personal selling-kinds of salesmen-Function-Qualities of a good salesmen-process of selling.
UNIT 5	Market Research-Objectives, Importance-Marketing Research activities-Types of Research Design-types of elements of Research Design-Steps involved in Research process.

BOOKS:

1. Marketing: Philip Kotler
2. Marketing Rajan Nair
3. Marketing: William.J.Stanton.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P824V	INSTITUTIONAL TRAINING & PROJECT REPORT	6	-		6

Max. Marks: 100 (SE – 80, IA – 20)

Hours per week: 5 Hrs;

Credits: 5

Supervised Institutional Training shall be an integral part of the Course. It is to be a sort of job testing programme – bridge the gap between theory and practice. It is designed to create a natural interest in the practical aspects of the Company Secretaryship so as to stimulate trainee's desire to face its challenges and problems.

The training should be given under the joint supervision and guidance of the Training Officer of the Institution and Faculty member of Corporate Secretaryship of the college. The details of the training given and the assessment of each student in that regard should be fully documented.

The duration of the training shall be for a period of 30 days during the Second year. The training shall broadly relate to Secretarial Practice, Finance, Human Resource, Marketing and Systems.

The following types of organizations may be selected for the training:

1. Public Limited Companies (Both Industrial and Commercial).
2. Statutory bodies, Public Enterprises and Public Utilities like L.I.C., Electricity Board, Housing Board and Chambers of Commerce, Cooperative Societies and banks.
3. Multi National Corporations

NOTE:

The paper on Institutional Training shall carry hundred marks and Internal and External Viva – Voce based on a report submitted by the candidate, under the guidance of the faculty member of the respective colleges assisted by the training officers of the Institutions providing training.

The report shall be around 100 typed pages, excluding tables, figures, bibliographies and appendices. The department of the respective college shall value the report. A candidate failing to secure the minimum for a pass (40%) shall be required to resubmit this report to the Department.

The External Examiner in consultation with Internal Examiner should conduct Viva-Voce and evaluate the report.

M.COM-CORPORATE SECRETARYSHIP

Course Code	COURSE TITLE	L	T	P	C
14P824V	COMPUTING SKILL	2	-		2

Objective: The major objective in introducing the Computer Skills course is to impart training for students in Microsoft Office which has different components like MS Word, MS Excel, MS Access, Power point etc., at two levels based on their knowledge and exposure. It provides essential skills for the user to get adapted to any work environment, as most of the systems in any6 work place have MS Office installed for their day to day activities. The course is highly practice oriented rather than regular class room teaching.

Unit I: *Introduction to Computers* – Classification of Computers; Role of Computers in society; Inside the Computers – Hardware (processing, memory, i/o, storage), Software (systems, application), CPU, OS, (DOS, Windows, Unix, Linux), Storage Devices; Programming – Overview, need for languages, skills; Networking Basics; Virus; Hacking.

Unit II: *Word Processing* – Open, Save and close word document; Editing text – tools, formatting, bullets; Spell Checker; Navigating in word – keyword, Mouse; document formatting – paragraph alignment, indentation, headers and footers, numbering; printing – preview, options.

Unit III: *File Management* – Understanding the importance of file management; backing of files, navigating thru My Computer and Windows Explorer; Files and Folders – editing, retrieving, deleting, renaming, subfolders – manipulate windows – maximize, minimize; Power point basics – terminology, templates, viewing.

Unit IV: *Spreadsheets* – MS Excel – opening, entering text and data, formatting, navigating; Formulas – entering, handling and copying; Charts – creating, formatting and printing, header and footer, centering data, printing.

Unit V: *Networks* – Internet Explorer – components; www – working, browsing, searching, saving – Bookmark – favorite, create, delete – Printing a web page; email – creating, receiving, reading and sending messages.

Note: *Unit II to Unit V needs exposure thru practicals.*

References:

1. Introduction to Computers – Peter Norton, Tata McGraw-Hill.
2. Microsoft 2003 – Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, Tata McGraw-Hill.

Examination:

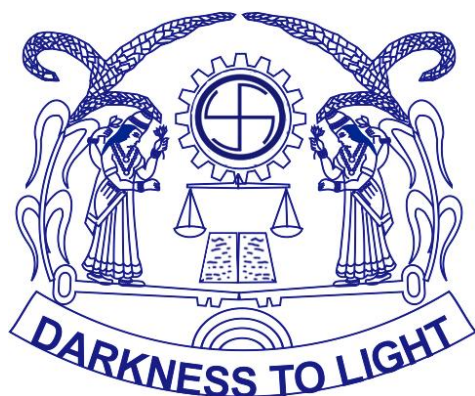
1. Internal assessment could be based on Theory and/or practicals.
2. End semester is based on practical.

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COMPUTER SCIENCE
M.Phil.



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: 2

Total No. of Credits: 18

SCHEME OF EXAMINATIONS

Courses Components	Credits	Hours of Examination	Marks		
			CIA	EE	TOTAL
Semester I					
PAPER I - RESEARCH METHODOLOGY	6	6 Hours	40	60	100
PAPER II – DATA WAREHOUSING AND DATA MINING.	6	6 Hours	40	60	100
PAPER III - ELECTIVE	6	6 Hours	40	60	100
Semester II					
Dissertation and Viva-Voce	18	-	50	150 (Viva Voce)	200

COURSE CODE	COURSE TITLE	L	T	P	C
	RESEARCH METHODOLOGY	6			6

UNIT	SYLLABUS
UNIT 1	RESEARCH METHODS Meaning of Research- Objectives of Research- Motivation in Research- Types of Research- Research Approaches- Significance of Research-research methods versus Methodology-Research and Scientific Method- Importance of Knowing How Research is done- Research Process –Criteria of good Research – Problem Encountered by Researchers in India- What is Research Problem? Selecting the Problem- Necessity of Defining the Problem- Technique involved in Defining the Problem.
UNIT 2	REPORT WRITING Meaning of Research Design- Need for Research Design- Features of a Good Design- Important Concepts Relating to Research Design- Different research design- Basic principles of Experimental Designs- Significance of Report Writing- Different Steps in writing Report- Layout of the Research Report- Types of Reports- Oral Presentation Mechanics of Writing a Research Report- Precautions for Writing Research Reports.
UNIT 3	ALGORITHMS AND ANALYSIS Elementary data Structures, Greedy method: Knapsack problem-job sequencing with deadlines, Dynamic Programming: Multistage graphs- 0/1 knapsack- The traveling salesperson problem.
UNIT 4	DESIGN TECHNIQUES Basics search and traversal techniques, The techniques for binary tree, Graphs, Code Optimization, Connected and Bi-connected components and depth- first search. Backtracking: The 8-Queers problem- Sum of subsets – Hamiltonian cycles- Graph coloring.
UNIT 5	BRANCH AND BOUND FIFO-LC Branch and Bound- Traveling salesperson problem- Lower bound theory: Comparison trees- Np-Hard and Np- complete problems.

TEXT BOOKS

UNIT - I & II

1. C.R.Kothari, "Research Methodology Methods & Techniques" 2nd Edition, Wishwa Prakashan Publishers.
2. Dr.Rajammal P. Devadas, "A. Handbook on Methodology of Research-Sri Ramakrishna Mission Vidyalaya College of Rural Higher Education".

UNIT – III, IV,V

1. Ellis Harowitz, Sartaj Sahini, "Compute Algorithms", Galgotia Publications (P) Ltd., 1993.

COURSE CODE	COURSE TITLE	L	T	P	C
	DATA WAREHOUSING AND DATA MINING	6			6

UNIT	SYLLABUS
UNIT 1	Data Warehousing Introduction – Definition-Architecture-Warehouse Schema-Warehouse server-OLAP operations. Data Warehouse technology – Hardware and operating system- Warehousing Software – Extraction tools – Transformation tools – Data quality tools – Data loaders – Data Access and retrieval tools – Data Modeling tools – Fact tables and dimensions Data warehousing case studies : Data warehousing in Government , Tourism, Industry , Genomics data.
UNIT 2	Data Mining definition – DM Techniques – current trends in data mining - Different forms of Knowledge – Data selection, cleaning, Integration, Transformation, Reduction and Enrichment. Data: Types of data - Data Quality - Data Preprocessing - Measures of similarity and dissimilarity. Exploration: Summary statistics – Visualization.
UNIT 3	Association rules: Introduction – Methods to discover association rule – Apriori algorithm Partition Algorithm – Pincher search algorithm – Dynamic Item set algorithm – FP Tree growth algorithm. Classification: Decision Tree classification – Bayesian Classification – Classification by Back Propagation.
UNIT 4	Clustering Techniques: Introduction – Clustering Paradigms – Partitioning Algorithms – K means & K Mediod algorithms – CLARA – CLARANS – Hierarchical clustering – DBSCAN – BIRCH – Categorical Clustering algorithms – STIRR – ROCK – CACTUS. Introduction to machine learning – Supervised learning – Unsupervised learning – Machine learning and data mining. Neural Networks: Introduction – Use of NN – Working of NN Genetic Algorithm: Introduction –Working of GA.
UNIT 5	Web Mining: Introduction –Web content mining – Web structure mining –Web usage mining – Text mining –Text clustering, Temporal mining -Spatial mining –Visual data mining – Knowledge mining – Various tools and techniques for implementation using (weka, Rapidminer and Matlab).

TEXT BOOKS:

1. Arun K Pujari , “Data Mining Techniques”, University press , Edition 2001.
2. Jaiwei Han, Michelinne Kamber , “Data Mining : Concepts and Techniques”
3. Pang-Ning Tan, Michael Steinbach, Vipin Kumar, “Introduction to Data Mining”, 2007.
4. T.Sushmita mitra, Tir ku Acharaya , “Data Mining Multimedia,Softcomputing & Bioinformatics”, Wiley Interscience publications , 2004.
5. Michal J A Berry, Gordon Linoff, “Mastering Data Mining”, John Wiley & Sons, 2000.
6. Alex Berson , Stephen J.Smith , “Data Warehousing , Data Mining & OLAP “, Tata McGrawhill
7. C S R Prabhu, “Data Warehousing – concepts, techniques and applications “, 2nd Edition, Prentice Hall of India, 2002.

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	ADVANCED NETWORKING	6			6

UNIT	SYLLABUS
UNIT 1	Interconnections: Digital Data Communication Techniques – Data Link control protocol – Multiplexing – Spread spectrum – Circuit switching and packet switching – routing in switched networks. Data Link Layer issues – Transparent and Source routing bridges – Network interface– generic connectionless service – network layer address – connectionless data packet formats –routing algorithm concepts – Fast packet forwarding.
UNIT 2	Frame relay – ATM – High- speed LANs - Congestion control in data networks and Internets –Link-level flow and error control – TCP traffic control – Integrated and differential services –protocols for Qos support.
UNIT 3	VPN - SDH and SONET networks – Operational aspects – evolution of the optical network –optical transport network – MPLS traffic engineering. Network Management: SNMP Basic Foundation – SNMPv2 – SNMPv3 –RMON.
UNIT 4	Mobile Communication: Wireless Transmission – Medium Access Control –Telecommunication Systems – Broadcast Systems - Wireless LAN – Mobile IP Adhoc Wireless Networks: Adhoc Wireless Networks – MAC Protocol – Routing Protocols – Multicast Routing - QOS – Wireless Sensor Networks – Energy Management.
UNIT 5	Network Security and System Security: Introduction to Network Security – Symmetric Encryption and Message Confidentiality – Public-key Cryptography and Message Authentication– Authentication Application – Electronic Mail Security – IP Security – Web Security – Network Management Security - Intruders – Malicious Software – Firewalls

TEXT

BOOKS:

1. Jochen Schiller, Mobile Communication, Pearson, 2nd Edition, 2009.
2. C.Siva Ram Murthy, B.S. Manoj, “Adhoc Wireless Networks”, Pearson, 2005.
3. Radia Perlman, “Interconnections”, Pearsons, 2000.
4. William Stallings, “High Speed Networks and Internets”, Pearson, 2010.
5. Jon C.Snader,” VPNs Illustrated Tunnels, VPNs and Ipsec”, Pearson, 2006.
6. Jean Pjilippe Vasseur, Mario Pickavet, Demeester, “Network Recovery”, Elsevier, 2004.
7. Mani Subramanian, “Network Management”, Pearson, 2006.
8. William Stallings, “Data and Computer Communications”, Pearson

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	BIOINFORMATICS ALGORITHMS	6			6

UNIT	SYLLABUS
UNIT 1	INTRODUCTION Algorithms and Complexity- Biological algorithms versus computer algorithms – The change problem –Correct versus Incorrect Algorithms – Recursive Algorithms – Iterative versus Recursive Algorithms – Big-O Notations – Algorithm Design Techniques.
UNIT 2	GREEDY ALGORITHMS Molecular Biology Primer – Exhaustive Search – Mapping Algorithms – Motif-Search Trees – Finding Motifs – Finding a Median String – Greedy Algorithm – Genome Rearrangements – Sorting by Reversals – Approximation Algorithms – A Greedy Approach to Motif Finding
UNIT 3	DYNAMIC PROGRAMMING ALGORITHMS DNA Sequence comparison – Manhattan Tourist Problem – Edit Distance and Alignments – Longest Commons Subsequences – Global Sequence Alignment – Scoring Alignment – Local Sequence Alignment – Alignment with Gap Penalties – Multiple Alignment-Gene Predictions – Approaches to Gene Prediction - Spiced Alignment – Divide and Conquer Algorithms
UNIT 4	GRAPH ALGORITHMS Graphs – Graphs and Genetics – DNA Sequencing – Shortest Superstring Problem – DNA arrays as an alternative sequencing techniques – Sequencing by Hybridization – Path Problems – Fragment assembly in DNA Sequencing – Protein Sequencing and Identification – The Peptide Sequencing Problem – Spectrum Graphs – Spectral Convolution and Alignment – Combinatorial Patter matching.
UNIT 5	CLUSTERING AND TREES Clustering and trees – Gene expression analysis – Hierarchical clustering-k-means clustering – Clustering and corrupted Cliques – Evolutionary Trees – Distance-based tree reconstruction – Reconstruction trees from additive matrices – Evolutionary trees and hierarchical clustering – Character-based tree reconstruction – Small and large Parsimony Problem – Hidden Markov Models- Randomized Algorithms.

TEXTBOOKS

1. Neil C. Jones and Pavel A. Pevzner, An Introduction to Bioinformatics Algorithms, MIT Press, First Indian Reprint 2005.
2. Gary Benson Roderic page (Eds), Algorithms in Bioinformatics, Springer International Edition, First Indian Reprint 2004.

REFERENCE BOOKS

1. Gusfields G, Algorithms on strings, trees and sequences- Computer Science and Computational Biology, Cambridge University Press 1997.
2. Steffen Schulze-Kremer, Molecular Bioinformatics: Algorithms and Applications, Walter de Gruyter, 1996.

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	NATURAL LANGUAGE PROCESSING	6			6

UNIT	SYLLABUS
UNIT 1	Natural Language Processing (NLP) - open problems - major goal - language structure - language analyzer - morphological analyzer - local world grouper (LWG) - core parser - requirements of computational grammars - computational aspect - system aspect - large system aspect - morphological analysis - morphological generation using paradigms - morphological analysis using paradigms - speeding up morphological analysis by compilation - morphological analyzer - additional issues - local word grouping - verb groups - noun groups - strategy for grammar development - semantics in stages.
UNIT 2	Paninian grammar - semantic model - free word order and vibhakti - paninian theory - karaka relations - active passive - control - karaka to vibhakti mapping - karaka sharing
UNIT 3	Machine translation - survey - is MT possible? - Possible approaches - current status - anusaraka or language processor - cutting the Gordian knot - structure of anusaraka systems - user interface - linguistic area - anusaraka output - language bridges.
UNIT 4	Lexical functional grammar - active passive and dative constructions - WH movements in questions - LFG formalism - well formedness conditions - handling WH movements in questions - computational aspects - features and feature structures - unification - other constraints - CFG and Indian languages functional specification - lexicalized grammars and locality - lexicalized tree substitution grammar - lexicalized tree adjoining grammar - feature structures - mathematical aspects.
UNIT 5	Comparing TAG with PG - similarities between TAG and PG - differences between TAG and PG - Government and binding - GB modules - X-bar theory - theta theory - Government - Case theory - bounding theory - empty category principle (ECP) - binding theory - constraints on movement - GB parsing - comparing GB with PG.

REFERENCE BOOKS

1. Akshar Bharati, Vineet Chaitanya, Rajeev Sangal, “Natural Language Processing - A Paninian Prespective”, Prentice Hall of India, 2000
2. James Allen, Natural Language Understanding, Pearson Education, 3rd ed., 2005
3. D. Jurafsky and J. Martin, *Speech and Language Processing: An Introduction to Natural Language Processing, Computational Linguistics, and Speech Recognition*, 2nd Edition, Prentice Hall, 2008.
4. C. Manning and H. Schutze, *Foundations of Statistical Natural Language Processing*”, MIT

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	SOFT COMPUTING	6			6

UNIT	SYLLABUS
UNIT 1	Fundamentals of ANN: The Biological Neural Network, Artificial Neural Networks – Building Blocks of ANN and ANN terminologies: architecture, setting of weights, activation functions - McCulloch-pitts Neuron Model, Hebbian Learning rule, Perception learning rule, Delta learning rule.
UNIT 2	Models of ANN: Single layer perception, Architecture, Algorithm, application procedure - Feedback Networks: Hopfield Net and BAM - Feed Forward Networks: Back Propagation Network (BPN) and Radial Basis Function Network (RBFN) - Self Organizing Feature Maps: SOM and LVQ.
UNIT 3	Fuzzy Sets, properties and operations - Fuzzy relations, cardinality, operations and properties of fuzzy relations, fuzzy composition.
UNIT 4	Fuzzy variables - Types of membership functions - fuzzy rules: Takagi and Mamdani – fuzzy inference systems: fuzzification, inference, rulebase, defuzzification.
UNIT 5	Genetic Algorithm (GA): Biological terminology – elements of GA: encoding, types of selection, types of crossover, mutation, reinsertion – a simple genetic algorithm – Theoretical foundation: schema, fundamental theorem of GA, building block hypothesis.

TEXT BOOKS:

1. S. N. Sivanandam, S. Sumathi, S.N. Deepa, “Introduction to Neural Networks using MATLAB 6.0 “, Tata McGraw-Hill, New Delhi, 2006.
2. S. N. Sivanandam, S.N. Deepa, “Principles of Soft Computing”, Wiley-India, 2008.
3. D.E. Goldberg,” Genetic algorithms, optimization and machine learning”, Addison Wesley 2000.

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	AGENT BASED COMPUTING	6			6

UNIT	SYLLABUS
UNIT 1	Introduction to Software Agents: What is a software agent? - Why software agents? - Applications of Intelligent software agents-Practical design of intelligent agent systems
UNIT 2	Intelligent Agent Learning- Approaches to Knowledge base development-Disciple approach for building intelligent agents- Knowledge representation-Generalization-Problem solving methods-Knowledge elicitation.
UNIT 3	Rule learning: Rule learning problem- Rule learning method- Learned rule characterization. Rule refinement: Rule refinement problem- Rule refinement method- Rule experimentation and verification-Refined rule characterization-Agent interactions.
UNIT 4	Disciple shell: Architecture of Disciple shell- Methodology for building Intelligent Agents- Expert-Agent interactions during knowledge elicitation process- Expert-Agent interactions during rule learning process- Expert-Agent interactions during rule refinement process.
UNIT 5	Case studies in building intelligent agents: Intelligent Agents in portfolio management-Intelligent Agents in financial services. Java Agent Development framework [JADE]: Creating multi-agent systems with JADE- Agent platform-Agent Tasks and behaviors-Agent Communication Language - Interaction protocols- Using JADE from Java.

TEXT BOOKS

1. Jeffrey M Bradshaw, "Software Agents", AAAI Press/ The MIT Press, 2000.
2. Nicholas R Jennings, Michael J Wooldridge (Eds.), "Agent Technology – Foundations, Applications and Markets", Springer, 1997.
3. Gheorghe Tecuci et al., "Building Intelligent Agents", Academic Press, 2003.
4. Eduardo Alanso, Daniel Kudenko, Dimitar Kazakov (Eds.), "Adaptive Agents and Multi-Agent Systems", Springer Publications, 2003.

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	INFORMATION SECURITY	6			6

UNIT	SYLLABUS
UNIT 1	Conventional Encryption : Classical Technique – Modern technique – Algorithms; Public Key Cryptography : Public Key Cryptography – Introduction to Number Theory – Message Authentication and Hash Function – HASH and MAC Algorithm – Digital Signature and Authentication protocol.
UNIT 2	Network Security Practice: Authentication Application – Electronic Mail Security – IP Security Program Security and System Security: Secure programs – No malicious program errors – viruses and Worms – Memory and address protection – control access to general objects – File protection mechanism – user authentication – Trusted operating system design and assurance – Intrusion Detection system.
UNIT 3	System Security and Web Security: Intruders,– Firewall - Managing Access – Password management - Web Security requirements – SSL and TLS – SET; Client Side Security : Using SSL – Active Content – Web Privacy. Database Security: The Database as a Networked Server – Securing database-to-database communication – Reliability and Integrity of database – sensitive data – inference – multilevel databases.
UNIT 4	Wireless Network Security: Mobile Security – Encryption Schemes in WLANs – Basic approach to WLAN security and Policy Development – WLAN intrusion process – WLAN security solutions. Digital Watermarking and Steganography: Models of Watermarking – Basic Message Coding – Watermark Security – Content Authentication – Steganography
UNIT 5	Cyber Crimes: Introduction – computer crime and cyber crimes; Classification of cyber crimes, Cyber crime and Related Concepts: Distinction between cyber crime and conventional crimes, Reasons for commission of cyber crime, Cyber forensic : Cyber criminals and their objectives, Kinds of cyber crimes – cyber stalking; cyber pornography; forgery and fraud; crime related to IPRs; Cyber terrorism; computer vandalism, Regulation of cyber crimes: Issues relating to investigation, Issues relating to Jurisdiction, Issues relating to Evidence , Relevant provisions under Information Technology Act, 2000, Indian Penal Code, Pornography Act and Evidence Act etc.

TEXT BOOKS:

1. Charles P. Pfleeger, Shari Lawrence Pfleeger, "Security in Computing", Prentice Hall of India, 2007.
2. William Stallings, "Cryptography and Network Security", 5th Edition, Pearson.
3. John W. Rittinghouse, James F. Ransome, "Wireless Operational Security", Elsevier, 2004.
4. Ron Ben Natan, "Implementing Database Security and Auditing", Elsevier, 2005.
5. Lincoln D. Stein, "Web Security", Addison Wesley, 1999.
6. Ingemar J. Cox, Matthew L. Miller, Jeffrey A. Bloom, Jessica Fridrich, Ton Kalker, "Digital Watermarking and Steganography", 2nd Edition, Elsevier.
7. Dr. R. K. Tiwari, P. K. Sastri, K. V. Ravikumar, "Computer Crime and Computer Forensics", 1st Edition, Selective Publishers, 2002.

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	CLOUD COMPUTING	6			6

UNIT	SYLLABUS
UNIT 1	What is Cloud Computing – Types of Clouds – Private Cloud- Public Cloud- Community Cloud – Hybrid Cloud - Understanding Cloud Architecture – Understanding Cloud Storage – Understanding Cloud Services.
UNIT 2	Pros and Cons of Cloud Service Development – Who Benefits from Cloud – Who should not use the cloud - Types of Cloud Service Development – Software as a Service – Platform as a Service – Infrastructure as a Service.
UNIT 3	Data Security – Network Security – Host Security – Disaster Recovery Planning – Disasters in the Cloud – Disaster Management.
UNIT 4	Virtualization and the Cloud – Characteristics - Using a Hypervisor in virtualization – Abstracting hardware assets – Foundation issues – Abstraction layer – Provisioning software – Virtualization Storage – Hardware Provisioning.
UNIT 5	Amazon Web Services (IaaS), Google (SaaS, Paas).

REFERENCE BOOKS

1. Michael Miller, Cloud Computing: Web-Based Applications That Change the Way You Work and Collaborate Online, Que Publishing, August 2008.
2. Cloud Application Architectures - George Reese –O'Reilly
3. Cloud Computing for Dummies – Judith Hurwitz, Robin Bloor, Marcia Kaufman, Dr. Fern Halper
4. Cloud Security and Privacy – Tim Mather, Subra Kumaraswamy and Shahed Latif - O'Reilly

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	DISTRIBUTED COMPUTING	6			6

UNIT	SYLLABUS
UNIT 1	Hardware Concepts - Switched Multiprocessor - Bus-based multicomputer - Switched Multicomputer - Software concepts - Network Operating Systems and NFS - Time Distributed Systems. Design Issues: Transparency - Flexibility - Reliability - Performance and scalability.
UNIT 2	Communications in distribute systems - The Client/Server Model - Blocking versus unbuffered primitives - Implementation of Client/Server model.
UNIT 3	Synchronization in distributed systems - Clock synchronization - Mutual exclusion - Election algorithms - Atomic transactions - Dead lock distributed system - Threads - Thread usage and implementation of thread packages - Processor allocation.
UNIT 4	Distributed File System: File Service interface - Semantics of file sharing - Distributed file system - Implementation of new trends in distributed file system.
UNIT 5	Distributed databases: Distributed DBMS Architecture - Sorting Data in a Distributed DBMS - Distributed Catalog Management - Distributed query processing - Updating distributed data - Distributed transaction management - Distributed Concurrency control - Recovery.

TEXTBOOKS

1. A.S. Tanenbaum - Modern Operating Systems - Prentice Hall.

REFERENCE BOOKS

- 1.Sape Mullender,” Distributed Systems”, Addison Wesley, Second Edition, 1993.
- 2.Albert Fleishman,” Distributes Systems- Software Design and Implementation”, Springer-Verlag, 1994.
- 3.M.L.Liu, “Distributed Computing Principles and Applications”, Pearson Education, 2004.
4. Andrew S Tanenbaum , Maarten van Steen, “Distibuted Systems –Principles and Pardigms”, Pearson Education, 2002.
5. Mugesh Singhal,Niranjan G Shivaratri, “Advanced Concepts in Operating Systems”, Tata McGraw Hill Edition, 2001 .

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	ARTIFICIAL NEURAL NETWORKS	6			6

UNIT	SYLLABUS
UNIT 1	Introduction to Neural Networks – Basic Concepts of Neural Networks– Inference and Learning – Classification Models – Association Models – Optimization Models – Self-Organization Models.
UNIT 2	Supervised and Unsupervised Learning – Statistical Learning – AI Learning – Neural Network Learning – Rule Based Neural Networks – Network Training – Network Revision- Issues- Theory of Revision- Decision Tree Based NN – Constraint Based NN
UNIT 3	Incremental learning – Mathematical Modeling – Application of NN Knowledge based Approaches
UNIT 4	Heuristics- Hierarchical Models – Hybrid Models – Parallel Models – Differentiation Models- Control Networks – Symbolic Methods- NN Methods.
UNIT 5	Structures and Sequences – Spatio-temporal NN – Learning Procedures- Knowledge based Approaches.

TEXT BOOK

(i) L. Fu, 1994, Neural Networks in Computer Intelligence, Tata McGraw Hill, New Delhi.

REFERENCE BOOKS

(i) R. J. Schalkoff, 1997, Artificial Neural Networks, Tata McGraw Hill, New Delhi.

(ii) Anderson, 2001, An Introduction to Neural Network, PHI, New Delhi.

M.Phil. – Computer Science

COURSE CODE	COURSE TITLE	L	T	P	C
	WEB ENGINEERING	6			6

UNIT	SYLLABUS
UNIT 1	The need for Web Engineering: Introduction – Web Applications versus Conventional Software – The need for Web Engineering Approach – Empirical Assessment
UNIT 2	Web Effort Estimation: Introduction – Effort Estimation Techniques – Measuring Effort Prediction Power & Accuracy – Which is the most Accurate Prediction Technique – Case Study.
UNIT 3	Web Productivity Measurement and Benchmarking: Introduction – Productivity Measurement Method – Case Study.
UNIT 4	Web Quality: Introduction – Different Perspectives of Quality – Evaluating Web Quality using WebQEM – Case Study.
UNIT 5	Web Usability: Principles and Evaluation Methods - Introduction – Defining Web Usability – Web Usability Criteria – Evaluation Methods – Automatic Tools to Support Evaluations – Evaluation of the DEI Application.

REFERENCE BOOKS

1. Web Engineering – Emilia Mendes, Nile Mosley (Eds) – Springer.
2. Web Engineering: The Discipline of Systematic Development of Web Applications – Gerti Kappel, Birgit Proll, Siegfried Reich, Werner Retschitzegger – John Wiley & Sons Ltd 2006.

COURSE CODE	COURSE TITLE	L	T	P	C
	SOFTWARE TESTING AND QUALITY ASSURANCE	6			6

UNIT	SYLLABUS
UNIT 1	Testing Objectives and principles - Purpose of Software testing – SDLC and testing –Verification and validation - Weyuker's adequacy axioms – model for testing and consulting oracles – Is complete testing possible – The Consequence of bugs – Taxonomy of Bugs– Test case Design – Black Box Testing and White Box testing – Testing strategies - Unit testing – Integration Testing – Validation testing – System testing – The art of Debugging and debugging approaches.
UNIT 2	Basis Path testing - Data flow testing - Control flow and structure testing– Strategies –Applications, Tools and effectiveness – Condition Testing -Transaction Flow testing, Syntax Testing – Grammar for formats – Implementation. Loop and Logic Based Testing – Decision tables – Path Expressions – KV Charts – Specifications – State transition Testing – identifying good & bad states – state testing Metrics and Complexity.
UNIT 3	Graph based testing methods –Orthogonal Array testing – Performance Testing -Testing for Real-time Systems– issues – Testing in web applications – Testing in object oriented software - Differences from testing non-OO Software – Testing OOA and OOD models -Class testing strategies - Class Modality - State-based Testing - Message Sequence Specification.
UNIT 4	Automated Tools for Testing - Static code analyzers - Test case generators - GUI Testing -Capture/Playback – Stress Testing - Testing Client -server applications - Testing compilers and language processors - Testing web enabled applications. Design for Testability - Observability & Controllability - Built-in Test - Design by Contract - Precondition, Post condition and Invariant - Impact on inheritance – polymorphism.
UNIT 5	Regression Testing - Challenges – Test optimization- Mutation testing – Fault based testing –Scenario based testing-penetration testing-Testing Approaches in Software Industry – testing metrics – function based metrics –Bang metrics – software quality metrics.

TEXT BOOKS:

1. Boris Beizer, "Software Testing Techniques", 2nd Edition, Dreamtech Press, 2003.
2. Myers, Glenford.J., "The Art of Software Testing", John-Wiley & Sons, 1979.
3. Roger.S.Pressman, "Software Engineering – A Practitioner's Approach", 5th Edition, Mc- Graw Hill, 2001.
4. Marnie.L. Hutcheson, "Software Testing Fundamentals", Wiley, 2007.
5. William E.Perry, "Effective Methods for Software Testing ", 2nd Edition, John Wiley & Sons, 2000.
6. Robert V.Binder, "Testing Object-Oriented Systems: Models Patterns and Tools ", Addison Wesley, 2000

DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF COMMERCE
M.Phil.



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: 2

RESEARCH METHODOLOGY- I

UNIT	SYLLABUS
UNIT 1	Research : Meaning and purpose – Essentials of scientific method – Limitations in social and behavioral research – Types of research; Exploratory Research, Pure Research, Applied Research, Analytical, Descriptive, Historical, Experimental, Survey, Case Study – Research Design.
UNIT 2	Steps in Research – Selection and formulation of a research problem – Review of previous research – Delimitation of the scope of the study – Setting up of objectives – definition of concepts – Formulation of hypothesis and research questions – Preparation of research design – construction of tool – field work and collection of data
UNIT 3	Review of literature -Purpose- Brief survey of business research with reference to specific areas taken up for study.
UNIT 4	Some concepts used in research – Facts and Data, definitions and measurements, reliability, precision, accuracy bias and validity, norms, standards, criteria and objectives, sets, variables, parameters, constants and functions, assumptions, axioms, postulates and premises, models, theories, hypothesis, research questions, operationalising concepts, etc.
UNIT 5	Report writing - Target audience- Types of reports-Concepts of report-Style and conversations in reporting - Steps in drafting a report.

Books referred:

1. Research methods-C.R. Kothari
2. Statistical methods-S.P.Gupta
3. Research methods in management-V.P. Micheal
4. Research Methods & Communications-Dr. v. Balu.
5. Research methods for Commerce and Management-K.V.Rao

RESEARCH METHODOLOGY- II

UNIT	SYLLABUS
UNIT 1	Formulation of Hypothesis – Meaning of hypothesis – Types of hypothesis – Sources of hypothesis – Testing of hypothesis – Errors in testing.
UNIT 2	Sampling Techniques – Sampling theory – Sampling error and data collection error – Sample size – Sampling methods and their application – Testing the appropriateness of a sample – Sample unit and sample size.
UNIT 3	Principles and Methods of Collection of Data – Primary and secondary data: Observation – Interview – Questionnaire – Scales – Checklists; pretest, pilot study – Reliability testing and validating a questionnaire. Attitude measurement – Methods of scale construction – Multidimensional scaling.
UNIT 4	Processing and Analysis of Data – Checking –Editing – Coding – Transcription and tabulation. Data processing through computers.
UNIT 5	Statistical Analysis – Elements of analysis – Types of analysis – Levels of measurements – Choice of statistical measurements. Descriptive statistics : Diagrammatic and graphic representation of data – Measures of central tendency – Measures of dispersion – Sampling distribution – Testing of hypothesis – z test, t test, F test – Estimating parameter value – Relational analysis – parametric and non-parametric – Correlation and regression – Association – Karl Pearson's 'r' – Kendall's tau and Spearman's rho-Chi-square test. Analysis of differences among variances and attributes – Parametric analysis of variance (F test – one way and two way analysis of variance) – Non – Parametric analysis of variance – Friedman test – Kruskal – Wallis test – Mann Whitney test – Wilcoxin test – Analysis of Time Series – forecasting – applications of statistical methods in Finance, Marketing and Personnel Functions of Business (Theory and Problems)

Books referred:

6. Research methods-C.R. Kothari
7. Statistical methods-S.P.Gupta
8. Research methods in management-V.P. Micheal
9. Research Methods & Communications-Dr. v. Balu.
10. Research methods for Commerce and Management-K.V.Rao

FINANCIAL MANAGEMENT

UNIT	SYLLABUS
UNIT 1	Definition – Objectives – Scope and Functions of Financial Management – Financial planning – Meaning and Importance of Financial Planning – Capitalization – Over capitalization – Causes – Effects – Remedies – Under capitalization – Causes – Effects – Remedies.
UNIT 2	Capital structure – Meaning – Determinants – Capital structure Theories – Net income Approach – Net operating income Approach – Modigliani and Miller Approach - Capital budgeting – Meaning and Importance – Payback period method – Accounting rate of return method – Net Present value method – Internal rate of return method and Profitability Index – Capital Rationing (Theoretical Concepts)
UNIT 3	Cost of Capital – Meaning and Importance – Cost of equity capital – Cost of Preference capital – Cost of debt capital – Cost of retained earnings – Weighted average cost of capital – Operating and financial leverage – EBIT and EPS analysis.
UNIT 4	Dividend – Meaning – Types of Dividend – Types of Dividend policy – Determinants of dividend policy Dividend theories – Walter’s Model – Gordon’s Model – Capitalization of dividend – Bonus and Rights issue.
UNIT 5	Working Capital - Meaning – Importance – Types – Operating cycle – Working capital estimation – Cash management – Receivables management – Inventory management – Financing of working capital.

Reference books:

1. M.Y. Khan and P.K. Jain – Basic Financial Management, TATA Mc Graw Hill, NewDelhi.
2. I.M.Pandey – Financial Management, Vikas publications, New Delhi.
3. S.N.Maheshwari – Financial Management, Sultan chand publications, New Delhi.
4. R.K.Sharma& Shashi K. Gupta – Financial Management, Kalyani publications, New Delhi.
5. Prasanna Chandra –Financial Management, TATA Mc Graw Hill Publication.

ENTREPRENEURIAL DEVELOPMENT

UNIT	SYLLABUS
UNIT 1	Entrepreneurial Development: The Entrepreneurial Culture and Structure – Entrepreneurial Traits – Types – Behavioral Patterns of Entrepreneurs – Establishing Entrepreneurial Systems – Development of Women Entrepreneurship in India – “Modi”Fication of Entrepreneurial Vision 2020.
UNIT 2	Project Identification and Analysis: Search and Identification of a Business Idea – Sources and Selection – Project Classification and Identification – Constraints – Feasibility Studies – Project Objectives – Design and Appraisal – Network Analysis (PERT, CPM) – Activity Performance – Time Schedules.
UNIT 3	Financial Feasibility Analysis: Financial Analysis – Capital Cost, Operating Cost Estimation and Budgeting Under Uncertainty Risk and Inflation – Social Cost Benefit Analysis, Sources of Project Finance, Credit Facilities – Evaluation by Financial Institutions – Role of Consultancy Organizations in Financial Analysis.
UNIT 4	Entrepreneurial Development Programme: Institutions Providing Technical, Financial and Marketing Assistance – Setting Quality Standards and Benchmarking – Entrepreneurship Development Programmes in India – Prospects – Role of Entrepreneurial Development Institutes.
UNIT 5	Entrepreneurship Promotion: Steps for Starting a Small Industry – Selection of Types of Organization (Special Reference to Partnership, LLP, OPC, Producer Companies) – Central Government Schemes and State Government Schemes & Incentives to SSI – Registration: Registration and Licensing – Incentives for Exports & Imports - Import of Capital Goods and Raw Materials.

Reference Books:

1. C.B. Gupta and S.P. Srinivasan, Entrepreneurial Development, Sultan Chand Publishers.
2. S.S. Khanka, Entrepreneurial Development, Sultan Chand & Co.
3. Ramachandran K, Entrepreneurial Development, TATA Mc Graw Hill Publishers.
4. Jayashree Suresh, Entrepreneurial Development, Margham Publications, Chennai.
5. Chalam KS, Women Entrepreneurs and Socio Economic Development, Serials Publications.

MARKETING

UNIT	SYLLABUS
UNIT 1	Introduction to Marketing: Modern concepts of Marketing – Marketing Environment – Marketing Research – Marketing Information System – Market potential analysis – Uses and Methods – Sales forecasting – New horizons of Marketing – Rural marketing – E-marketing – Green marketing.
UNIT 2	Marketing Mix and Components: Product mix – Product Life Cycle – New Product Development Process – Price mix – Objectives of Pricing – Measuring and analysis of Price sensitivity – Promotion mix – Objectives – Media research – Measuring advertising effectiveness – Place mix – Channels of Distribution – Supply chain management.
UNIT 3	Consumer Behaviour: Consumer Behaviour and Perception – Learning – Personality – Attitude – Motivation – Social influence on consumer buying behaviour – Measurement of consumer attitudes – Introduction to Customer Relationship Marketing (CRM).
UNIT 4	Introduction to Services Marketing: Meaning and Characteristics of services – Distinction between Goods and Services – Classification of services – Marketing strategy for services (an Overview).
UNIT 5	Service Marketing Mix: Elements – Service Products – Pricing in Services – Service Promotion – Place in Services – People in Services – Marketing of Services – Banking Services – Financial Services – Insurance Service (an Overview).

Reference Books:

1. William J Stanton – Fundamentals of Marketing, Tata McGraw Hill, New Delhi.
2. Philip Kotler – Marketing Management, Prentice Hall of India, New Delhi.
3. Memoria C.B and Joshi R.L – Principles and Practices of Marketing in India.
4. Valarie A Zeithaml – Service Marketing, Tata McGraw Hill, New Delhi.
5. Christopher Lovelock – Service Marketing, Pearson Education Asia, New Delhi.

HUMAN RESOURCE MANAGEMENT:

UNIT	SYLLABUS
UNIT 1	Human Resource Management: Scope and activities of Human resources Management – New Trends in HRM – HR competitiveness – Executive Resources planning – HR Manager as strategic business partner – Changing status of HR Managers – Challenges and issues facing as a HR Manager.
UNIT 2	Human Resource Planning and Performance Appraisal: Process and steps involved in HR planning – Manpower Planning – Job Analysis – Job Design – Job Enrichment – Job Rotation – Modern methods of Recruitment – Performance based Appraisals – Process of Performance Appraisal – 360 Degree Performance Appraisals – BOS and BARS – HR Scorecard.
UNIT 3	Human Resource Development (HRD): Goals of HRD – HRD culture – Role of Chief Executives in HRD – Role of psychology in HRD and Management – Training, Development, Coaching and Mentoring – Competency mapping – Developing competencies – Talent Management (an Overview).
UNIT 4	Work Life Balance: Quality of work life – Participation and Empowerment – Career Planning and Development – Managing Discipline and Grievances – Employee welfare.
UNIT 5	Human Resource Information System (HRIS): Meaning – Scope – Importance – HRM Research and Audit – HRM in changing Environment – International HRM – Managing Human Resource in Virtual Organizations.

Reference books:

1. V.S.P.Rao – Human Resource Management, Excel Books.
2. Ashwathappa – Human Resource Management, Tata McGraw Hill publications.
3. C.B.Gupta – Human Resource Management, Sultan chand publishers.
4. L.M.Prasad – Human Resource Management, Sultan chand publishers.
5. P.C.Tripathi – Human Resource Management, Jain Book publishers.

BANKING AND FINANCIAL SERVICES

UNIT	SYLLABUS
UNIT 1	Origin of Banks and Banking Systems: Origin of Banks: Classification of Banks – Definition of Banking – Economic and Monetary Implication of Modern Banking system- Concept of Social Responsibility of Banks. Banking systems: Unit Banking and Branch Banking – Cooperative Banks and Regional Rural Banks(RRBs) Banking Regulation Act 1948.
UNIT 2	Functions of Commercial Banks: Importance of Commercial banks – Creation of credit – Mechanism of Credit creation – Money market – Developed and Under developed Money markets – Importance of Money markets.
UNIT 3	Central Banks: 1. Central bank: Origin and evolution – Definition – Necessity – Functions – Bill market – Monetary Policy 2. Credit control: Quantitative credit control Methods – Bank rate Policy – Open market Operation – Variable cash Reserve ratio (CRR) 3. Selective or Qualitative credit control methods: Changing the Margin requirements – Credit Rationing – Direct action – Moral Suasion.
UNIT 4	Financial Markets and services: New issue market – Stock Exchange – SEBI Regulations – Merchant Banks – Underwriting – Factoring and leasing – Negotiable instrument – Cheque – Crossing – endorsement – Holder in due course – Paying & collecting banker – Advances – Lending against goods and documents.
UNIT 5	Latest developments in Borrowing – World Bank Norms, ATM Credit & Debit cards, Core banking of Role of RBI in Monitoring and Regulating Foreign Direct Investment.

Reference books:

1. Banking law & Practice – Varshney & Sundaram – Sultan chand sons, New Delhi.
2. Banking and financial system – Dr. V.Balu – Srivenkateshvara publications, Chennai.

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PG DEPARTMENT OF COMPUTER SCIENCE
M.Sc. (Information Technology)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: **4**

Total No. of Credits: **90**

FIRST SEMESTER

S. No .	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks IA EA		Hours per week
1	Core – 1	Problem solving and Programming	4	3	20	80	5
2	Core – 2	Visual basic & Data Base Management System	4	3	20	80	5
3	Core – 3	Data Structure & Algorithms	4	3	20	80	5
4	Elec - 1	Elective - I	4	3	20	80	5
5	Core – 4	Practical-I: Problem solving using C- Lab	2	3	20	80	4
6	Core - 5	Practical-II: RDBMS lab	2	3	20	80	4
7	Soft skill - I	Language and Communication Level II	2	3	20	80	2

IA- Internal Assessment ; EA- External Assessment

SECOND SEMESTER

S. No .	Course Components	Name of the Course	Credits	Exam Duration(Hrs)	Max. Marks IA EA		Hours per week
8	Core – 6	Operating System	4	3	20	80	5
9	Core – 7	Object oriented Programming with C++	4	3	20	80	5
10	Elec – 2	Elective – II	4	3	20	80	5
11	Elec - 3	Elective – III	4	3	20	80	5
12	Core – 8	Practical-III: C++ lab	2	3	20	80	4
13	Elective – IV	Practical-IV: Based on Elective-III	2	3	20	80	4
14	Soft skill – 2	Spoken and Presentation Skills Level – II	2	3	20	80	2
15	Internship training		*	-	-	-	

Elective -I :- Software engineering **OR** Object Oriented Analysis And Design **OR** Distributed Computing

Elective- II:- Multimedia Systems **OR** Software Project Management
OR Data Mining and Data warehousing

Elective –III-Unified Modelling Language **OR** PHP **OR** Web Technology

THIRD SEMESTER

Course components	Name of Course	Credits	Exam. Duration	Max. Marks		Hours
				IA	EA	Per Week
Core-9	Programming in Java	4	3	20	80	4
Core-10	Internet Programming	4	3	20	80	4
Core-11	Elective-4	4	3	20	80	4
Extra-Disciplinary	Information Security	4	3	20	80	
Core -12	Elective –5	4	3	20	80	4
Core-13	Practical : Java Lab	2	3	20	80	4
Soft Skill-3	Personality Enrichment	2	3	20	80	4
Core -14	Internet Programming Lab	2	3	20	80	4
Soft Skill-4	Foreign Language	2	3	20	80	2
Internship **	During summer vacation 4 to 6 weeks of I Year	-	-	20	80	

**** Internship will be carried out during the summer vacation of the first year and marks should be sent to the University by the College and the same will be included in the Third Semester Marks Statement.**

FOURTH SEMESTER

COURSE COMPONENTS	NAME OF COURSE	SEMESTER	CREDITS	EXAM. DURATION	MAX. MARKS	
					IA	EA
Core	Project & Viva-Voce	IV	20	-	60	240

List of Electives

Elective-IV- Professional Ethics and Human Values **OR** Artificial Intelligence **OR** Software Quality Management.

Elective – V: Cloud Computing **OR** Enterprise Resource Planning **OR** Computer Graphics

COURSE CODE	COURSE TITLE	L	T	P	C
14P621A	PROBLEM SOLVING AND PROGRAMMING	4			4

UNIT	SYLLABUS
UNIT 1	Introduction to computer Problem Solving Introduction – The problem solving aspect – Top down Design – Implementation of algorithms- Program Verifications – Efficiency of Algorithms – Analysis of algorithms
UNIT 2	Introduction – Exchanging the values – counting – Factorial Computation – SINE Computation – Base conversion – Factoring methods – Array Techniques
UNIT 3	Overview of C – Constants, variables and data types – Operators and expressions – Managing Input/Output Operations – Formatted I/O – decision making – Branching – IF, Nested IF – Switch – Goto – Looping – While, do, for statements
UNIT 4	Arrays – Dynamic and multi-dimensional arrays – Character arrays and strings – String handling functions – User Defined functions – Categories of functions – Recursion – Structures and Unions – Array of Structures – Structures and functions
UNIT 5	Pointers – Declaration, Accessing a variable, character strings, pointers to functions and structures – File management in C – Dynamic memory allocation – Linked lists – Pre processors.

TEXTBOOKS

1. R.G. Dromey, “How to solve it by computer”, PHI, 1998
2. E.Balagurusamy, “Programming in Ansi C”, Tata McGraw Hill, 2004

REFERENCES:

1. Deitel and Deitel, “C How to program”, Addison Wesley, 2001
2. Brian W Kernighan & Dennis Ritchie, “C Programming Language”, PHI, 1990
3. Byron S Gottfried, “Schaum’s Outline of Programming with C”, 2nd ed., 1996.

COURSE CODE	COURSE TITLE	L	T	P	C
14P621B	VB & Database Management Systems	4			4

UNIT	SYLLABUS
UNIT 1	Customizing a Form – writing simple programs – Toolbox – creating controls – Name properties – command button – access keys – image controls – Text Boxes – labels – message boxes – grid – tools – variables – Data types – String Numbers.
UNIT 2	Displaying information – determinate loops – indeterminate loops – conditionals - Built in functions – functions and procedures.
UNIT 3	Lists – arrays – sorting and searching – records – control arrays – combo boxes – grid controls – projects with multiple forms – Do events and sub main –error trapping – VB objects – Dialog boxes – common controls – menus – MDI forms.
UNIT 4	Purpose of Database Systems – Overall System structure – Entity relationship model – Mapping constraints – Primary Keys – Foreign Keys – E.R.Diagrams-Relational Model : structure – formal query languages
UNIT 5	Relational Algebra – Relational Calculus – SQL.-Relational database Design : Pitfalls – normalization using functional dependencies – Decomposition – Boyce – Codd normal form – Third Normal Form – Normalization using multivalued Dependencies – Forth Normal Form.

Recommended Texts :

1. Gary Cornell (1999), Visual Basic 6 from the Groand UP, TMH, New Delhi.
2. Noel Jerk (1999), Visual Basic 6 (The complete reference), TMH, New Delhi.
3. HF.Korth and A.Silberschatz – Database System Concepts – Mcgraw Hill International Publication – 1998

COURSE CODE	COURSE TITLE	L	T	P	C
14P621C	DATA STRUCTURE AND ALGORITHM	4			4

UNIT	SYLLABUS
UNIT 1	Definition of a Data structure – primitive and composite Data Types, Asymptotic notations Arrays, Operations on arrays, Order Lists.
UNIT 2	Stacks – Applications of Stack – Infix to Postfix Conversions, Recursion, Maze Problems Queues – Operations on Queues, Queue Applications, Circular Queue.
UNIT 3	Singly Linked List – Operations, Application – Representation of a Polynomial Addition, Doubly Linked List – Operations, Applications – Ordering of Books in Library (Alphabetical Ordering).
UNIT 4	Trees and Graphs: Binary Trees – Conversion of Forest to Binary Tree, Operations – Tree Traversals, Graph – Definition, Types of Graphs, Hashing Functions, Traversal – Shortest Path; Dijkstra's Algorithm.
UNIT 5	Algorithm – Definition – Examples – Complexity – Divide and Conquer – Binary Search – Maximum and Minimum – Merge Sort.

1. E.Horowitz and S.Shani Fundamentals of Data Structures in C++, Universities Press; Second edition (2008)
2. Horowitz, S.Shani, and S.Rajasekaran, Computer Algorithms, Silicon Press, 2008
3. R.Kruse C.L. Tondo and B.Leung, Data Structure and Program design in C, PHI, 1997.

COURSE CODE	COURSE TITLE	L	T	P	C
14P6211	PRACTICAL – Problem solving Using C-Language	4			4

1. Determining a given number prime or not
2. Euclidean's Algorithm for finding GCD
3. Summation of Series:-Sin (x),
4. Cos (x),
5. Exp (x) (Comparison with built in functions)
6. String Manipulation: Counting the no of vowels, consonants, words, white spaces in a line of text and array of lines
7. Reverse a string & check for palindrome.
8. Fibonacci sequence
9. Maximum & Minimum
10. Matrix Manipulation:-Addition & Subtraction
11. Matrix Multiplication
12. Student record creation-Array of structures

COURSE CODE	COURSE TITLE	L	T	P	C
14P6212	PRACTICAL – VISUAL PROGRAMMING & RDBMS LAB	4			4

Visual Programming

1. Creation, altering and dropping and inserting rows into a table (use constraints while creating tables) examples using select command.
2. Queries (along with sub queries) using ANY, ALL, IN, EXISTS, NOT EXISTS, UNIQUE, INTERSECT, Constraints.
3. Create a database and write the programs for library information system.
4. Create and perform Database Operations using Oracles Back End and VB as Front End Use ODBC connectivity.
5. Create a Trigger that audits the operations of EMP table.

Students are advised to use the concepts like Data Normalization, Link between table by means of foreign keys and other relevant data base concepts for developing databases for the following problems. The implementation of each problem should have necessary Input screen Menu driven query processing and pleasing reports. The choice of RDBMS is left to the students. Necessary validations must be done after developing database.

1. Students Mark Sheet Processing.
2. Telephone directory maintenance.

COURSE CODE	COURSE TITLE	L	T	P	C
14S21AA	ESSENTIALS OF LANGUAGE AND COMMUNICATION	4			4

Objectives

- *enable* students to build a repertoire of functional vocabulary and to move from the lexical level to the syntactic level.
- *train* students to summon words, phrases relevant to the immediate communication tasks.
- *enable* students to comprehend the concept of communication.
- *teach* students the four basic communication skills- Listening, Speaking, Reading and Writing.

UNIT 1: Recap of language skills – vocabulary, phrase, clause, sentence.

UNIT 2: Fluency building.

UNIT 3: Principles of Communication.

UNIT 4: Types of Communication.

UNIT 5: LSRW in Communication.

Recommended Texts

- Monippally, Matthukutty. M. 2001. *Business Communication Strategies*. 11th Reprint. Tata McGraw-Hill. New Delhi.
- Sasikumar. V and P.V. Dhamija. 1993. *Spoken English: A Self-Learning Guide to Conversation Practice*. 34th Reprint. Tata McGraw-Hill. New Delhi.
- Swets, Paul. W. 1983. *The Art of Talking So That People Will Listen: Getting Through to Family, Friends and Business Associates*. Prentice Hall Press. New York.
- Hewings, Martin. 1999. *Advanced English Grammar: A Self-Study Reference and Practice Book for South Asian Students*. Reprint 2003. Cambridge University Press. New Delhi.
- Lewis, Norman. 1991. *Word Power Made Easy*. Pocket Books.
- Hall and Shepherd. *The Anti-Grammar Grammar Book: Discovery Activities for Grammar Teaching*. Longman

Websites

- www.tatamcgrawhill.com/digital_solutions/monippally
- www.dictionary.cambridge.org
- www.wordsmith.org

COURSE CODE	COURSE TITLE	L	T	P	C
14P622D	OPERATING SYSTEM	4			4

UNIT	SYLLABUS
UNIT 1	Introduction Views – Goals – Types of system – OS Structure – Components – Service Structure – Layered Approach – Virtual Machines – Systems Design and Implementation Management: Process – Process Scheduling – Cooperating Process – Treads – InterProcess Communication CPU Scheduling: CPU Schedulers – Scheduling Criteria – Scheduling Algorithms.
UNIT 2	Process Synchronization Critical Section Problem – Synchronization Hardware – Classical Problems of Synchronization – Critical Region – Monitor. Deadlocks: Characterization method for Handling Deadlock Prevention – Avoidance – Detection – Recovery
UNIT 3	Memory management: Address Binding – Dynamic Loading and Linking – Overlays and physical Address space – Contiguous Allocation – Internal & External Fragmentation. Non-Contagious Allocation: Paging and Segmentation Schemes – Implementation – Hardware-protection – Fragmentation.
UNIT 4	Virtual Memory: Demand Paging – Page Replacement – Page Replacement Algorithm Thrashing. File System: File Concepts – Access Methods – Directory Structures – Protection Semantics – File System Structures – Allocation Methods – Free Space Management.
UNIT 5	I/O System: Overview – I/O Hardware – Application I/O Interface – Kernel I/O Transforming I/O Requests to hardware operations – Performance. Secondary Storage

BOOKS FOR STUDY AND REFERENCE

1. **Text 1.** A. Silberschatz P.B. Galvin, Gange., “Operating System Concepts”, 9th Edn., John Wiley & Sons., Co., 2012.

2.**Reference:** H.M.Deitel, An Introduction to operating system, Second Edition, Addison Wesley, 1990.

COURSE CODE	COURSE TITLE	L	T	P	C
14P622E	<i>OBJECT ORIENTED PROGRAMMING WITH C++</i>	4			4

UNIT	SYLLABUS
UNIT 1	What is Object Oriented Programming? – C ++ Console I/O – C++ commands – Classes: Some difference between C and C++ - Introducing Function Overloading - Constructor and Destructor Functions – Constructors that take parameters – Introducing Inheritance – Object Pointers – In –line Functions – Automatic in – lining.
UNIT 2	Assigning Objects – Passing Object to Functions – Returning Object from Functions – An Introduction to friend functions – Arrays of objects – Using Pointers to Objects – The this pointer – Using new & delete -More about new & delete – references – Passing references to objects – Returning references – Independent References and restrictions.
UNIT 3	Overloading Constructor Functions – Creating and using a copy constructor – Using default arguments – Overloading and ambiguity – Finding the address of an overloaded function – the basics of operator overloading – overloading binary operators – over loading the relational and logical operators – overloading a Unary operator – using friend operator functions – a closer look at the assignment operator – over loading the subscript () Operator.
UNIT 4	Base class access control – using protected members – Constructors, destructors and inheritance – multiple inheritance – virtual base classes – Some C++ I/O basics – formatted I/O using width (), precision () and fill () – using I/O manipulators – Creating your own inserters – creating extractors.
UNIT 5	Creating your own manipulators – file I/O basics – unformatted, binary I/O – more unformatted I/O functions – random access – checking the I/O status – customized I/O and files – Pointers and derived classes – Introduction to virtual functions – more about virtual functions – applying polymorphism – Exception Handling.

Text Book:

I). Herbert Schildt, “Teach Yourself C++”, Third Edition, Tata McGraw Hill, Reprint 2000.

Reference Books:

I). Robert Lafore, “Object Oriented Programming in Turbo C++”, fourth edition, Dorling Kindersley

ii). H.M.Deitel – C++ How to program – 5th edition – Pearson – 2005

COURSE CODE	COURSE TITLE	L	T	P	C
14P6223	PRACTICAL - DATA STRUCTURES AND C++ Lab	4			4

For the implementation of the following problems, the students are advised to use all possible object oriented features. The implementation based on structured concepts will not accepted.

1. Creation of classes ,objects and functions(inline function,friend function)
2. Implementation of constructors
3. Inheritance Implementation(single level,Multilevel and Multiple)
4. Polymorphism-Operator overloading(Unary and Binary Operators)
5. Polymorphism-Function overloading & Virtual functions
6. File Handling mechanisms.
7. Implementation of Arrays (Single and Multi-Dimensional)
8. Implementation of Stack (using Arrays and Pointers)
9. Implementation of Queue (using Arrays and Pointers)
10. Evaluation of Expressions.
11. Binary Tree implementations and Traversals using recursion
12. Search methods in graphs (DFS & BFS) using recursion

COURSE CODE	COURSE TITLE	L	T	P	C
14S22AB	ESSENTIALS OF SPOKEN AND PRESENTATION SKILLS	4			4

Objectives

- *train* students to become aware of their thinking style and to enable them to convert thinking into performance.
- *prepare* students to evolve mental models for intra-personal and inter-personal transactions.
- *make* students reflect and improve their use of body language – posture, gesture, facial expression, tone.

UNIT I: Thinking and Articulation – cognitive, affect, critical, creative aspects of articulation.

UNIT II: Acquisition of Oral and Aural Skills.

UNIT III: Communication Boosters – body language.

UNIT IV: Function of Cultural Codes in Presentation – etiquette.

UNIT V: Models of Presentation.

Recommended Texts

- Powell. *In Company*. MacMillan.
- Cotton, et al. *Market Leader*. Longman.
- Pease, Allan. 1998. *Body Language: How to Read Others Thoughts by their Gestures*. Sudha Publications. New Delhi.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice: A Reader*. Basic Books. New York.
- De Bono, Edward. 2000. *Six Thinking Hats*. 2nd Edition. Penguin Books.
- De Bono, Edward. 1993. *Serious Creativity*. Reprint. Harper Business.

COURSE CODE	COURSE TITLE	L	T	P	C
14P623G	PROGRAMMING IN JAVA	4			4

UNIT	SYLLABUS
UNIT 1	Introduction to Java – Features of Java – Object Oriented Concepts – Lexical Issues – Data Types – Variables – Arrays – Operators – Control Statements, Classes – Objects – Constructors – Overloading method – Access Control – Static and fixed methods – Inner Classes – String Class – Inheritance – Overriding methods – Using super-Abstract class.
UNIT 2	Packages – Access Protection – Importing Packages – Interfaces – Exception Handling – Throw and Throws – Thread – Synchronization – Messaging – Runnable Interface – Inter thread Communication – Deadlock – Suspending, Resuming and stopping threads – Multithreading.
UNIT 3	I/O Streams – File Streams – Applets – Events handling – String Objects – String Buffer – Char Array – Java Utilities – Code Documentation.
UNIT 4	Network basics – Socket Programming – Proxy Servers – TCP/IP Sockets – Net Address – URL – Datagrams – Working with windows using AWT Classes – AWT Controls – Layout Managers and Menus, jdbc connectivity.
UNIT 5	Servelets – Environment and Role – Architectural Role for servlets – HTML support – Generation – Server side – Installing Servalts APT – servlet life cycle – HTML to servelet communication

BOOKS FOR STUDY AND REFERENCE:

1. Cay S. Horstmann, Gary Cornell – Core Java 2 Volume I – Fundamentals – 9th Edition – Perason – 2012.
2. P. Haughton and H. Schildt – Java2 (The Complete Reference) – 5th Edition-2008
3. K. Arnold and J. Gosling – The Java Programming Language – 3rd Edition – Perason – 2011.
4. Karl Moss, Java Servalts, TMH edition.
5. D.R. Callaway, Inside Servalts, Addison Wesley.

COURSE CODE	COURSE TITLE	L	T	P	C
14P623H	INTERNET PROGRAMMING	4			4

UNIT	SYLLABUS
UNIT 1	Internet Basics: What Is Internet? What Special about Internet? -Dial Up Connection/ Direct Connection; Slip Or PPP -WWW: The Client Site, Server Site, Web Pages In HTML, CGI Programming Overview,- Environment Variables, Difference Between HTML And DHTML, ECOM And Portals.
UNIT 2	Internet Internals: Transmission Control Protocol/Internet Protocol (TCP/IP), FTP, HTTP, WAIS (Wide Area Information Service), TELNET, Internet Addressing, IP Address, Electronic Mail Address, URL, E-Mail Basic.
UNIT 3	Domain Name System: Name for Machine, Flat Name Space, Hierarchical-Names Internet Domain Names, Domain Name Revolution.
UNIT 4	Introduction To Java: Applets, Application & JDK, Differences between Java and C++, Working With Java Objects: Encapsulation, Inheritance And Polymorphisms, Constructors, Garbage Collection and finalize, Data Types, Data Types, Modifiers And Expressions, Array and Flow Control Statement, Exception Handling, Threads, Event Handling, JDBC.
UNIT 5	Socket Interface: Socket Abstraction, Creating Socket, Receiving Data through a Socket. Using Socket with Servers. Components, Network Programming.

REFERENCES: -

1. Internet working With TCP/IP Vol-I 6th Edition (2013) By Douglas E. Comer.
2. Java 2 The Complete Reference By Petric Noughton And Herbet Schildt.

COURSE CODE	COURSE TITLE	L	T	P	C
14P623J	INFORMATION SECURITY	4			4

UNIT	SYLLABUS
UNIT 1	Introduction: Security- Attacks- Computer criminals- Method of defense Program Security: Secure programs- Non-malicious program errors- Viruses and other malicious code- Targeted malicious code- Controls against program threats.
UNIT 2	Operating System Security: Protected objects and methods of protection- Memory address protection- Control of access to general objects- File protection mechanism- Authentication: Authentication basics- Password- Challenge-response- Biometrics.
UNIT 3	Database Security: Security requirements- Reliability and integrity- Sensitive data- Interface- Multilevel database- Proposals for multilevel security
UNIT 4	Security in Networks: Threats in networks- Network security control- Firewalls- Intrusion detection systems- Secure e-mail- Networks and cryptography- Example protocols: PEM- SSL- Ipsec.
UNIT 5	Adminstrating Security: Security planning- Risk analysis- Organizational security policies- Physical security - Legal- Privacy- and Ethical Issues in Computer Security - Protecting programs and data- Information and law- Rights of employees and employers- Software failures- Computer crime- Privacy- Ethical issues in computer society- Case studies of ethics.

Recommended Texts

1. C. P. Pfleeger, and S. L. Pfleeger, Security in Computing, Pearson Education, 4th Edition, 2006
2. Matt Bishop, Computer Security: Art and Science, Pearson Education, 2003.

Reference Books

1. Stallings, Cryptography And Network Security: Principles and practice, 4th Edition, 2006
2. Kaufman, Perlman, Speciner, Network Security, Prentice Hall, 2nd Edition, 2003
3. Eric Maiwald, Network Security : A Beginner's Guide, TMH, 1999
4. Macro Pistoia, Java Network Security, Pearson Education, 2nd Edition, 1999
5. Whitman, Mattord, Principles of information security, Thomson, 2nd Edition, 2005

COURSE CODE	COURSE TITLE	L	T	P	C
14P6235	PRACTICAL – JAVA LAB	4			4

Application

1. Determining the order of numbers generated randomly using Random Class.
2. Implementation of Point Class for Image manipulation.
3. Usage of calendar Class and manipulation.
4. String Manipulation using Char Array.
5. Database Creation for storing e-mail addresses and manipulation.
6. Usage of Vector Classes.
7. Implementing Thread based applications & Exception Handling.
8. Application using synchronization such as Thread based, Class based and synchronized statements.

Applets

9. Working with Frames and various controls.
10. Working with Dialogs and Menus.
11. Working with Panel and Layout.
12. Incorporating Graphics.
13. Working with Colours and Fonts.

Applications for Events Handling

14. Application Using jdbc Connectivity
15. HTML to Servlet Applications.
16. Servlet to Applet communication.

COURSE CODE	COURSE TITLE	L	T	P	C
14S23AC	PERSONALITY ENRICHMENT	4			4

Objectives

1. To make students understand the concepts and components of personality, thereby to apply the acquired knowledge to themselves and to march towards excellence I their respective academic careers.
2. To enable students to keep themselves abreast of general knowledge and current information.
3. To bring out creativity and other latent talents with proper goal setting so that self-esteem gets enhanced.
4. To sharpen memory skills and other study skills which are vital for academic excellence.
5. To give training for positive thinking which will keep the students in a good stead at the time of crisis.

Unit I- Introduction

- Definition of Personality
- Components of Personality – structural and functional aspects.
- Determinants of Personality- biological, psychological and socio-cultural factors.
- Assessment of Personality – observation, interview and psychological tests.
- Misconceptions and Classifications.
- Need for personality development.

Unit II- Self-Awareness and Self Motivation

- Self analysis through SWOT and Johari widow.
- Elements of motivation.
- Seven rules of motivation.
- Techniques and strategies for self motivation.
- Motivation checklist and Goal setting based on the principle of SMART.
- Self motivation and life.

Unit III- General Knowledge and current affairs

- Regional, National and International events.
- Geographical, political and historical facts.
- Information on sports and other recreational activities.
- Basic knowledge with regard to health and health promotion.

Unit IV- Memory, decision making and study skills

- Definition and importance of memory.
- Causes of forgetting.
- How to forget (thought stopping), how to remember (techniques for improving memory)
- The technique of passing exams.

- The rational decision making process.
- Improving creativity in decision making and components of creativity.

Unit V- Power of positive thinking

- Thinking power- seven steps for dealing with doubt.
- Traits of positive thinkers and high achievers,\
- Goals and techniques for positive thinking.
- Enhancement of concentration through positive thinking.
- Practicing a positive life style.

PRACTICAL TRAINING

The course would include the following practical exercises.

Ice-breaking, Brainstorming and stimulation exercises. Thought stopping. Memory and study skills training.

REFERENCES

1. Mile, D.J. (2004). Power of positive thinking. Delhi: Rohan Book Company.
2. Pravesh Kumar. (2005). All about self-motivation. New Delhi: Goodwill Publishing House.
3. Dudley, G.A. (2004). Double your learning power. Delhi: Konark Press. Thomas publishing Group Ltd.
4. Lorayne, H. (2004). How to develop a super power memory. Delhi: Konark Press. Thomas publishing Group Ltd.
5. Hurlock, E.B. (2006). Personality Development, 28th Reprint. New Delhi: Tata McGraw Hill.

COURSE CODE	COURSE TITLE	L	T	P	C
14P6235	INTERNET PROGRAMMING LAB	4			4

1. Web page creation using HTML.
 - i) To embed an image map in a web page
 - ii) To fix the hot spots
 - iii) Show all the related information when the hot spots are clicked.
2. Web page creation with all types of cascading style sheets.
3. Client side scripts for validating web form controls using DHTML.
4. Java programs to create applets
 - i. Create a color palette with matrix of buttons
 - ii. Set background and foreground of the control text area by selecting a color from color palette.
5. Java programs to create applets and set background and foreground of the control text area by selecting a color from color palette.
6. Programs in java using servlets
7. Programs in java to create three-tier applications using JSP and Databases .
 - i) for conducting online examination
 - ii) for displaying students mark list.
8. Programs using XML-schema-XSLT/XSL.
9. Programs using AJAX.
10. Implementation of web services and databases.

COURSE CODE	COURSE TITLE	L	T	P	C
	PHP	4			4

UNIT	SYLLABUS
UNIT 1	Introduction to PHP. - Introduction to PHP - PHP configuration in IIS & -Apache Web server PHP Variable - Static & global variable GET & POST method PHP Operator Conditional Structure & Looping - Structure -Array - User Define Function:
UNIT 2	User Define Function: - Argument function - Default Argument - variable function - return function - Variable Length Argument - Function - - Variable Function - String Function - Math Function - Date Function Date, Array Function -Count, list.
UNIT 3	Miscellaneous Function -Definition, constant, include, require, header, die File handling Function fopen, fread, fwrite, fclose, file_exists, is_readable, is_writable, fgets, fgetc, file, file_get_contents, file_putcontents, ftell, fseek, rewind, copy, unlink, rename, move_upload_file
UNIT 4	PHP Components- PHP GD Library - PHP Regular expression function - Cookies - Session - Server variable - Database Connectivity with MySQL (Using PhpMyAdmin) .
UNIT 5	Advance PHP- PHP with OOPS- Class, constructor, inheritance - serialize objects PHP with XML-XML introduction- Simple XML functions- PHP with AJAX - AJAX introduction XMLHttpRequest-AJAX with MySQL Database

Reference Books:

1. Pure JavaScript - by [Charlton Ting](#) (Author) , [R. Allen Wyke](#) (Author)
2. Fundamentos PHP 5/ Beginning PHP 5 (Spanish Edition) by Dave W. Mercer, Allan Kent, Steven D. Nowicki and Dan Squier (Sep 30, 2005)
3. PHP Bible Programming - [PHP 4 Bible](#) by [Tim Converse](#) and Joyce Park (Aug 17, 2000)
4. Professional PHP5 Ed Lecky-Thompson, Heow Eide-Goodman John Wiley & Sons, 01-Nov-2004 .
5. PHP Manual- PHP at the Core: A Hacker's Guide

COURSE CODE	COURSE TITLE	L	T	P	C
	PRACTICAL - PHP LAB	4			4

1. HTML and forms.
2. HTML, PHP, and Forms
3. Making the Form Dynamic
4. File-system browsing using PHP
5. Passing data between pages using PHP
6. Building a Quiz using HTML forms and PHP.

DHANRAJ BAID JAIN COLLEGE
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Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

DEPARTMENT OF MATHEMATICS
M.Sc. (Mathematics)



SYLLABUS
(Choice Based Credit System)

Total No. of Semesters: 4

Total No. of Credits: 90

SCHEME OF EXAMINATIONS

FIRST SEMESTER

Category	Paper	Title of the paper
Core	1	Algebra – I
Core	2	Real Analysis – I
Core	3	Ordinary Differential Equations
Core	4	Probability theory
Core	5	Elective – I: Graph theory
Soft	1	Skill based course - I

SECOND SEMESTER

Category	Paper	Title of the paper
Core	6	Algebra – II
Core	7	Real Analysis – II
Core	8	Partial Differential Equations
Core	9	Mathematical Statistics
Core	10	Elective – II: Mathematical Programming
Soft	2	Skill based Course - II

Summer internship

THIRD SEMESTER

Category	Paper	Title of the paper
Core	11	Complex Analysis – I
Core	12	Topology
Core	13	Mechanics
Core	14	Operation Research
Core	15	Elective - III: Java programming
Soft	3	Skill based course - III

FOURTH SEMESTER

Category	Paper	Title of the paper
Core	16	Complex Analysis – II
Core	17	Functional Analysis
Core	18	Differential Geometry
Core	19	Tensor Analysis and Relativity
Core	20	Elective – IV: Relational Database Management Systems
Soft	4	Skill based Course - IV

ELECTIVE SUBJECTS

One paper to be selected for each semester

1. Graph Theory
2. Numerical Analysis
3. Calculus of Variations and Integral Equations
4. Number theory and Cryptography
5. Formal languages and Automate theory
6. Object Oriented programming with C++
7. Fuzzy Sets and Applications
8. Mathematical Economics
9. Mathematical programming
10. Discrete Mathematics
11. Wavelets
12. Java Programming
13. Algebraic Theory of Numbers
14. Stochastic processes
15. Data Structure and Algorithm
16. Fluid Dynamics
17. Algebraic Topology
18. Difference Equation
19. Relational Data Base Management Systems
20. Financial Mathematics

COURSE CODE	COURSE TITLE	L	T	P	C
14P631A	ALGEBRA - I	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Another counting principle - class equation for finite groups and its applications - Sylow's theorems (For theorem 2.12.1, First proof only). Chapter 2: Sections 2.11 and 2.12 (Omit Lemma 2.12.5)
UNIT 2	Solvable groups - Direct products - Finite abelian groups- Modules (Definition and Examples) Chapter 2: Sections 2.13 and 2.14 (Theorem 2.14.1 only) Chapter 4: Section 4.5 (Omit theorem 4.5.1) Chapter 5 : Section 5.7 (Lemma 5.7.1, Lemma 5.7.2, Theorem 5.7.1)
UNIT 3	Linear Transformations: Canonical forms –Triangular form - Nilpotent transformations. Chapter 6: Sections 6.4 , 6.5
UNIT 4	Jordan form - rational canonical form. Chapter 6 : Sections 6.6 and 6.7
UNIT 5	Trace and transpose - Hermitian, unitary, normal transformations, real quadratic form. Chapter 6 : Sections 6.8, 6.10 and 6.11 (Omit 6.9)

Recommended Text

I. N. Herstein. Topics in Algebra (II Edition) Wiley Eastern Limited, New Delhi, 1975.

Reference Books

1. M.Artin, Algebra, Prentice Hall of India, 1991.
2. P.B.Bhattacharya, S.K.Jain, and S.R.Nagpaul, Basic Abstract Algebra (II Edition) Cambridge University Press, 1997. (Indian Edition)
3. I.S.Luther and I.B.S.Passi, Algebra, Vol. I –Groups(1996); Vol. II Rings, Narosa Publishing House , New Delhi, 1999
4. D.S.Malik, J.N. Mordeson and M.K.Sen, Fundamental of Abstract Algebra, McGraw Hill (International Edition), New York. 1997.
5. N.Jacobson, Basic Algebra, Vol. I & II W.H.Freeman (1980); also published by Hindustan Publishing Company, New Delhi.

Website and e-learning sources

1. <http://mathforum.org>,
2. <http://ocw.mit.edu/ocwweb/Mathematics>,
3. <http://www.opensource.org>,

COURSE CODE	COURSE TITLE	L	T	P	C
14P631B	CORE 2: REAL ANALYSIS-I	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Functions of bounded variation - Introduction - Properties of monotonic functions - Functions of bounded variation - Total variation - Additive property of total variation - Total variation on $[a, x]$ as a function of x - Functions of bounded variation expressed as the difference of two increasing functions - Continuous functions of bounded variation. Chapter – 6 : Sections 6.1 to 6.8 Infinite Series : Absolute and conditional convergence - Dirichlet's test and Abel's test - Rearrangement of series - Riemann's theorem on conditionally convergent series. Chapter 8 : Sections 8.8, 8.15, 8.17, 8.18
UNIT 2	The Riemann - Stieltjes Integral - Introduction - Notation - The definition of the Riemann - Stieltjes integral - Linear Properties - Integration by parts-Change of variable in a Riemann - Stieltjes integral - Reduction to a Riemann Integral – Euler's summation formula - Monotonically increasing integrators, Upper and lower integrals - Additive and linearity properties of upper and lower integrals - Riemann's condition - Comparison theorems. Chapter - 7 : Sections 7.1 to 7.14
UNIT 3	The Riemann-Stieltjes Integral - Integrators of bounded variation-Sufficient conditions for the existence of Riemann-Stieltjes integrals-Necessary conditions for the existence of Riemann-Stieltjes integrals- Mean value theorems for Riemann - Stieltjes integrals - The integrals as a function of the interval - Second fundamental theorem of integral calculus-Change of variable in a Riemann integral-Second Mean Value Theorem for Riemann integral-Riemann-Stieltjes integrals depending on a parameter-Differentiation under the integral sign-Lebesgue criteriaon for the existence of Riemann integrals. Chapter - 7 : 7.15 to 7.26
UNIT 4	Infinite Series and infinite Products - Double sequences - Double series - Rearrangement theorem for double series - A sufficient condition for equality of iterated series - Multiplication of series - Cesaro summability - Infinite products. Chapter - 8 Sec, 8.20, 8.21 to 8.26 Power series - Multiplication of power series - The Taylor's series generated by a function - Bernstein's theorem - Abel's limit theorem - Tauber's theorem Chapter 9 : Sections 9.14 9.15, 9.19, 9.20, 9.22, 9.23

UNIT 5	Sequences of Functions - Pointwise convergence of sequences of functions - Examples of sequences of real - valued functions - Definition of uniform convergence - Uniform convergence and continuity - The Cauchy condition for uniform convergence - Uniform convergence of infinite series of functions - Uniform convergence and Riemann - Stieltjes integration – Non-uniform Convergence and Term-by-term Integration - Uniform convergence and differentiation - Sufficient condition for uniform convergence of a series - Mean convergence. Chapter -9 Sec 9.1 to 9.6, 9.8,9.9, 9.10,9.11, 9.13

Recommended Text

Tom M.Apostol : Mathematical Analysis, 2nd Edition, Addison-Wesley Publishing Company Inc. New York, 1974.

Reference books

1. Bartle, R.G. Real Analysis, John Wiley and Sons Inc., 1976.
2. Rudin, W. Principles of Mathematical Analysis, 3rd Edition. McGraw Hill Company, New York, 1976.
3. Malik, S.C. and Savita Arora. Mathematical Analysis, Wiley Eastern Limited. New Delhi, 1991.
4. Sanjay Arora and Bansi Lal, Introduction to Real Analysis, Satya Prakashan, New Delhi, 1991.
5. Gelbaum, B.R. and J. Olmsted, Counter Examples in Analysis, Holden day, San Francisco, 1964.
6. A.L.Gupta and N.R.Gupta, Principles of Real Analysis, Pearson Education, (Indian print) 2003.

Website and e-learning source

<http://mathforum.org>,
<http://ocw.mit.edu/ocwweb/Mathematics>,
<http://www.opensource.org>,
www.mathpages.com

COURSE CODE	COURSE TITLE	L	T	P	C
14P631C	CORE 3: ORDINARY DIFFERENTIAL EQUATIONS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Linear equations with constant coefficients: Second order homogeneous equations-Initial value problems-Linear dependence and independence-Wronskian and a formula for Wronskian-Non-homogeneous equation of order two. Chapter 2: Sections 1 to 6
UNIT 2	Linear equations with constant coefficients: Homogeneous and non-homogeneous equation of order n –Initial value problems- Annihilator method to solve non-homogeneous equation. Chapter 2 : Sections 7 to 11.
UNIT 3	Linear equation with variable coefficients: Initial value problems -Existence and uniqueness theorems – Solutions to solve a non-homogeneous equation – Wronskian and linear dependence – reduction of the order of a homogeneous equation and non homogeneous equation with analytic coefficients-The Legendre equation. Chapter : 3 Sections 1 to 6 and 8 (Omit section 7 and 9)
UNIT 4	Linear equation with regular singular points: Euler equation – Second order equations with regular singular points – Bessel Function. Chapter 4 : Sections 1 to 3 and 7 to 8 (Omit sections 4,5,6 and 9)
UNIT 5	Existence and uniqueness of solutions to first order equations: Equation with variable separated – Exact equation – method of successive approximations – the Lipschitz condition. Chapter 5 : Sections 1 to 5 (Omit Sections 6 to 9)

Recommended Text

E.A.Coddington, A introduction to ordinary differential equations (3rd Printing) Prentice-Hall of India Ltd., New Delhi, 1987.

Reference books

1. Williams E. Boyce and Richard C. DI Prima, Elementary differential equations and boundary value problems, John Wiley and sons, New York, 1967.
2. George F Simmons, Differential equations with applications and historical notes, Tata McGraw Hill, New Delhi, 1974.
3. N.N. Lebedev, Special functions and their applications, Prentice Hall of India, New Delhi, 1965.
4. W.T. Reid. Ordinary Differential Equations, John Wiley and Sons, New York, 1971
5. M.D.Raisinghania, Advanced Differential Equations, S.Chand & Company Ltd. New Delhi 2001

B.Rai, D.P.Choudary and H.I. Freedman, A Course in Ordinary Differential Equations, Narosa Publishing House, New Delhi, 2002.

Website and e-learning source

<http://mathforum.org>,

<http://ocw.mit.edu/ocwweb/Mathematics>,

<http://www.opensource.org>,

www.mathpages.com

COURSE CODE	COURSE TITLE	L	T	P	C
14P631D	CORE 4: PROBABILITY THEORY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Random Events and Random Variables: Random events – Probability axioms – Combinatorial formulae – conditional probability – Bayes Theorem – Independent events – Random Variables – Distribution Function – Joint Distribution – Marginal Distribution – Conditional Distribution – Independent random variables – Functions of random variables. Chapter 1: Sections 1.1 to 1.7 Chapter 2 : Sections 2.1 to 2.9
UNIT 2	Parameters of the Distribution : Expectation- Moments – The Chebyshev Inequality – Absolute moments – Order parameters – Moments of random vectors – Regression of the first and second types. Chapter 3 : Sections 3.1 to 3.8 (Generalization of Regression line of second type is omitted)
UNIT 3	Characteristic functions : Properties of characteristic functions – Characteristic functions and moments – semi invariants – characteristic function of the sum of the independent random variables – Determination of distribution function by the Characteristic function – Characteristic function of multidimensional random vectors – Probability generating functions. Chapter 4 : Sections 4.1 to 4.7
UNIT 4	Some Probability distributions: Discrete distributions - One point , two point , Binomial – Polya – Hypergeometric – Poisson (discrete) distributions. Continous distributions: Uniform – normal - gamma – Beta – Cauchy and Laplace (continuous) distributions. Chapter 5 : Section 5.1 to 5.10 (Omit Section 5.11, examples 5.5.1 and 5.5.2)
UNIT 5	Limit Theorems : Stochastic convergence – Bernaulli law of large numbers – Levy-Cramer Theorems (only one part of the theorem can be asked) – de Moivre-Laplace Theorem – Poisson, Chebyshev, Khintchine Weak law of large numbers – Lindberg Theorem – Lapunov Theroem – Borel-Cantelli Lemma - Kolmogorov Inequality and Kolmogorov Strong Law of large numbers. Chapter 6 : Sections 6.1 to 6.4, 6.6 to 6.9 , 6.11 and 6.12. (Omit Sections 6.5, 6.10,6.13 to 6.15, examples 6.9.1)

Recommended Text

M. Fisz, Probability Theory and Mathematical Statistics, John Wiley and Sons, New York, 1963.

Reference books

1. R.B. Ash, Real Analysis and Probability, Academic Press, New York, 1972
 2. K.L.Chung, A course in Probability, Academic Press, New York, 1974.
 3. R.Durrett, Probability : Theory and Examples, (2nd Edition) Duxbury Press, New York, 1996.
 4. V.K.Rohatgi An Introduction to Probability Theory and Mathematical Statistics, Wiley Eastern Ltd., New Delhi, 1988(3rd Print).
 5. S.I.Resnick, A Probability Path, Birhauser, Berlin,1999.
- B.R.Bhat , Modern Probability Theory (3rd Edition), New Age International (P)Ltd, New Delhi, 1999

COURSE CODE	COURSE TITLE	L	T	P	C
14P631E	CORE 5: ELECTIVE I – GRAPH THEORY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Graphs, subgraphs and Trees : Graphs and simple graphs – Graph Isomorphism – The Incidence and Adjacency Matrices – Subgraphs – Vertex Degrees – Paths and Connection – Cycles – Trees – Cut Edges and Bonds – Cut Vertices. Chapter 1: Section 1.1 – 1.7 Chapter 2 : Section 2.1 – 2.3
UNIT 2	Connectivity, Euler tours and Hamilton Cycles : Connectivity – Blocks – Euler tours – Hamilton Cycles. Chapter 3: Section 3.1 – 3.2 Chapter 4: Section 4.1 – 4.2
UNIT 3	Matchings, Edge Colourings : Matchings – Matchings and Coverings in Bipartite Graphs – Edge Chromatic Number – Vizing’s Theorem. Chapter 5: Section 5.1 – 5.2 Chapter 6: Section 6.1 – 6.2
UNIT 4	Independent sets and Cliques, Vertex Colourings : Independent sets – Ramsey’s Theorem – Chromatic Number – Brooks’ Theorem – Chromatic Polynomials. Chapter 7: Section 7.1 – 7.2 Chapter 8: Section 8.1 – 8.2, 8.4
UNIT 5	Planar graphs : Plane and planar Graphs – Dual graphs – Euler’s Formula – The Five- Colour Theorem and the Four-Colour Conjecture. Chapter 9: Section 9.1 – 9.3, 9.6

Recommended Text

J.A.Bondy and U.S.R. Murthy , Graph Theory and Applications , Macmillan, London, 1976.

Reference books

1. J.Clark and D.A.Holton , A First look at Graph Theory, Allied Publishers, New Delhi , 1995.
 2. R. Gould. Graph Theory, Benjamin/Cummings, Menlo Park, 1989.
 3. A.Gibbons, Algorithmic Graph Theory, Cambridge University Press, Cambridge, 1989.
 4. R.J.Wilson and J.J.Watkins, Graphs : An Introductory Approach, John Wiley and Sons, New York, 1989.
 5. R.J. Wilson, Introduction to Graph Theory, Pearson Education, 4th Edition, 2004, Indian Print.
- A.Choudum, A First Course in Graph Theory, MacMillan India Ltd. 1987.

Website and e-learning source

<http://mathforum.org>,
<http://ocw.mit.edu/ocwweb/Mathematics>,
<http://www.opensource.org>,
www.graphtheory.com

COURSE CODE	COURSE TITLE	L	T	P	C
14P632G	CORE 6: ALGEBRA – II	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Extension fields – Transcendence of e. Chapter 5: Section 5.1 and 5.2
UNIT 2	Roots or Polynomials.- More about roots Chapter 5: Sections 5.3 and 5.5
UNIT 3	Elements of Galois theory. Chapter 5 : Section 5.6
UNIT 4	Finite fields - Wedderburn's theorem on finite division rings. Chapter 7: Sections 7.1 and 7.2 (Theorem 7.2.1 only)
UNIT 5	Solvability by radicals - A theorem of Frobenius - Integral Quaternions and the Four - Square theorem. Chapter 5: Section 5.7 (Theorem 5.7.2 only) Chapter 7 : Sections 7.3 and 7.4

Recommended Text

I.N. Herstein. Topics in Algebra (II Edition) Wiley Eastern Limited, New Delhi, 1975.

Reference books

1. M.Artin, Algebra, Prentice Hall of India, 1991.
2. P.B.Bhattacharya, S.K.Jain, and S.R.Nagpaul, Basic Abstract Algebra (II Edition) Cambridge University Press, 1997. (Indian Edition)
3. I.S.Luther and I.B.S.Passi, Algebra, Vol. I –Groups(1996); Vol. II Rings, Narosa Publishing House , New Delhi, 1999
4. D.S.Malik, J.N. Mordeson and M.K.Sen, Fundamental of Abstract Algebra, McGraw Hill (International Edition), New York. 1997.

N.Jacobson, Basic Algebra, Vol. I & II Hindustan Publishing Company, New Delhi.

Website and e-learning source

<http://mathforum.org>,
<http://ocw.mit.edu/ocwweb/Mathematics>,
<http://www.opensource.org>,
www.algebra.com

COURSE CODE	COURSE TITLE	L	T	P	C
14P632H	CORE 7: REAL ANALYSIS – II	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Measure on the Real line - Lebesgue Outer Measure - Measurable sets - Regularity - Measurable Functions - Borel and Lebesgue Measurability Chapter 2: Sections 2.1 to 2.5 (de Barra)
UNIT 2	Integration of Functions of a Real variable - Integration of Non- negative functions - The General Integral - Riemann and Lebesgue Integrals Chapter 3: Sections 3.1,3.2 and 3.4 (de Barra)
UNIT 3	Fourier Series and Fourier Integrals - Introduction - Orthogonal system of functions - The theorem on best approximation - The Fourier series of a function relative to an orthonormal system - Properties of Fourier Coefficients - The Riesz-Fischer Theorem - The convergence and representation problems in for trigonometric series - The Riemann - Lebesgue Lemma - The Dirichlet Integrals - An integral representation for the partial sums of Fourier series - Riemann's localization theorem - Sufficient conditions for convergence of a Fourier series at a particular point - Cesaro summability of Fourier series- Consequences of Fejes's theorem - The Weierstrass approximation theorem Chapter 11 : Sections 11.1 to 11.15 (Apostol)
UNIT 4	Multivariable Differential Calculus - Introduction - The Directional derivative - Directional derivative and continuity - The total derivative - The total derivative expressed in terms of partial derivatives - The matrix of linear function - The Jacobian matrix - The chain rule - Matrix form of chain rule - The mean - value theorem for differentiable functions - A sufficient condition for differentiability - A sufficient condition for equality of mixed partial derivatives - Taylor's theorem for functions of $\mathbb{R}^n$ to $\mathbb{R}^1$ Chapter 12 : Section 12.1 to 12.14 (Apostol)
UNIT 5	Implicit Functions and Extremum Problems : Functions with non-zero Jacobian determinants – The inverse function theorem-The Implicit function theorem-Extrema of real valued functions of several variables- Extremum problems with side conditions. Chapter 13 : Sections 13.1 to 13.7 (Apostol)

Recommended Text

1. G. de Barra, Measure Theory and Integration, Wiley Eastern Ltd., New Delhi, 1981. (for Units I and II)
- Tom M.Apostol : Mathematical Analysis, 2nd Edition, Addison-Wesley Publishing Company Inc. New York, 1974. (for Units III, IV and V)

Reference books

1. Burkill,J.C. The Lebesgue Integral, Cambridge University Press, 1951.
 2. Munroe,M.E. Measure and Integration. Addison-Wesley, Mass.1971.
 3. Roydon,H.L.Real Analysis, Macmillan Pub. Company, New York, 1988.
 4. Rudin, W. Principles of Mathematical Analysis, McGraw Hill Company, New York,1979.
 5. Malik,S.C. and Savita Arora. Mathematical Analysis, Wiley Eastern Limited. New Delhi, 1991.
- Sanjay Arora and Bansilal, Introduction to Real Analysis, Satya Prakashan, New Delhi, 1991

Website and e-learning source

<http://mathforum.org>,
<http://ocw.mit.edu/ocwweb/Mathematics>,
<http://www.opensource.org>,
www.algebra.com

COURSE CODE	COURSE TITLE	L	T	P	C
14P632J	CORE 8: PARTIAL DIFFERENTIAL EQUATIONS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Mathematical Models and Classification of second order equation: Classical equations-Vibrating string – Vibrating membrane – waves in elastic medium – Conduction of heat in solids –Second order equations in two independent variables – canonical forms – equations with constant coefficients. Chapter 2 : Sections 2.1 to 2.5 Chapter 3 : Sections 3.1 to 3.3 (Omit 3.4 and 3.5)
UNIT 2	Cauchy Problem : The Cauchy problem –Homogeneous wave equation – Initial Boundary value problem- Non-homogeneous boundary conditions – Finite string with fixed ends – Non-homogeneous wave equation – Riemann method Chapter 4 : Sections 4.1, 4.3 to 4.8
UNIT 3	Method of separation of variables: Separation of variable- Vibrating string problem – Existence and uniqueness of solution of vibrating string problem.- Heat conduction problem – Existence and uniqueness of solution of heat conduction problem – Laplace and beam equations Chapter 6 : Sections 6.1 to 6.6 (Omit section 6.7)
UNIT 4	Boundary Value Problems : Boundary value problems – Maximum and minimum principles – Uniqueness and continuity theorem – Dirichlet Problem for a circle , a circular annulus, a rectangle Chapter 8 : Sections 8.1 to 8.7
UNIT 5	Green's Function: The Delta function – Green's function – Method of Green's function – Dirichlet Problem for the Laplace and Helmholtz operators – Method of images and eigen functions. Chapter 10 : Section 10.1 to 10.7

Recommended Text

Tyn Myint-U and Lokenath Debnath, Partial Differential Equations for Scientists and Engineers (Third Edition), North Hollan, New York, 1987.

Reference books

1. M.M.Smirnov, Second Order partial Differential Equations, Leningrad, 1964.
2. I.N.Sneddon, Elements of Partial Differential Equations, McGraw Hill, New Delhi, 1983.
3. R. Denemeyer, Introduction to Partial Differential Equations and Boundary Value Problems, McGraw Hill, New York, 1968.
4. M.D.Raisinghania, Advanced Differential Equations, S.Chand & Company Ltd., New Delhi, 2001.
5. S, Sankar Rao, Partial Differential Equations, 2nd Edition, Prentice Hall of India, New Delhi. 2004

Website and e-learning source

<http://mathforum.org>,

<http://ocw.mit.edu/ocwweb/Mathematics>,

<http://www.opensource.org>,

www.mathpages.com

COURSE CODE	COURSE TITLE	L	T	P	C
14P632K	CORE 9: MATHEMATICAL STATISTICS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Sample Moments and their Functions: Notion of a sample and a statistic – Distribution functions of X , S^2 and $-(X, S^2) - \chi^2$ distribution – Student t-distribution – Fisher's Z-distribution – Snedecor's F-distribution – Distribution of sample mean from non-normal populations Chapter 9 : Sections 9.1 to 9.8
UNIT 2	Significance Test : Concept of a statistical test – Parametric tests for small samples and large samples - χ^2 test – Independence Tests by contingency tables. Chapter 12 : 12.1 to 12.4 and 12.7(omit 12.5, 12.6)
UNIT 3	Estimation : Preliminary notion – Consistency estimation – Unbiased estimates – Sufficiency – Efficiency – Asymptotically most efficient estimates – methods of finding estimates – confidence Interval. Chapter 13 : Sections 13.1 to 13.8 (Omit Section 13.9, examples 13.6.3, 13.6.4 and 13.7.2 to 13.7.4)
UNIT 4	Analysis of Variance : One way classification and two-way classification (theory only) Hypotheses Testing: Poser functions – OC function- Most Powerful test – Uniformly most powerful test – unbiased test. Chapter 15 : Sections 15.1 and 15.2 Chapter 16 : Sections 16.1 to 16.5 (Omit Section 16.6 and 16.7, examples 16.2.3)
UNIT 5	Sequential Analysis : SPRT – Auxiliary Theorem – Wald's fundamental identity – OC function and SPRT – $E(n)$ and Determination of A and B – Testing a hypothesis concerning p on 0-1 distribution and m in Normal distribution. Chapter 17 : Sections 17.1 to 17.9 (Omit Section 17.10)

Recommended Text

M. Fisz , Probability Theory and Mathematical Statistics, John Wiley and sons, New Your, 1963.

Reference books

1. E.J.Dudewicz and S.N.Mishra , Modern Mathematical Statistics, John Wiley and Sons, New York, 1988.
 2. V.K.Rohatgi An Introduction to Probability Theory and Mathematical Statistics, Wiley Eastern New Delhi, 1988(3rd Edn)
 3. G.G.Roussas, A First Course in Mathematical Statistics, Addison Wesley Publishing Company, 1973
- B.L.Vander Waerden, Mathematical Statistics, G.Allen & Unwin Ltd., London, 1968.

Website and e-learning source

<http://mathforum.org>,

<http://ocw.mit.edu/ocwweb/Mathematics>,

<http://www.opensource.org>,

www.casact.org

COURSE CODE	COURSE TITLE	L	T	P	C
14P632L	CORE 10: ELECTIVE II- MATHEMATICAL PROGRAMMING	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Integer Linear Programming: Types of Integer Linear Programming Problems – Concept of Cutting Plane – Gomory’s All Integer Cutting Plane Method – Gomory’s mixed Integer Cutting Plane method – Branch and Bound Method. – Zero-One Integer Programming. Chapters: 7
UNIT 2	Dynamic Programming: Characteristics of Dynamic Programming Problem – Developing Optimal Decision Policy – Dynamic Programming Under Certainty – DP approach to solve LPP. Chapters: 20.
UNIT 3	Classical Optimization Methods: Unconstrained Optimization – Constrained Multi-variable Optimization with Equality Constraints Chapter:
UNIT 4	Non-linear Programming Methods: Examples of NLPP – General NLPP – Quadratic Programming – Wolfe’s modified Simplex Methods – Beale’s Method. Chapter: 23
UNIT 5	Revised Simplex Method: Standard forms for Revised simplex Method – Computational procedure for Standard form I – comparison of simplex method and Revised simplex Method. Chapter: 26

Recommended Text

J.K.Sharma, Operations Research , Macmillan (India) New Delhi 2001

Reference books

1. Hamdy A. Taha, Operations Research, (seventh edition) Prentice - Hall of India Private Limited, New Delhi, 1997.
 2. F.S. Hillier & J.Lieberman Introduction to Operation Research (7th Edition) Tata- McGraw Hill Company, New Delhi, 2001.
 3. Beightler. C, D.Phillips, B. Wilde ,Foundations of Optimization (2nd Edition) Prentice Hall Pvt Ltd., New York, 1979
- S.S. Rao - Optimization Theory and Applications, Wiley Eastern Ltd. New Delhi. 1990

COURSE CODE	COURSE TITLE	L	T	P	C
14P633M	CORE 11: COMPLEX ANALYSIS-I	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Cauchy's Integral Formula: The Index of a point with respect to a closed curve – The Integral formula – Higher derivatives. Local Properties of analytical Functions : Removable Singularities-Taylor's Theorem – Zeros and poles – The local Mapping – The Maximum Principle . Chapter 4 : Section 2 : 2.1 to 2.3 Chapter 4 : Section 3 : 3.1 to 3.4
UNIT 2	The general form of Cauchy's Theorem : Chains and cycles- Simple Continuity - Homology - The General statement of Cauchy's Theorem - Proof of Cauchy's theorem - Multiply connected regions - Residue theorem - The argument principle. Chapter 4 : Section 4 : 4.1 to 4.7 (Omit 4.6) Chapter 4 : Section 5: 5.1 and 5.2
UNIT 3	Harmonic Functions: Definition of Harmonic function and basic properties - Mean value property - Poisson formula. Chapter 4 : Sections 6 : 6.1 to 6.3
UNIT 4	Harmonic Functions and Power Series Expansions: Schwarz theorem - The reflection principle - Weierstrass theorem – Taylor's Series – Laurent series . Chapter 4 : Sections 6.4 and 6.5 Chapter 5 : Sections 1.1 to 1.3
UNIT 5	Partial Fractions and Entire Functions: Partial fractions - Infinite products – Canonical products – Gamma Function- Jensen's formula – Chapter 5 : Sections 2.1 to 2.4 Chapter 5 : Sections 3.1

Recommended Text

Lars V. Ahlfors, Complex Analysis, (3rd edition) McGraw Hill Co., New York, 1979

Reference books

1. I.H.A. Presfly, Introduction to complex Analysis, Clarendon Press, oxford, 1990.
2. J.J.B. Conway, Functions of one complex variables Springer - Verlag, International student Edition, Naroser Publishing Co.1978
3. E. Hille, Analytic function Thorey (2 vols.), Gonm & Co, 1959.
4. M.Heins, Complex function Theory, Academic Press, New York,1968

COURSE CODE	COURSE TITLE	L	T	P	C
14P633N	CORE 12: TOPOLOGY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Topological spaces : Topological spaces – Basis for a topology – The order topology – The product topology on $X \times Y$ – The subspace topology – Closed sets and limit points. Chapter 2 : Sections 12 to 17
UNIT 2	Continuous functions: Continuous functions – the product topology – The metric topology. Chapter 2 : Sections 18 to 21 (Omit Section 22)
UNIT 3	Connectedness: Connected spaces- connected subspaces of the Real line Chapter 3 : Sections 23 to 24.
UNIT 4	Compactness : Compact spaces – compact subspaces of the Real line – Limit Point Compactness. Chapter 3 : Sections 26 to 28.
UNIT 5	Countability and Separation Axiom: The Countability Axioms – The separation Axioms – Normal spaces – The Urysohn Lemma – The Urysohn metrization Theorem. Chapter 4 : Sections 30 to 34.

Recommended Text

James R. Munkres, Topology (2nd Edition) Pearson Education Pve. Ltd., Delhi-2002 (Third Indian Reprint)

Reference books

1. J. Dugundji , Topology , Prentice Hall of India, New Delhi, 1975.
 2. George F.Sinmons, Introduction to Topology and Modern Analysis, McGraw Hill Book Co., 1963
 3. J.L. Kelly, General Topology, Van Nostrand, Reinhold Co., New York
 4. L.Steen and J.Subhash, Counter Examples in Topology, Holt, Rinehart and Winston, New York, 1970.
- S.Willard, General Topology, Addison - Wesley, Mass., 1970

COURSE CODE	COURSE TITLE	L	T	P	C
14P633P	CORE 13: MECHANICS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Mechanical Systems : The Mechanical system- Generalised coordinates – Constraints - Virtual work - Energy and Momentum Chapter 1: Sections 1.1 to 1.5
UNIT 2	Lagrange's Equations: Derivation of Lagrange's equations- Examples- Integrals of motion. Chapter 2 : Sections 2.1 to 2.3 (Omit Section 2.4)
UNIT 3	Hamilton's Equations : Hamilton's Principle - Hamilton's Equation - Other variational principle. Chapter 4 : Sections 4.1 to 4.3 (Omit section 4.4)
UNIT 4	Hamilton-Jacobi Theory : Hamilton Principle function – Hamilton-Jacobi Equation - Separability Chapter 5 : Sections 5.1 to 5.3
UNIT 5	Canonical Transformation : Differential forms and generating functions – Special Transformations– Lagrange and Poisson brackets. Chapter 6 : Sections 6.1, 6.2 and 6.3 (omit sections 6.4, 6.5 and 6.6)

Recommended Text

D. Greenwood, Classical Dynamics, Prentice Hall of India, New Delhi, 1985

Reference books

1. H. Goldstein, Classical Mechanics, (2nd Edition) Narosa Publishing House, New Delhi.
 2. N.C.Rane and P.S.C.Joag, Classical Mechanics, Tata McGraw Hill, 1991.
- J.L.Synge and B.A.Griffith, Principles of Mechanics (3rd Edition) McGraw Hill Book Co., New York, 1970.

COURSE CODE	COURSE TITLE	L	T	P	C
14P633Q	CORE 14: OPERATIONS RESEARCH	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Decision Theory: Introduction -Decision making environments-Decion making under certainty-Decision making under uncertainty-Decision making under risk-Posterior propabilities and Bayesian analysis -Decision Tree Analysis. Chapter 15
UNIT 2	Project Management : PERT and CPM : Basic Differences between PERT and CPM – Steps in PERT/CPM Techniques – PERT/CPM Network Components and Precedence Relationships – Critical Path Analysis – Probability in PERT Analysis – Project time-cost Trade Off – Updating the Project – Resource Allocation Chapter 17
UNIT 3	Inventory Control: Relevant inventory costs – steps of inventory modi building –Deterministic inventory models-EOQ Model with constant rate of demand –EOQ Models with different rates of demand-Economic production quantity model when supply (Replenishment) is gradual Chapter18
UNIT 4	Queuing Theory : Introduction-Essential features of Queuing system – Performance measures of a Queuing system-Transient State and Steady state-Relation among performance measures-Classifications of Queuing Models and their solutions. Chapter 19
UNIT 5	Replacement and Maintenance Models:Introduction-Types of failure- Replacement of Items whose efficiency deteriorates with Time Chapter 20.

Recommended Text

J.K.Sharma, Operations Research , MacMillan India, New Delhi, Second edition -2004.

Reference books

1. F.S. Hillier and J.Lieberman -,Introduction to Operations Research (8th Edition), Tata McGraw Hill Publishing Company, New Delhui, 2006.
2. Beightler. C, D.Phillips, B. Wilde ,Foundations of Optimization (2nd Edition) Prentice Hall Pvt Ltd., New York, 1979
3. Bazaraa, M.S; J.J.Jarvis, H.D.Sharall ,Linear Programming and Network flow, John Wiley and sons, New York 1990.
4. Gross, D and C.M.Harris, Fundamentals of Queueing Theory, (3rd Edition), Wiley and Sons, New York, 1998.

Hamdy A. Taha , Operations Research (sixth edition), Prentice - Hall of India Private Limited, New Delhi.

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COURSE CODE	COURSE TITLE	L	T	P	C
14P633R	CORE 15: ELECTIVE III - JAVA PROGRAMMING	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Java Tokens – Java statements – Constants – Variables – Data types Chapters 3 and 4
UNIT 2	Operators – Expressions – Decision making and Branching. Chapters 5,6 and
UNIT 3	Classes – Objects – Methods – Arrays – Strings – Vectors – Multiple Inheritance Chapters 8, 9 and 10
UNIT 4	Multithreaded Programming – Managing errors and Exceptions Chapters 12 and 13
UNIT 5	Applet Programming Chapter 14

Recommended Text

E. Balagurusamy, Programming with Java – A primer , Tata McGraw Hill Publishing Company Limited, New Delhi, 1998.

Reference books

1. Mitchell Waite and Robert Lafore, Data Structures and Algorithms in Java, Techmedia (Indian Edition), New Delhi, 1999

Adam Drozdek, Data Structures and Algorithms in Java, (Brown/Cole), Vikas Publishing House, New Delhi, 2001.

Website and e-learning source

<http://www.java.sun.com> ,
www.cafeaulait.org/course/
<http://en.wikipedia.org>

COURSE CODE	COURSE TITLE	L	T	P	C
14P634S	CORE 16: COMPLEX ANALYSIS-II	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Riemann Zeta Function and Normal Families: Product development – Extension of $\zeta(s)$ to the whole plane – Equicontinuity – Normality and compactness – Arzela's theorem – Families of analytic functions . Chapter 5 : Sections 4.1 to 4.3 Chapter 5 : Sections 5.1 to 5.4
UNIT 2	Riemann mapping Theorem : Statement and Proof – Boundary Behaviour – Use of the Reflection Principle. Conformal mappings of polygons : Behaviour at an angle Schwarz-Christoffel formula – Mapping on a rectangle. Harmonic Functions : Functions with mean value property – Harnack's principle. Chapter 6 : Sections 1.1 to 1.3 (Omit Section 1.4) Chapter 6 : Sections 2.1 to 2.3 (Omit section 2.4) Chapter 6 : Section 3.1 and 3.2
UNIT 3	Elliptic functions : Simply periodic functions – Doubly periodic functions Chapter 7 : Sections 1.1 to 1.3 Chapter 7 : Sections 2.1 to 2.4
UNIT 4	Weierstrass Theory : The Weierstrass $\wp$ -function – The functions $\zeta(s)$ and $\sigma(s)$ – The differential equation – The modular equation $\lambda(\tau)$ – The Conformal mapping by $\lambda(\tau)$. Chapter 7 : Sections 3.1 to 3.5
UNIT 5	Analytic Continuation : The Weierstrass Theory – Germs and Sheaves – Sections and Riemann surfaces – Analytic continuation along Arcs – Homotopic curves – The Monodromy Theorem Chapter 8 : Sections 1.1 to 1.6

Recommended Text

Lars F. Ahlfors, Complex Analysis, (3rd Edition) McGraw Hill Book Company, New York, 1979.

Reference books

1. H.A. Presfly, Introduction to complex Analysis, Clarendon Press, oxford, 1990.
 2. J.B. Corway, Functions of one complex variables, Springer -Verlag, International student Edition, Narosa Publishing Co.
 3. E. Hille, Analytic function Thorey (2 vols.), Gonm & Co, 1959.
- M.Heins, Complex function Theory, Academic Press, New York, 1968.

COURSE CODE	COURSE TITLE	L	T	P	C
14P634T	CORE 17: FUNCTIONAL ANALYSIS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Banach Spaces : Definition – Some examples – Continuous Linear Transformations – The Hahn-Banach Theorem – The natural embedding of N in N^{**} (concept only) Chapter 9 : Sections 46 to 49
UNIT 2	Banach spaces and Hilbert spaces: Open mapping theorem – conjugate of an operator – Definition and some simple properties – Orthogonal complements – Orthonormal sets Chapter 9 : Sections 50 and 51 Chapter 10 : Sections 52 to 54.
UNIT 3	Hilbert Space : Conjugate space H^* - Adjoint of an operator – Self-adjoint operator – Normal and Unitary Operators – Projections Chapter 10 : Sections 55 to 59.
UNIT 4	Preliminaries on Banach Algebras : Definition and some examples – Regular and single elements – Topological divisors of zero – spectrum – the formula for the spectral radius Chapter 12 : Sections 64 to 68.
UNIT 5	Structure of commutative Banach Algebras : Gelfand mapping – Applications of the formula $r(x) = \lim_{n \rightarrow \infty} \ x^n\ ^{1/n}$ - Involutions in Banach Algebras – Gelfand-Neumark Theorem. Chapter 13 : Sections 70 to 73.

Recommended Text

G.F.Simmons, Introduction to topology and Modern Analysis, McGraw Hill International Book Company, New York, 1963.

Reference books

1. W. Rudin Functional Analysis, Tata McGraw-Hill Publishing Company, New Delhi , 1973
 2. G. Bachman & L.Narici, Functional Analysis Academic Press, New York,1966.
 3. H.C. Goffman and G.Fedrick, First course in Functional Analysis, Prentice Hall of India, New Delhi, 1987
- E. Kreyszig Introductory Functional Analysis with Applications, John wiley & Sons, New York.,1978.

COURSE CODE	COURSE TITLE	L	T	P	C
14P634U	CORE 18: DIFFERENTIAL GEOMETRY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Space curves: Definition of a space curve – Arc length – tangent – normal and binormal – curvature and torsion – contact between curves and surfaces- tangent surface- involutes and evolutes- Intrinsic equations – Fundamental Existence Theorem for space curves- Helices. Chapter I : Sections 1 to 9.
UNIT 2	Intrinsic properties of a surface: Definition of a surface – curves on a surface – Surface of revolution – Helicoids – Metric- Direction coefficients. Chapter II: Sections 1 to 6.
UNIT 3	Geodesics: Geodesics – Canonical geodesic equations – Normal property of geodesics- Geodesics curvature- Gauss- Bonnet Theorem – Gaussian curvature-surface of constant curvature. Chapter II: Sections 10 to 18 (omit sections 13 and 14)
UNIT 4	Non Intrinsic properties of a surface: The second fundamental form- Principle curvature – Lines of curvature – Developable - Developable associated with space curves and with curves on surface. Chapter III: Sections 1 to 6.
UNIT 5	Differential Geometry of Surfaces : Fundamental Existence Theorem for surfaces -Compact surfaces whose points are umbilics- Hilbert's lemma – Compact surface of constant curvature. Chapter IV : Sections 1 to 4

Recommended Text

T.J.Willmore, An Introduction to Differential Geometry, Oxford University Press,(17th Impression) New Delhi 2002. (Indian Print)

Reference books

1. Struik, D.T. Lectures on Classical Differential Geometry, Addison – Wesley, Mass. 1950.
 2. Kobayashi. S. and Nomizu. K. Foundations of Differential Geometry, Interscience Publishers, 1963.
 3. Wilhelm Klingenberg: A course in Differential Geometry, Graduate Texts in Mathematics, Springer-Verlag 1978.
- J.A. Thorpe Elementary topics in Differential Geometry, Under - graduate Texts in Mathematics, Springer - Verlag 1979.

COURSE CODE	COURSE TITLE	L	T	P	C
14P634V	CORE 19: TENSOR ANALYSIS AND RELATIVITY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Tensor Algebra: Systems of Different orders – Summation Convention – Kronecker Symbols – Transformation of coordinates in S_n – Invariants – Covariant and Contravariant vectors – Tensors of Second Order – Mixed Tensors – Zero Tensor – Tensor Field – Algebra of Tensors – Equality of Tensors – Symmetric and Skew-symmetric tensors – Outer multiplication, Contraction and Inner Multiplication – Quotient Law of Tensors – Reciprocal Tensor of Tensor – Relative Tensor – Cross Product of Vectors. Chapter I : I.1 – I.3 Chapter II : II.1 – II.18
UNIT 2	Tensor Calculus: Riemannian Space – Christoffel Symbols and their properties Chapter III: III.1 and III.2
UNIT 3	Tensor Calculus (contd): Covariant Differentiation of Tensors, Chapter III: III.3
UNIT 4	Special Theory of Relativity: Galilean Transformation – Maxwell's equations – The ether Theory – The Principle of Relativity Relativistic Kinematics : Lorentz Transformation equations Chapter 7 : Sections 7.1 and 7.2
UNIT 5	Relativistic Dynamics : Momentum – Energy – Momentum-energy four vector – Force – Conservation of Energy – Mass and energy – Example – inelastic collision – Principle of equivalence – Lagrangian and Hamiltonian formulations. Chapter 7 : Sections 7.3

Recommended Text

For Units I,II and III

U.C. De, Absos Ali Shaikh and Joydeep Sengupta, Tensor Calculus, Narosa Publishing House, New Delhi, 2004.

For Units IV and V

D. Greenwood, Classical Dynamics, Prentice Hall of India, New Delhi, 1985.

Reference books

1. J.L.Synge and A.Schild, Tensor Calculus, Toronto, 1949.
 2. A.S.Eddington. The Mathematical Theory of Relativity, Cambridge University Press, 1930.
 3. P.G.Bergman, An Introduction to Theory of Relativity, New York, 1942
- C.E.Weatherburn, Riemannian Geometry and the Tensor Calculus, Cambridge, 1938.

COURSE CODE	COURSE TITLE	L	T	P	C
14P634W	CORE 20: ELECTIVE 4 - RELATIONAL DATABASE MANAGEMENT SYSTEM	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Data, information and information processing – secondary storage devices – files, file organization and file structure – indexing and hashing – introduction to DBMS- software development life cycle- database development life cycle- introduction to RDBMS Chapter 1 – 7
UNIT 2	Database Architecture and data modeling – ER modeling – enhanced entity relationship model – data normalization Chapter 8 – 11
UNIT 3	Relational algebra and relational calculus – tables – SQL – tables – views and indexes and Null Queries and sub queries – aggregate functions. Chapter 12- 18
UNIT 4	Insert, update, delete operations – cursors – joins and unions –programming with SQL – query by example – QUEL triggers – Query processing and optimization Chap 19 – 26
UNIT 5	Database security – data integrity – transaction management and concurrency control –backup and recovery Chap : 27 – 30

Recommended Text

Alex Leon and Mathews Leon, Database Management Systems, Leon Vikas, Chennai

Reference books

1. Elamasri, R. and Navathe S. Fundamentals of Data Base Systems (3rd Edition) Person Education 2000
 2. Silberschatz A. Korth H.F. and Sudarshan , S. Database System Concepts (3rd Edn) McGraw Hill Publishing Company, New York 1997
 3. Ullman , J.O. Principles of Database System (2nd Edn) Computer Science Press Inc, 1984
- Date. C.J. Introduction to Database Systems (7th Edition), Addison Wesley, Mass 2000.

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COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - GRAPH THEORY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Data, information and information processing – secondary storage devices – files, file organization and file structure – indexing and hashing – introduction to DBMS- software development life cycle- database development life cycle- introduction to RDBMS Chapter 1 – 7
UNIT 2	Database Architecture and data modeling – ER modeling – enhanced entity relationship model – data normalization Chapter 8 – 11
UNIT 3	Relational algebra and relational calculus – tables – SQL – tables – views and indexes and Null Queries and sub queries – aggregate functions. Chapter 12- 18
UNIT 4	Insert, update, delete operations – cursors – joins and unions –programming with SQL – query by example – QUEL triggers – Query processing and optimization Chap 19 – 26
UNIT 5	Database security – data integrity – transaction management and concurrency control –backup and recovery Chap : 27 – 30

Recommended Text

J.A.Bondy and U.S.R. Murthy , *Graph Theory and Applications* , Macmillan, London, 1976.

Reference books

1. J.Clark and D.A.Holton , *A First look at Graph Theory*, Allied Publishers, New Delhi , 1995.
2. R. Gould. *Graph Theory*, Benjamin/Cummings, Menlo Park, 1989.
3. A.Gibbons, *Algorithmic Graph Theory*, Cambridge University Press, Cambridge, 1989.
4. R.J.Wilson and J.J.Watkins, *Graphs : An Introductory Approach*, John Wiley and Sons, New York, 1989.
5. R.J. Wilson, *Introduction to Graph Theory*, Pearson Education, 4th Edition, 2004, Indian Print.

A.Choudum, *A First Course in Graph Theory*, MacMillan India Ltd. 1987.

Website and e-learning source

<http://mathforum.org>, <http://ocw.mit.edu/ocwwweb/Mathematics>,
<http://www.opensource.org>, www.graphtheory.com

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - NUMERICAL ANALYSIS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Non Linear Equation: Bisection method – The secant method – Regula falsi method – Newton Raphson method – The fixed point method – Mueller’s method – Newton’s method for multiple roots – System of non Linear equations by Newton’s method and fixed point method Chapters 2 : (Devi Prasad)
UNIT 2	Interpolation: Lagrange’s formula – Newton’s divided difference formula – Newton’s forward and backward Interpolation formula. Numerical Differentiation: Derivatives based on Newton’s forward and backward Interpolation formula Chapters 4,5: 4.1 to 4.3, 5.1 (Devi Prasad)
UNIT 3	Numerical Integration: Basic Trapezoidal rule – Composite Trapezoidal rule – Basic Simpson’s one third rule – Composite Simpson’s one third rule – Basic Simpson’s three eight rule – composite Simpson’s three eighth rule – Numerical double integration with constant limits by composite trapezoidal and composite Simpson’s on third rule. Chapters 5 : 5.3, 5.7.1, 5.7.3 (Devi Prasad)
UNIT 4	Numerical Solution of Ordinary differential equation: Difference equation – Taylor’s series method – Euler’s method – Runge-Kutta method (fourth order only) – Predictor – corrector methods – Milne’s method and Adam’s method Chapter 6: 5.1 to 6.1 to 6.4 (Devi Prasad)
UNIT 5	Numerical Solution of Partial Differential Equations: Introduction – Solution of Laplace’s equation $U_{xx} + U_{yy} = 0$ and Poission’s Equations by Jacobi’s and Gauss seidel method. Solution of parabolic heat conduction equation $U_{xx} = \text{Cut}$ by Bender Schmidt recurrence relation and Crank Nickolson formula. Chapter 8: 8.1,8.2,8.3.1,8.3.2,8.4 (S.S.Sastry)

Recommended Text

1. Devi Prasad, An Introduction to Numerical Analysis (3rd ed) Narosa Publishing House, New Delhi, 2006.

S.S.Sastry, Introductory methods of Numerical Analysis (4th ed.), PHI Learning Pvt Ltd, New Delhi, 2009

Reference books

1. K.Sankara Rao, Numerical Methods for Scientists and Engineers, 3rd ed., Narosa Publishing house, New Delhi, 2008.
- Jain, Iyengar, Jain Numerical Methods, 5th ed., New Age Publishers, 2010.

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - CALCULUS OF VARIATIONS AND INTEGRAL EQUATIONS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	The Method of Variations in Problems with Fixed Boundaries Chapter 6 : Sections 1 to 7 (Elsgolts)
UNIT 2	Variational Problems with Moving Boundaries and certain other problems and Sufficient conditions for an Extremum Chapter 7 : Sections 1 to 4 (Elsgolts) Chapter 8 : Sections 1to 3(Elsgolts)
UNIT 3	Variational Problems Involving a conditional Extremum Chapter 9 : Sections 1 to 3. (Elsgolts)
UNIT 4	Integral Equations with Separable Kernels and Method of successive approximations. Chapter 1 : Sections 1.1 to 1.7 (Kanwal) Chapter 2 : Sections 2.1 to 2.5 (Kanwal) Chapter 3 : Sections 3.1 to 3.5 (Kanwal)
UNIT 5	Classical Fredholm Theory , Symmetric Kernels and Singular Integral Equations Chapter 4 : Sections 4.1 to 4.5 (Kanwal) Chapter 7 : Sections 7.1 to 7.6 (Kanwal) Chapter 8 : Sections 8.1 to 8.5 (Kanwal)

Recommended Text

For Units I,II and III :

L. Elsgolts , *Differential Equations and the Calculus of Variations*, Mir Publishers, Moscow, 1973 (2nd Edition)

For Units IV and V :

Ram P.Kanwal,*Linear Integral Equations*, Academic Press, New York, 1971.

Reference books

1. I.M.Gelfand and S.V.Fomin, *Calculus of Variations*, Prentice-Hall Inc. New Jersey, 1963.
2. A.S.Gupta, *Calculus of Variations with Applications*, Prentice-Hall of India, New Delhi, 1997.
3. M.Krasnov, A.Kiselev and G.Makarenko, *Problems and Exercises in Integral Equations*, Mir Publishers, Moscow, 1979.
4. S.G.Mikhlin, *Linear Integral Equations*, Hindustan Publishing Corp. Delhi,1960.
5. L.A.Pars, *An Introduction to the Calculus of Variations*, Heinemann, London, 1965.
6. R.Weinstock, *Calculus of Variations with Applications to Physics and Engineering*, McGraw-Hill Book Company Inc. New York, 1952.

Website and e-learning source

<http://mathforum.org>, <http://ocw.mit.edu/ocwwweb/Mathematics>
<http://www.opensource.org>

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COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - NUMBER THEORY AND CRYPTOGRAPHY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Elementary Number Theory – Time Estimates for doing arithmetic – divisibility and Euclidean algorithm – Congruences – Application to factoring.
UNIT 2	Introduction to Classical Crypto systems – Some simple crypto systems – Enciphering matrices DES
UNIT 3	Finite Fields and quadratic Residues – Reciprocity
UNIT 4	Public Key Cryptography
UNIT 5	Primality , Factoring and Elliptic Curves

Recommended Text

Neal Koblitz, *A Course in Number Theory and Cryptography*, Springer-Verlag, New York, 1987

Reference books

1. Niven and Zuckermann, *An Introduction to Theory of Numbers* (Edn. 3), Wiley Eastern Ltd., New Delhi, 1976
 2. David M. Burton, *Elementary Number Theory*, Wm C. Brown Publishers, Dubuque, Iowa, 1989
- K. Ireland and M. Rosen, *A Classical Introduction to Modern Number Theory*, Springer Verlag, 1972

Website and e-learning source

<http://mathforum.org>, <http://ocw.mit.edu/ocwweb/Mathematics>,
<http://www.opensource.org> , www.numbertheory.org

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - FORMAL LANGUAGES AND AUTOMATA THEORY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Finite automata, regular expressions and regular grammars Finite state systems – Basic definitions – Nondeterministic finite automata – Finite automata with ϵ moves – Regular expressions – Regular grammars. Chapter 2: Sections 2.1 to 2.5 Chapter 9: Section 9.1
UNIT 2	Properties of regular sets: The Pumping lemma for regular sets – Closure properties of regular sets – Decision algorithms for regular sets – The Myhill-Nerode Theorem and minimization of finite automata. Chapter 3 : Sections 3.1 to 3.4
UNIT 3	Context-free grammars: Motivation and introduction – Context-free grammars – Derivation trees- Simplification of context-free grammars – Chomsky normal form – Greibach normal form. Chapter 4 : Section 4.1 to 4.6
UNIT 4	UNIT-IV : Pushdown automata Informal description- Definitions-Pushdown automata and context-free languages – Normal forms for deterministic pushdown automata. Chapter 5 : Sections 5.1 to 5.3
UNIT 5	Properties of context-free languages: The pumping lemma for CFL's – Closure properties for CFL's – Decision algorithms for CFL's. Chapter 6 : Sections 6.1 to 6.3

Recommended Text

John E.Hopcraft and Jeffrey D.Ullman, *Introduction to Automata Theory, Languages and Computation*, Narosa Publishing House, New Delhi, 1987.

Reference books

1. A. Salomaa, *Formal Languages*, Academic Press, New York, 1973.
- John C. Martin, *Introduction to Languages and theory of Computations* (2nd Edition) Tata-McGraw Hill Company Ltd., New Delhi, 1997.

Website and e-learning source

<http://mathforum.org>, <http://ocw.mit.edu/ocwweb/Mathematics>,
<http://www.opensource.org>, www.jflap.org

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COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - OBJECT ORIENTED PROGRAMMING WITH C++	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Variables – Operators – Manipulators – Expressions and their types – Control Structures – Functions – Main Function – Function Prototyping – Call by Reference – Return by Reference – Inline Functions – Default Arguments – Function Overloading Chapters: 3 (3.1 to 3.24) and 4 (4.1 to 4.7, 4.9)
UNIT 2	Classes and Objects – Specifying a Class – Defining Member Functions – A C++ Program with Class – Static Members – Arrays of Objects – Objects as Function Arguments – Friend Functions – Returning Objects Chapters: 5 (5.3 to 5.5, 5.11 to 5.16)
UNIT 3	Constructors and Destructors – Parameterized Constructors – Multiple Constructors in a Class – Copy constructors – Destructors – Defining Operator Overloading – Overloading Unary Operators – Overloading Binary Operators – Using Friend Function – Rules for Overloading Operators Chapters: 6 (6.1 to 6.4, 6.7, 6.11) and 7(7.1 to 7.5, 7.7)
UNIT 4	Inheritance – Defining Derived Clases – Single Inheritance – Multilevel Inheritance – Multiple iNheritance – Virtual Base Classes – Pointers to Objects – this pointer – Pointer to Derived Classes – virtual Functions and Polymorphism – Pure Virtual Function. Chapters: 8(8.1 to 8.3, 8.5, 8.6,8.9), 9(9.1 to 9.7)
UNIT 5	Managing Console I/O Operations – C++ Streams – C++ Stream Classes – Unformatted I/O Operations – Formatted Console I/O Operations – Working with Files – Classes for File Stream Operations – Opening and Closing a File – Detcting End – of File – File Modes Chapters: 10 (10.1 to 10.5) and 11 (11.1 to 11.5)

Recommended Text

Object – Oriented Programming with C++, 3rd ed., E.Balagurusamy, Tata McGraw Hill Pub, New Delhi

Reference books

1. Mastering C++, Venugopal and Prasad, Tata McGraw Hill Pub,
Object Oriented Programming with C++, Ashok N Kamthane, pearson education.

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COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - FUZZY SETS AND APPLICATIONS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Fundamental Notions Chapter 1: Section 1 to 8
UNIT 2	Fuzzy Graphs Chapter 2: Section 10 to 18
UNIT 3	Fuzzy relations Chapter 2 : Section 19 to 29
UNIT 4	Fuzzy Logic Chapter 3: Section 31 to 40 (omit section 37,38,49)
UNIT 5	The Laws of Fuzzy Composition Chapter 4: Section 43 to 49

Recommended Text

A.Kaufman, Introduction to the theory of Fuzzy subsets, Vol.1, Academic Press, New York, 1975

Reference books

H.J.Zimmermann, Fuzzy set theory and its applications, Allied publishers, Chennai, 1996.

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - MATHEMATICAL ECONOMICS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	The theory of Consumer Behaviour: Utility function – Indifference Curves – Rate of Commodity Substitution – Existence of Utility Function – Maximization of Utility – Choice of a utility Index – demand function – Income and Leisure – Substitution and Income Effects – Generalization to n variables – Theory of Revealed Preference – Problem of Choice in Risk Chapter 2: 2.1 to 2.10
UNIT 2	The Theory of Firm : Productio Function – Productivity Curves – Isoquents – Optimization behavior – Input Demand functions – cost Functions (short run and long-run) – Homogeneous Production functions and their properties – CES Production Function and their Properties – Joint Products – Generalisation to m variables
UNIT 3	Market Equilibrium: Assumptions of Perfect Competition – Demand Functions – supply functions – commodity Equilibrium – Applications of the Analysis – Factor Market Equilibrium – existence of uniqueness of Equilibrium – Stability of Equilibrium – Dynamic Equilibrium with lagged adjustment
UNIT 4	Imperfect competition: Monopoly and its Applications – duopoly and Oligopoly – Monopolistic Composition – Monopsony, Duopsony and Oligopsony –Bilateral Monopoly Chapter 6: Section 6.1 to 6.7
UNIT 5	Welfare Economics: Parato Optimality and the efficiency of perfect competition – The efficiency of Imperfect competition – External Effects in consumption and Production – Taxes, Subsidies and Compensation – Social Welfare functions – The theory of Second best Chapter 7: Sections 7.1 to 7.7

Recommended Text

Henderson and R.e.Quandt, Micro Economic Theory – a Mathematical Approach 2nd ed., Tata McGraw Hill, New York, 1971.

Reference books

1. William J Baumol, Economic theory and operations analysis, Prentice Hall of India, New Delhi, 1978
2. A.c.Chiang, Fundamental Methods of Mathematical Economics, McGraw Hill, New York, 1984
3. Michael D Intriligator, Mathematical Optimization and Economic Theory, prentice Hall, New York, 1971

Kautsoyiannis, Modern Microeconomics, 2nd ed, Macmillan, New York, 1979

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - MATHEMATICAL PROGRAMMING	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Integer Linear Programming: Types of Integer Linear Programming Problems – Concept of Cutting Plane – Gomory’s All Integer Cutting Plane Method – Gomory’s mixed Integer Cutting Plane method – Branch and Bound Method. – Zero-One Integer Programming. Dynamic Programming: Characteristics of Dynamic Programming Problem – Developing Optimal Decision Policy – Dynamic Programming Under Certainty – DP approach to solve LPP. Chapters: 7 and 21.
UNIT 2	Classical Optimization Methods: Unconstrained Optimization – Constrained Multi-variable Optimization with Equality Constraints - Constrained Multi-variable Optimization with inequality Constraints Non-linear Programming Methods: Examples of NLPP – General NLPP – Graphical solution – Quadratic Programming – Wolfe’s modified Simplex Methods – Beale’s Method. Chapters: 22 and 23
UNIT 3	Theory of Simplex method : Canonical and Standard form of LP – Slack and Surplus Variables – Reduction of any Feasible solution to a Basic Feasible solution – Alternative Optimal solution – Unbounded solution – Optimality conditions – Some complications and their resolutions – Degeneracy and its resolution. Chapter 24
UNIT 4	Revised Simplex Method: Standard forms for Revised simplex Method – Computational procedure for Standard form I – comparison of simplex method and Revised simplex Method. Bounded Variables LP problem: The simplex algorithm Chapters 25 and 27
UNIT 5	Parametric Linear Programming : Variation in the coefficients c_j , Variations in the Right hand side, b_i. Goal Programming : Difference between LP and GP approach – Concept of Goal Programming – Goal Programming Model formulation – Graphical Solution Method of Goal Programming – Modified Simplex method of Goal Programming. Chapters 28 and 29.

Recommended Text

J.K.Sharma, *Operations Research* , Macmillan (India) New Delhi 2001

Reference books

1. Hamdy A. Taha, *Operations Research*, (seventh edition) Prentice - Hall of India Private Limited, New Delhi, 1997.
2. F.S. Hillier & J.Lieberman *Introduction to Operation Research* (7th Edition) Tata- McGraw Hill Company, New Delhi, 2001.

3. Beightler. C, D.Phillips, B. Wilde ,*Foundations of Optimization* (2nd Edition) Prentice Hall Pvt Ltd., New York, 1979
S.S. Rao - *Optimization Theory and Applications*, Wiley Eastern Ltd. New Delhi. 1990

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - DISCRETE MATHEMATICS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Lattices: Properties of Lattices: Lattice definitions – Modular and distributive lattice; Boolean algebras: Basic properties – Boolean polynomials, Ideals; Minimal forms of Boolean polynomials. Chapter 1: § 1 A and B § 2A and B. § 3.
UNIT 2	Applications of Lattices: Switching Circuits: Basic Definitions - Applications Chapter 2: § 1 A and B
UNIT 3	Finite Fields Chapter 3: § 2
UNIT 4	Polynomials : Irreducible Polynomials over Finite fields – Factorization of Polynomials Chapter 3: § 3 and §4.
UNIT 5	Coding Theory : Linear Codes and Cyclic Codes Chapter 4: § 1 and 2

Recommended Text

Rudolf Lidl and Gunter Pilz, *Applied Abstract Algebra*, Springer-Verlag, New York, 1984.

Reference books

1. A.Gill, *Applied Algebra for Computer Science*, Prentice Hall Inc., New Jersey.
 2. J.L.Gersting, *Mathematical Structures for Computer Science*(3rd Edn.), Computer Science Press, New York.
- S.Wiitala, *Discrete Mathematics- A Unified Approach*, McGraw Hill Book Co.

Website and e-learning source

<http://mathforum.org>, <http://ocw.mit.edu/ocwweb/Mathematics>,
<http://www.opensource.org>

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COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - WAVELETS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	An Overview: Fourier to Wavelets – Integral Wavelet Transform and Time-frequency analysis – Inversion formulas and duals – Classification of Wavelets – Multiresolution analysis – Splines and Wavelets. Fourier Analysis: Fourier and Inverse Fourier Transforms – Continuous time convolution – The delta function – Fourier Transform of square integrable functions. Chapter 1: Sections 1.1 to 1.6 Chapter 2: Sections 2.1 to 2.3
UNIT 2	Fourier Analysis (contd): Fourier Series - Basic Convergence Theory – Poisson Summation Formula. Wavelet Transforms and Time Frequency Analysis: The Gabor Transform – Short time Fourier Transforms and the uncertainty principle – The integral Wavelet Transform – Dyadic Wavelets – Inversions – Frames – Wavelet Series . Chapter 2: 2.4 and 2.5 Chapter 3: Section 3.1 to 3.6
UNIT 3	Cardinal Spline Analysis: Cardinal Spline spaces.- B-Splines and their basic properties – The time scale relation and an interpolating graphical display algorithm – B-Net representations and computation of cardinal splines – Construction of cardinal splines – construction of spline application formulas – Construction of Spline interpolation formulas. Chapter 4: Sections 4.1 to 4.6
UNIT 4	Scaling functions and Wavelets: Multiresolution analysis – Scaling functions with finite two scale relation – Direction sum Decompositions of $L^2(\mathbb{R})$ – Wavelets and their duals. Chapter 5: Sections 5.1 to 5.4 (omit 5.5 and 5.6)
UNIT 5	Cardinal Spline Wavelets: Interpolating splines wavelets – Compactly supported spline – Wavelets – Computation of Cardinal spline Wavelets – Euler – Frobenius Polynomials. Orthogonal Wavelets: Examples of orthogonal Wavelets – Identification of orthogonal two scale symbols – Construction of compactly supported orthogonal wavelets. Chapter 6 : Sections 6.1 to 6.4 (omit 6.5 and 6.6) Chapter 7: Sections 7.1 to 7.3 (omit 7.4 and 7.5)

Recommended Text

Charles K.Chui , *An Introduction to Wavelets*, Academic Press, New York, 1992.

Reference books

1. Chui. C.K. (ed) *Approximation theory and Fourier Analysis*, Academic Press Boston, 1991.
2. Daribeckies, I. *Wavelets*, CBMS-NSF Series in Appl. math. SIAM. Philadelphia, 1992.
3. Schumaker, L.L. *Spline Functions: Basic Theory*, Wiley, New York 1981.
4. Nurnberger, G. *Applications to Spline Functions*, Springer Verlag, New York. 1989.
5. Walnut, D.F. *Introduction to Wavelet Analysis*, Birkhauser, 2004.

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COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - JAVA PROGRAMMING	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Java Tokens – Java statements – Constants – Variables – Data types Chapters 3 and 4
UNIT 2	Operators – Expressions – Decision making and Branching. Chapters 5,6 and 7
UNIT 3	Classes – Objects – Methods – Arrays – Strings – Vectors – Multiple Inheritance Chapters 8, 9 and 10
UNIT 4	Multithreaded Programming – Managing errors and Exceptions Chapters 12 and 13
UNIT 5	Applet Programming Chapter 14

Recommended Text

E. Balagurusamy, Programming with Java – A primer , Tata McGraw Hill Publishing Company Limited, New Delhi, 1998.

Reference books

1. Mitchell Waite and Robert Lafore, Data Structures and Algorithms in Java, Techmedia (Indian Edition), New Delhi, 1999
Adam Drozdek, Data Structures and Algorithms in Java, (Brown/Cole), Vikas Publishing House, New Delhi, 2001.

Website and e-learning source

<http://www.java.sun.com> ,
www.cafeaulait.org/course/
<http://en.wikipedia.org>

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - ALGEBRAIC THEORY OF NUMBERS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Algebraic background: Rings and Fields – Factorization of Polynomials – Field Extensions – Symmetric Polynomials – Modules Free Abelian Groups Chapter 1: Section 1.1 to 1.6
UNIT 2	Algebraic Numbers: Algebraic numbers – conjugates and Discriminants – Algebraic Integers – Integral Bases – Norms and Traces – Rings of Integers Chapter 2: Section 2.1. to 2.6
UNIT 3	Quadratic and Cyclotomic Fields: Quadratic fields and cyclotomic fields Factorization into Irreducibles: Trivial factorization – Factorization into irreducible – Examples of non-unique factorization into irreducibles Chapter 3: Section 3.1 and 3.2 Chapter 4: Section 4.1 to 4.4
UNIT 4	Prime Factorization – Euclidean Domains – Euclidean Quadratic fields – consequences of unique factorization – The Ramanujan – Nagell Theorem Chapter 4 : Section 4.5 to 4.9
UNIT 5	Ideals: Prime Factorization of Ideals: The norms of an Ideal – Non-unique Factorization in Cyclotomic Fields Chapter 5: Section 5.1. to 5.4

Recommended Text

Stewart and D.Tall, Algebraic Number Theory and Fermat's Last Theorem, 3rd ed., A.K.Peters Ltd, Natick, Mass, 2002

Reference books

1. Z.I.Borevic and I.R.Safarevic, Number Theory, Academic Press, Newyork, 1966
 2. J.W.S. Cassels and A.Frohlich, Algebraic Number Theory,
 3. P..Ribenoim, Algebraic Number theory, Academic Press, Newyork, 1967
- P.Samuel, Algebraic Theory of Numbers, Houghton Mifflin Company, Boston, 1970

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - STOCHASTIC PROCESSES	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Poisson Process : Inter arrival and waiting time distributions – conditional distributions of the arrival times – Non-homogenous Poisson process – Compound Poisson Random variables and processes- Conditional Poisson processes. Chapter 2: Sections 2.1 to 2.6
UNIT 2	Renewal Theory: Distribution of $N(t)$ – Some Limit Theorems – The Key Renewal Theorem and applications – Delayed Renewal Processes – Renewal Reward Process. Chapter 3: 3.1 to 3.6 only
UNIT 3	Markov Chains : Chapman Kolmogorov Equations and classification of states – Limit theorems – Transitions among classes – The Gambler's Ruin Problem and mean times in transient states – Branching processes. Chapter 4: Section 4.1 to 4.5 only
UNIT 4	Continuous Time Markov Chains: Birth and Death Processes – Kolmogorov Differential equations – Limiting Probabilities Martingales: Stopping times – Azuma's inequality for martingales – Chapter 5: Section 5.1 to 5.5 only Chapter 6 : Section 6.1 to 6.3 only
UNIT 5	Brownian Motion and other Markov Processes: Brownian Motion – Hitting times – Maximum variable and the Arc sine laws - Variations of Brownian Motion – Brownian Motion with drift. Chapter 8: Sections 8.1 to 8.4 only

Recommended Text

Sheldon M. Ross, *Stochastic Processes* (2nd Ed) Wiley, New York, 1996

Reference books

1. Cinler E., *Introduction to Stochastic Processes*, Prentice Hall Inc., New Jersey, 1975
 2. Cox D.R. & H.D.Miller, *Theory of Stochastic Processes* (3rd Edn.), Chapman and Hall, London, 1983
 3. Kannan D., *An Introduction to Stochastic Processes*, North Holland, New York 1979
 4. Ross S.M., *An Introduction to Probability Models* (8th edn) Academic Press, New York, 2005 (reprinted)
- H.W.Taylor and S.Karlin, *An Introduction to Stochastic Modeling* (3rd Edition), Academic Press, New York, 1998

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - DATA STRUCTURES AND ALGORITHMS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Algorithms and Elementary Data Structures: Algorithms – structured programs – analysis of algorithms – stacks and queues – trees – heaps and heapsort – sets and disjoint set union – graphs – hashing Chapter 1 : 1.1 to 1.4 Chapter 2 : 2.1 to 2.6
UNIT 2	The Divide and Conquer Method: The general method – binary search – finding the max and min – merge sort – quick sort – selection sort – strassen's matrix multiplication Chapter 3 : 3.1 – 3.7
UNIT 3	The Greedy Method: The general method – optimal storage on tapes – Knapsack problem – job scheduling with deadlines –optimal merge pattern – min spanning trees – single source shortest path. Chapter 4 : 4.1 – 4.7
UNIT 4	Backtracking: The general methods –the 8 queens problem- sum of subsets – graph coloring – Hamiltonian cycles – Knapsack problems Chapter 7 : 7.1 – 7.6
UNIT 5	Branch and Bound and Np Hard and Np Complete Problems: Branch and Bound method – 0/1 knapsack problem – traveling salesperson – efficiency considerations – basic concepts of NP – Hard problems – Cook's theorem- NP Hard graph problems – NP Hard scheduling problems Chapter 8 : 8.1 – 8.4 Chapter 11 : 11.1 – 11.4

Recommended Text

E. Horowitz and S.Sahni, Fundamentals of Computer Algorithms, Galgotia Publishing (P) Ltd., New Delhi, 1992

Reference books

Adam Drozdek, Data Structures and Algorithms in C++, Vikas publishing House, New Delhi, 2001

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - FLUID DYNAMICS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Kinematics of Fluids in motion: Real fluids and Ideal fluids – Velocity of a fluid at a point, Stream lines, Path lines, Steady and unsteady flows – Velocity potential – The vorticity vector – Local and particle rates of changes – Equations of continuity – worked examples – Acceleration of a fluid – Conditions at a rigid boundary. Chapter 2: Section 2.1 to 2.10
UNIT 2	Equations of motion of a fluid: Pressure at a point in a fluid at rest – Pressure at a point in a moving fluid – Conditions at a boundary of two inviscid immiscible fluids – Euler's equation of motion – Discussion of the case of steady motion under conservative body forces Chapter 3: Section 3.1 to 3.7
UNIT 3	Some three dimensional flows: Introduction – Sources, sinks and doublets – Images in a rigid infinite plane – Axis symmetric flows – Stokes stream function Chapter 4: Section 4.1., 4.2, 4.3, 4.5
UNIT 4	Some two dimensional flows: Meaning of two dimensional flow – Use of Cylindrical polar coordinates – The stream function – The complex potential for two dimensional, irrotational incompressible flow – Complex velocity potentials for standard two dimensional flows – some worked examples – Two dimensional Image systems – The Milne Thompson circle theorem. Chapter 5: Section 5.1. to 5.8
UNIT 5	Viscous flows: Stress components: Stress components in a real fluid – Relations between Cartesian components of stress – Translational motion of fluid elements – The rate of strain quadric and principle stresses – some further properties of the rate of strain quadric – Stress analysis in fluid motion – Relation between stress and rate of strain – The coefficient of viscosity and Laminar flow – The Navier – Stokes equations of motion of a Viscous fluid. Chapter 8: Section 8.1 to 8.9

Recommended Text

F.Chorlton, Text Book of Fluid dynamics, CBS Publications, Delhi, 1985.

Reference books

1. R.W.Fox and A.T. McDonald, Introduction to Fluid Mechanics, Wiley, 1985
2. E.Krause, Fluid Mechanics with Problems and Solutions, Springer, 2005
3. B.S.Massey, J.W.Smith and A.J.W Smith, Mechanics of Fluids, Taylor and Francis, New York, 2005
4. P.Orlandi, Fluid Flow Phenomena, Kluwer, New York, 2002

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - ALGEBRAIC TOPOLOGY	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Cohomology and Homology: De Rham Cohomology and the Jordan Curve Theorem. Definition of the De Rham Graphs – The Coboundary map – the Jordan Curve Theorem – Applications and Variations. Homology: Chains, Cycles, and H_0U - Boundaries, H_1U , and Winding Numbers – Chains on Grids – Maps and Homology – The First Homology Group for General Spaces. Chapter 5: (a) to (d) ; Chapter 6: (a) to (e)
UNIT 2	Cohomology and Homology: De Rham Cohomology and the Jordan Curve Theorem. Definition of the De Rham Graphs – The Coboundary map – the Jordan Curve Theorem – Applications and Variations. Homology: Chains, Cycles, and H_0U - Boundaries, H_1U , and Winding Numbers – Chains on Grids – Maps and Homology – The First Homology Group for General Spaces. Chapter 5: (a) to (d) ; Chapter 6: (a) to (e)
UNIT 3	Holes and Integrals: Multiply connected regions – Integrations over continuous Paths and Chains – Periods of Integrals – Complex Integration Mayer-Victoris: The Boundary map – Mayer-Victoris for Homology – Variations and applications – Mayer-Victoris for Cohomology Chapter 9: (a) to (d) ; Chapter 10: (a) to (d)
UNIT 4	Covering Spaces and Fundamental Groups: Covering Spaces: Definition – Lifting paths and Homotopies – G-coverings – Covering Transformations. The Fundamental Groups: Definitions and Basic Properties – Homotopy – Fundamental Group and Homology. Fundamental Groups and Covering Spaces: Fundamental Group and Coverings – Automorphisms of Coverings – The Universal Covering – Coverings and Subgroups of the Fundamental Group Chapter 11 : (a) to (d) ; Chapter 12 : (a) to (c) ; Chapter 13: (a) to (d)
UNIT 5	The Van Kampen Theorem: G-Coverings from the Universal Covering – Patching Coverings together – The Van Kampen Theorem Cohomology: Patching Coverings and Cech cohomology – Cech Cohomology and Homology – De Rham Cohomology and Homology – Proof of Mayer-Victoris for De Rham Cohomology. Chapter 14 : (a) to (d) ; Chapter 15: (a) to (d)

Recommended Text

William Fulton, *Algebraic Topology – A First Course*, Springer-Verlag, New York, 1995

Reference books

1. M.K. Agoston, *Algebraic topology- A First Course*, Marcel Dekker, 1962
2. Satya Deo, *Algebraic Topology*, Hindustan Book Agency, New Delhi, 2003.
3. M. Greenberg and Harper, *Algebraic Topology-A First course*, Benjamin/Cummings, 1981.
4. C.F. Maunder, *Algebraic topology*, Van Nostrand, New York, 1970

[Type the document title]

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - DIFFERENCE EQUATIONS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Linear Difference Equations of Higher Order: Difference Calculus – General Theory of Linear Difference Equations – Linear Homogeneous Equations with constant Coefficients – Linear non-homogeneous equations – Method of Undertermined coefficients, the method of variation of constants – Limiting behavior of solutions Chapter 2: Sections 2.1 to 2.5
UNIT 2	System of Difference Equations: Autonomous System – the Basic Theory – The Jordan form – Linear Periodic system Chapter 3: Section 3.1 to 3.4
UNIT 3	The Z-Transform Method: Definition, Examples and properties of Z-transform – The Inverse Z-transform and solution of Difference Equations- Power series method, partial fraction method, the inverse integral method – Volterra Difference Equation of convolution types – Volterra systems Chapter 5: Sections 5.1 to 5.3, 5.5 (omit 5.4)
UNIT 4	Asymptotic behavior of difference equation: Tools and Approximations – Poincare's theorem – Second order difference equations – Asymptotic diagonal systems – Higher order Difference Equations Chapter 8: Sections 8.1 to 8.5
UNIT 5	Oscillation Theory: Three-term difference equations – Non-linear Difference Equations – Self-Adjoint second order equations. Chapter 7: Sections 7.1 to 7.3

Recommended Text

An Introduction to Difference Equations, Saber N elaydi, Springer Verlag, New York, 1996

Reference books

1. Difference Equations and Inequalities, Marcel Dekkar, R.P.Agarwal, 1999
2. Introduction to Difference Equatinos, S.Goldberg, Dover Publications, 1986
3. Theory of Difference Equations, V.Lakshmi Kantham and Triginat, Academic press, Newyork, 1988.
4. A difference Equations, an Introduction with applications Peterson, Academic press, newyork, 1991.

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - RELATIONAL DATABASE MANAGEMENT SYSTEM	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Data, information and information processing – secondary storage devices – files, file organization and file structure – indexing and hashing – introduction to DBMS- software development life cycle- database development life cycle- introduction to RDBMS Chapter 1 – 7
UNIT 2	Database Architecture and data modeling – ER modeling – enhanced entity relationship model – data normalization Chapter 8 – 11
UNIT 3	Relational algebra and relational calculus – tables – SQL – tables – views and indexes and Null Queries and sub queries – aggregate functions. Chapter 12- 18
UNIT 4	Insert, update, delete operations – cursors – joins and unions –programming with SQL – query by example – QUEL triggers – Query processing and optimization Chapter 19 – 26
UNIT 5	Database security – data integrity – transaction management and concurrency control –backup and recovery Chapter 27 – 30

Recommended Text

Alex Leon and Mathews Leon, Database Management Systems, Leon Vikas, Chennai

Reference books

1. Elamasri, R. and Navathe S. Fundamentals of Data Base Systems (3rd Edition) Person Education 2000
 2. Silberschatz A. Korth H.F. and Sudarshan , S. Database System Concepts (3rd Edn) McGraw Hill Publishing Company, New York 1997
 3. Ullman , J.O. Principles of Database System (2nd Edn) Computer Science Press Inc, 1984
- Date. C.J. Introduction to Database Systems (7th Edition), Addison Wesley, Mass 2000.

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE - FINANCIAL MATHEMATICS	5	1	-	4

UNIT	SYLLABUS
UNIT 1	Single period models: Definitions from Finance – Pricing a forward One-step Binary Model – A Ternary Model – Characterization of no arbitrage – Risk – Neutral Probability Measures Chapter 1
UNIT 2	Binomial Trees and Discrete parameter martingales: Multi-period Binary model – American Options – Discrete parameter martingales and Markov processes – Martingale Theorems – Binomial Representation Theorem – Overture to Continuous models Chapter 2
UNIT 3	Brownian Motion: Definition of the process – Levy’s Construction of Brownian Motion – the Reflection Principles and Scaling – Martingales in Continuous time Chapter 3
UNIT 4	Stochastic Calculus: Stock prices are not differentiable – Stochastic Integratin – Ito’s formula – Integration by parts and Stochastic Fubini Theorem – Girsanov Theorem – Brownian Martingale REpresentaiton Theorem – Geometric Brownian Motion – the Feynman – Kac Representation Chapter 4
UNIT 5	Block-Scholes Model: Basic Block-Scholes Model – Block- Scholes price and hedge for European Options – Foreign Exchange – Dividends – Bonds – market Price of risk Chapter 5

Recommended Text

Alison Etheridge, A course in Financial Calculus, Cambridge University Press, Cambridge 2002

Reference books

1. Martin Boxter and Andrew Rennie, Financial Calculus: An introduction to Derivatives pricing, Cambridge University Press, Cambridge, 1996
2. Damien Lamberton and Bernard Lapeyre, Translated by Nicolas Rabeau and Farancois Manton), Introduction to Stochastic Calculus applied to Finance, Chapman and Hall, 1996
3. Marek Musiela and Marek Rutkowski, Martingale methods in Financial modeling, Springer Verlag, New york 1988

4. Robert J Elliott and P. Ekkehard Kopp, Mathematics of Financial Markets, Springer Verlag, New York, 2001

DHANRAJ BAID JAIN COLLEGE (AUTONOMOUS)

THORAIPAKKAM, CHENNAI – 600 097.

2017 – 2018

DEPARTMENT OF ENGLISH

P.G. SOFTSKILLS FOR ODD SEMESTER

ESSENTIALS OF LANGUAGE AND COMMUNICATION SKILLS

SYLLABUS

UNIT-I

Tenses

UNIT-II

One word substitution

UNIT-III

Concord

UNIT-IV

Idioms and Phrases

UNIT-V

Spotting errors

P.G. SOFT SKILLS FOR EVEN SEMESTER
ESSENTIALS OF SPOKEN AND PRESENTATION SKILLS
SYLLABUS

UNIT-I

Types of communication

UNIT-II

Body language

UNIT-III

Stress management

UNIT-IV

Time management

UNIT-V

Facing interview

தன்ராஜ் பெய்த் ஜெயின் கல்லூரி

(தன்னாட்சி)

சென்னை – 600 097.



தெரிவுமுறை மதிப்பீடு – பாடத்திட்டம்

(CBCS – Syllabus)

பருவமுறைப் படிப்பு (தகுதிப் புள்ளிகளுடன்)

பகுதி IV அ, ஆ

துறைசாரா விருப்பப் பாடத்திற்கான

தமிழ்ப்பாடம்

(தமிழ் அல்லாது பிறமொழிப் பாடம் பயிலும்

மாணவர்களுக்கு உரியது)

(2017-2018 கல்வி ஆண்டிலிருந்து

செயல்படுத்தப்படுவது)

தமிழ்த்துறை

தன்ராஜ் பெய்த் ஜெயின் கல்லூரி
(தன்னாட்சி)

சென்னை – 600 097.



தெரிவுமுறை மதிப்பீடு – பாடத்திட்டம்
(CBCS – Syllabus)

பருவமுறைப் படிப்பு (தகுதிப் புள்ளிகளுடன்)

பகுதி IV: அ

பள்ளியில் தமிழ் பயிலாத மாணவர்களுக்கான
அடிப்படைத் தமிழ்ப்பாடம்

(எளிய முறையில் தமிழ் கற்றல்)

(2017-2018 கல்வி ஆண்டிலிருந்து
செயல்படுத்தப்படுவது)

தமிழ்த்துறை

தெரிவுமுறை மதிப்பீடு – பாடத்திட்டம்

பகுதி IV: அ

பள்ளியில் தமிழ் பயிலாத மாணவர்களுக்கான
அடிப்படைத் தமிழ்ப்பாடம்

(எளிய முறையில் தமிழ் கற்றல்)

முதற் பருவம்

வ.எண்	பாடத்தலைப்பு	மணி	தகுதிப் புள்ளி	தேர்வு நேரம்	மதிப்பெண்		மொத்தம்
					அக மதிப்பீடு	புற மதிப்பீடு	
1	தமிழ்மொழி அறிமுகம்	2	2	3	20	80	100

இரண்டாம் பருவம்

வ.எண்	பாடத்தலைப்பு	மணி	தகுதிப் புள்ளி	தேர்வு நேரம்	மதிப்பெண்		மொத்தம்
					அக மதிப்பீடு	புற மதிப்பீடு	
1	தமிழ் நூல்கள் அறிமுகம்	2	2	3	20	80	100

பகுதி IV: அ
பள்ளியில் தமிழ் பயிலாத மாணவர்களுக்கான
அடிப்படைத் தமிழ்ப் பாடம்
(எளிய முறையில் தமிழ் கற்றல்)
முதற்பருவம்

துறைசாரா விருப்பப்பாடம்: தாள் - 1 தமிழ்மொழி அறிமுகம்
தகுதிப்புள்ளி: 2 குறியீட்டு எண்: 17BL1AA
காலம்: கல்வி வாரத்திற்கு 2 மணிகள் மொத்த மணிகள்: 30

நோக்கம்:- தமிழை மொழிப்பாடமாக கற்காத மாணவர்களுக்கு அடிப்படைத்தமிழ் அறிமுகம் - எழுத்துகள், சொற்கள் - அறிமுகம், பிழையின்றி எழுதுவதற்கான பயிற்சி, தொடர் எழுதுதல் மற்றும் வாசித்தல் பயிற்சி அளித்தல்.

அலகு – 1 : தமிழ் எழுத்துகள் : உயிர் எழுத்துகள் - மெய்யெழுத்துகள்

அலகு – 2 : உயிர்மெய் எழுத்துகள்

அலகு – 3 : சொற்கள் : பெயர்ச்சொல், வினைச்சொல், இடைச்சொல், உரிச்சொல்

அலகு – 4 : தொடர்: தொடரமைப்பு (எழுவாய், செயப்படுபொருள், பயனிலை)

அலகு – 5 : எண்கள், உறவுப் பெயர்கள், வாழ் இடங்கள், பொருள்கள், நூற்பெயர்கள், நூலாசிரியர்கள்

பகுதி IV: அ

பள்ளியில் தமிழ் பயிலாத மாணவர்களுக்கான
அடிப்படைத் தமிழ்ப் பாடம்

(எளிய முறையில் தமிழ் கற்றல்)

இரண்டாம் பருவம்

துறைசாரா விருப்பப்பாடம்: தாள் - 2

தமிழ்நூல்கள் அறிமுகம்

தகுதிப்புள்ளி: 2

குறியீட்டு எண்: 17BL1AB

காலம்: கல்வி வாரத்திற்கு 2 மணிகள்

மொத்த மணிகள்: 30

நோக்கம்: எளிய செய்யுள்கள் அறிமுகம், நீதி நூல்கள், நீதிக்கதைகள் முதலியவற்றைக் கற்பித்தல், தமிழர் வரலாறு மற்றும் பண்பாடு குறித்த அறிமுகம், பேச்சுத்திறன் பயிற்சி

அலகு – 1 : ஆத்திசூடி (1-12)

அலகு – 2 : கொன்றைவேந்தன் (1-10)

அலகு – 3 : திருக்குறள் - கடவுள் வாழ்த்து – முதல் 5 குறள்கள்

அலகு – 4 : தமிழக மக்களின் உணவு முறை, விழாக்கள்.

விளையாட்டுகள், கலைகள்

அலகு – 5 : எளிய நீதிக்கதைகள் - 5 (வாய்மொழி)

வினாத்தாள் அமைப்பு

பகுதி IV: அ

முதற்பருவம்

நேரம்: 3 மணி

மதிப்பெண்: 80

பகுதி - அ

சரியானவற்றைத் தெரிவு செய்க

(15x2 = 30)

15 வினாக்கள் (1-15) இடம்பெற வேண்டும்

ஒவ்வொரு வினாவிற்கும் கீழ் மூன்று விடைகள் அமைய வேண்டும்.

பகுதி - ஆ

அ. கோடிட்ட இடத்தை நிரப்புக.

(15x2 = 30)

15 வினாக்கள் (16-30) இடம் பெறவேண்டும்

ஆ. சரியா? தவறா?

(10x2 = 20)

10 வினாக்கள் (31-40) இடம் பெறவேண்டும்

வினாத்தாள் அமைப்பு

பகுதி IV: அ

இரண்டாம் பருவம்

நேரம்: 3 மணி

மதிப்பெண்: 80

பகுதி - அ

சரியானவற்றைத் தெரிவு செய்க

(15x2 = 30)

15 வினாக்கள் (1-15) இடம்பெற வேண்டும்

ஒவ்வொரு வினாவிற்கும் கீழ் மூன்று விடைகள் அமைய வேண்டும்.

பகுதி - ஆ

அ. கோடிட்ட இடத்தை நிரப்புக.

(15x2 = 30)

15 வினாக்கள் (16-30) இடம் பெறவேண்டும்

ஆ. சரியா? தவறா?

10 வினாக்கள் (31-40) இடம் பெறவேண்டும்

தன்ராஜ் பெய்த் ஜெயின் கல்லூரி

(தன்னாட்சி)

சென்னை – 600 097.



தெரிவுமுறை மதிப்பீடு – பாடத்திட்டம்

(CBCS – Syllabus)

பருவமுறைப் படிப்பு (தகுதிப் புள்ளிகளுடன்)

பகுதி IV:ஆ

பன்னிரெண்டாம் வகுப்புவரை
தமிழ் பயின்ற மாணவர்களுக்கான
சிறப்புத் தமிழ்ப் பாடம்

(2017-2018 கல்வி ஆண்டிலிருந்து
செயல்படுத்தப்படுவது)

தமிழ்த்துறை

தெரிவுமுறை மதிப்பீடு – பாடத்திட்டம்

பகுதி IV: ஆ

பன்னிரெண்டாம் வகுப்புவரை தமிழ் பயின்ற
மாணவர்களுக்கான சிறப்புத் தமிழ்ப்பாடம்

முதற் பருவம்

வ.எண்	பாடத்தலைப்பு	மணி	தகுதிப் புள்ளி	தேர்வு நேரம்	மதிப்பெண்		மொத்தம்
					அக மதிப்பீடு	புற மதிப்பீடு	
1	செய்யுள், மொழித்திறன், இலக்கிய வரலாறு, பொதுக்கட்டுரை	2	2	3	20	80	100

இரண்டாம் பருவம்

வ.எண்	பாடத்தலைப்பு	மணி	தகுதிப் புள்ளி	தேர்வு நேரம்	மதிப்பெண்		மொத்தம்
					அக மதிப்பீடு	புற மதிப்பீடு	
1	செய்யுள், பயன்பாட்டுத் தமிழ், இலக்கிய வரலாறு, மொழிபெயர்ப்பு	2	2	3	20	80	100

பகுதி IV: ஆ

முதற் பருவம்

பன்னிரெண்டாம் வகுப்பு வரை தமிழ் பயின்ற மாணவர்களுக்கான

சிறப்புத் தமிழ்ப் பாடம்

துறைசாரா விருப்பப் பாடம் : தாள் - 1

(செய்யுள், மொழித்திறன், இலக்கிய வரலாறு, பொதுக் கட்டுரை)

தகுதிப் புள்ளி: 2

குறியீட்டு எண் : 17AL1AA

காலம்: கல்வி வாரத்திற்கு 2 மணிகள்

மொத்த மணிகள்: 30

அலகு : 1 பாரதியார் - பகைவனுக்கு அருள்வாய் - 1 முதல் 6

பாடல்கள் வரை

பாரதிதாசன் - தமிழின் இனிமை

அலகு : 2 கண்ணதாசன் - அவன் தான் இறைவன்

வைரமுத்து - மரங்களைப் பாடுவேன்

அலகு : 3 மொழித்திறன் -

1. எழுத்துப் பிழை நீக்கம்

2. ஒற்றுப் பிழை நீக்கம்

3. தொடர்ப்பிழை நீக்கம்

4. கலைச் சொற்கள்

5. பொருந்திய சொல் தருதல்

அலகு : 4 பாடந் தழுவிய இலக்கிய வரலாறு

அலகு : 5 பொதுக் கட்டுரை

பகுதி IV: ஆ இரண்டாம் பருவம்

பன்னிரெண்டாம் வகுப்பு வரை தமிழ் பயின்ற மாணவர்களுக்கான

சிறப்புத் தமிழ்ப் பாடம்

துறைசாரா விருப்பப் பாடம் : தாள் - 2

(செய்யுள், பயன்பாட்டுத் தமிழ், இலக்கிய வரலாறு, மொழிபெயர்ப்பு)

தகுதிப் புள்ளி: 2

குறியீட்டு எண் : 17AL1AB

காலம்: கல்வி வாரத்திற்கு 2 மணிகள்

மொத்த மணிகள்: 30

அலகு – 1 செய்யுள்

கலிங்கத்துப் பரணி – களம் பாடியது –

481 முதல் 490 பாடல்கள் வரை

அலகு – 2 திருக்குறள் - வாய்மை, அறிவுடைமை

முதுமொழிக்காஞ்சி - சிறந்த பத்து

அலகு – 3 பயன்பாட்டுத் தமிழ் - 1. நேர்காணல்

2. நூல் மதிப்புரை

3. விளம்பரம் தயாரித்தல்

அலகு – 4 பாடந்தழுவிய இலக்கிய வரலாறு

அலகு – 5 அலுவலக மொழிபெயர்ப்பு (ஆங்கிலத்திலிருந்து தமிழ்)

வினாத்தாள் அமைப்பு முறை

பகுதி IV: ஆ

முதற் பருவம்

பகுதி – அ

ஓரிரு சொற்களில் விடை தருக.

(20 x 2 = 40)

25 வினாக்கள் (1-25) இடம்பெற வேண்டும்

பகுதி – ஆ

500 சொற்களில் விடை தருக.

(4 x10 = 40)

5 வினாக்கள் (26-31) இடம் பெறவேண்டும்

வினாத்தாள் அமைப்பு முறை

பகுதி IV: ஆ

இரண்டாம் பருவம்

பகுதி - அ

ஓரிரு சொற்களில் விடை தருக.

(20 x 2 = 40)

25 வினாக்கள் (1-25) இடம்பெற வேண்டும்

பகுதி - ஆ

500 சொற்களில் விடை தருக.

(4 x10 = 40)

5 வினாக்கள் (26-31) இடம் பெறவேண்டும்

தன்ராஜ் பெய்த் ஜெயின் கல்லூரி

(தன்னாட்சி)

சென்னை – 600 097.



தெரிவுமுறை மதிப்பீடு – பாடத்திட்டம்

(CBCS – Syllabus)

பருவமுறைப் படிப்பு (தகுதிப் புள்ளிகளுடன்)

அடித்தளப் படிப்பு

பகுதி – 1 தமிழ்

(அனைத்துப் பட்டப்படிப்புப் பிரிவுகளுக்கும் பொதுவானது)

(2017-2018 கல்வி ஆண்டிலிருந்து
செயல்படுத்தப்படுவது)

தமிழ்த்துறை

தெரிவுமுறை மதிப்பீடு – பாடத்திட்டம்

அனைத்துப் பட்டப்படிப்புப் பிரிவுகளுக்கும்
பொதுவானது

பகுதி I: தமிழ்

வ.எண்	பருவம்	பாடத்தலைப்பு	மணி	தகுதிப் புள்ளி	தேர்வு நேரம்	மதிப்பெண்		மொத்தம்
						அக மதிப்பீடு	புற மதிப்பீடு	
1	I	தாள் - 1 இலக்கியமும் மொழித்திறனும்	6	3	3	20	80	100
2	II	தாள் - 2 இலக்கியமும் இதழியலும்	6	3	3	20	80	100
3	III	தாள் - 3 இலக்கியமும் மொழிபெயர்ப்பும்	6	3	3	20	80	100
4	IV	தாள் - 4 இலக்கியமும் தகவல் தொடர்பியலும்	6	3	3	20	80	100

அடித்தளப்படிப்பு

பகுதி – 1 தமிழ்

Foundation Course

Part – I TAMIL

அனைத்துப் பட்டப்படிப்புப் பிரிவுகளுக்கும் பொதுவானது

Common to All Under Graduate Courses

(2017-2018 கல்வி ஆண்டிலிருந்து செயல்படுத்தப்படுவது)

முதற் பருவம்

தாள் - 1 இலக்கியமும் மொழித்திறனும்

பாடக்குறியீடு: 17L11AA

தகுதிப்புள்ளி : 3

தகுதிப்புள்ளி (Credits) : 3

நோக்கம் : தற்கால இலக்கிய அறிமுகம் - தமிழ்மொழியின் சமகால மறுமலர்ச்சியை அறிதல் - தற்கால இலக்கிய வடிவங்களான மரபுக்கவிதை, புதுக்கவிதை, சிறுகதை முதலியவற்றின் இலக்கிய நயமும் பயனும் அறிதல் - எழுத்துப்பிழை, ஒற்றுப்பிழை, தொடர்ப்பிழை இன்றி எழுத மொழித்திறன் வளர்க்கும் பகுதிகளை அறிதல்.

கற்பித்தல் முறைகள்: கற்றலின் நோக்கம் மற்றும் பயனை உணரவைத்தல் - கற்றலுக்கு உகந்த சூழலை வழங்குதல் - அறிவுசார் மற்றும் உணர்வுசார் கல்விக்கூறுகளைச் சமமாக வழங்குதல்.

விரிவுரை முறை – வினாவுதல் முறை – கலந்துரையாடல் முறை – மாணவர் வினா தொடுக்க ஊக்கமளித்தல் - மாணவர் பங்கேற்கும் கருத்தரங்க முறை – குழுவாக கற்பிக்கும் முறை.

மரபு வழிப்பட்ட விரிவுரை – கரும்பலகை.

முறையோடு நவீன கற்றல் உபகரணங்களைப் பயன்படுத்துதல் - இணையப்பயன்பாடு – காணொலி காட்சிகளைப் பயன்படுத்துதல்.

முதற் பருவம்

தாள் - 1 இலக்கியமும் மொழித்திறனும்

பாடக்குறியீடு: 17L11AA

தகுதிப்புள்ளி : 3

தகுதிப்புள்ளி (Credits) : 3

அலகு - 1

1. மனோன்மனியம் பெ.சுந்தரம்பிள்ளை - மனோன்மனியம் - தமிழ்த்தெய்வ வணக்கம்-
'நீராரும் கடலுடுத்த' எனத் தொடங்கும் ப.:நாழிசைக் கொச்சகக் கலிப்பா - 1 முதல் 6 தாழிசைகள் வரை.
2. நாமக்கல் கவிஞர் வெ.இராமலிங்கம்பிள்ளை - வாழ்க நம் நாடு
3. பாரதியார் - ஞானப்பாடல்கள் - பகைவனுக்கு அருள்வாய் - 1 முதல் 6 பாடல்கள் வரை
4. பாரதிதாசன் - உலக ஒற்றுமை
5. கவிமணி தேசிகவிநாயகம்பிள்ளை - வீரபாண்டிய கட்டபொம்மன் - 1 முதல் 5 பாடல்கள்

அலகு - 2

1. ந.பிச்சமூர்த்தி - கிளிக்கூண்டு
2. கண்ணதாசன் - தேசம் ஒன்று தேசியம் ஒன்று
3. கவிஞர் சுரதா - i) வெற்றிக்கு வழி
ii) பொங்கல்
4. மு. மேத்தா - வெளிச்சம் வெளியே இல்லை
5. வைரமுத்து - மரங்களைப் பாடுவேன்

அலகு - 3 சிறுகதை மற்றும் படைப்பிலக்கியம் படைத்தல்

- i) சிறுகதை
 1. அன்பளிப்பு - கு.அழகிரிசாமி
 2. வேண்டாவரம் - ந. பிச்சமூர்த்தி
 3. உயிர்விடும் மூச்சு - அறிவுமதி
- ii) படைப்பிலக்கியம் படைத்தல்
 1. புதுக்கவிதை எழுதுதல் - தலைப்பு தொடர்பாகப் புதுக்கவிதை எழுதுதல்
 2. சிறுகதை எழுதுதல் - கருப்பொருள் கொடுத்து ஒரு பக்கக்கதை எழுதுதல்

அலகு – 4 இலக்கிய வரலாறு

1. இக்காலக் கவிஞர்கள்
2. புதுக்கவிதை தோற்றமும் வளர்ச்சியும்
3. சிறுகதை தோற்றமும் வளர்ச்சியும்

அலகு – 5 மொழித்திறன்

1. எழுத்துப் பிழை நீக்கம்
2. வல்லினம் மிகும் இடங்கள், வல்லினம் மிகா இடங்கள், ஒற்றுப்பிழை நீக்கம்
3. தொடர்ப்பிழை நீக்கம்
4. கலைச் சொற்கள்
5. பொருந்திய சொல் தருதல்.

குறிப்பு

இலக்கணக் குறிப்பு, இடஞ்சுட்டிப் பொருள் விளக்கம் ஆகியன செய்யுட் பகுதியில் இடம்பெற வேண்டும்.

பார்வை நூல்கள்

தமிழண்ணல், புதிய நோக்கில் தமிழ் இலக்கிய வரலாறு

வேங்கடராமன், கா.கோ., தமிழிலக்கிய வரலாறு, கலையக வெளியீடு, நாமக்கல், 2008.

ஜெயம், அ., சந்திரலேகா வைத்தியநாதன், தமிழிலக்கிய வரலாறு, ஜனகா பதிப்பகம், சென்னை, 2013.

பட்டாபிராமன், மொழித்திறன்

அடித்தளப்படிப்பு

பகுதி – 1 தமிழ்

Foundation Course

Part – I TAMIL

அனைத்துப் பட்டப்படிப்புப் பிரிவுகளுக்கும் பொதுவானது

Common to All Under Graduate Courses

(2017-2018 கல்வி ஆண்டிலிருந்து செயல்படுத்தப்படுவது)

இரண்டாம் பருவம்

தாள் - 2 இலக்கியமும் இதழியலும்

பாடக்குறியீடு: 17L12AB

தகுதிப்புள்ளி : 3

தகுதிப்புள்ளி (Credits) : 3

நோக்கம்: இடைக்காலத் தமிழ் - இலக்கிய வளர்ச்சியை அறிதல் - நாயன்மார், ஆழ்வார் பாடல்களின் இலக்கிய நயமும் மதிப்பீடுகளும் பற்றி அறிதல் - சிற்றிலக்கியங்களின் சிறப்புகள் அறிதல் - இதழியல் மற்றும் விளம்பரங்கள் குறித்து அறிதல்.

கற்பித்தல் முறைகள்: கற்றலின் நோக்கம் மற்றும் பயனை உணரவைத்தல் - கற்றலுக்கான உகந்த சூழலை வழங்குதல் - அறிவுசார் மற்றும் உணர்வுசார் கல்விக் கூறுகளை சமமாக வழங்குதல்.

விரிவுரை முறை – வினாவுதல் முறை – கலந்துரையாடல் முறை – மாணவர் வினா தொடுக்க ஊக்கமளித்தல் - மாணவர் பங்கேற்கும் கருத்தரங்க முறை – குழுவாக கற்பிக்கும் முறை.

மரபு வழிப்பட்ட விரிவுரை – கரும்பலகை.

முறையோடு நவீன கற்றல் உபகரணங்களைப் பயன்படுத்துதல் - இணையப்பயன்பாடு – காணொலி காட்சிகளைப் பயன்படுத்துதல்.

இரண்டாம் பருவம்

தாள் - 2 இலக்கியமும் இதழியலும்

பாடக்குறியீடு: 17L12AB

தகுதிப்புள்ளி : 3

தகுதிப்புள்ளி (Credits) : 3

அலகு - 1

1. திருநாவுக்கரசர் - நமச்சிவாயத் திருப்பதிகம்
2. மாணிக்கவாசகர் - திருவாசகம் - சிவபுராணம் - 1 முதல் 32 அடிகள்
3. ஆண்டாள் - நாச்சியார் திருமொழி - ஆறாம் திருமொழி -
வாரணமாயிரம் - 11 பாடல்கள்
4. சித்தர் இலக்கியம் - சிவவாக்கியார் - 10 பாடல்கள்
5. குணங்குடி மஸ்தான் சாகிபு - பராபரக்கண்ணி - 20 கண்ணிகள்

அலகு - 2

1. முத்தொள்ளாயிரம் - சேரன் 3 பாடல்கள் - சோழன் - 3
பாடல்கள் - பாண்டியன் - 3 பாடல்கள்

1. சேரன்

- i) வானிற்கு வையகம் வென்றது
- ii) அள்ளல் பழனத்து அரக்கு ஆம்பல்
- iii) ஏற்று ஊர்தியானும்

2. சோழன்

- i) கொடிமதில் பாய்ந்து இற்ற கோடும்
- ii) முடித்தலை வெள்ளோட்டு
- iii) அந்தணர் ஆவொடு பொன்பெற்றார்

3. பாண்டியன்

- i) பார்படுப செம்பொன்
- ii) நேமிநிமிர்தோள்
- iii) கார்நறு நீலம்

2. தனிப்பாடல்கள் -

- i) ஓளவையார் - 33, 39, 58, 64, 70 - ஆம் பாடல்கள்
- ii) காளமேகப்புவர் - 1,3,4,14,16 - ஆம் பாடல்கள்

3. தமிழ்விடுதாது - 16 முதல் 35 வரை - 20 கண்ணிகள்

4. நந்திக்கலம்பகம் - 35,38,49,68,110 – ஆம் பாடல்கள்

5. திருக்குற்றாலக்குறவஞ்சி – திரிகூடராசப்பக்கவிராயர் - திருக்குற்றால நாதர் உலாவரல், உலாக்காணவரும் பெண்கள், வசந்தவல்லியின் அழகு, வசந்தவல்லி பந்தாடுதல் - வசந்தவல்லி காதல் கொள்ளுதல் - நிலவைப் பழித்துரைத்தல், வசந்தவல்லியின் ஏக்கம்

அலகு – 3 இலக்கிய வரலாறு

1. சிற்றிலக்கியம்
2. பக்தி இலக்கியம்

அலகு – 4 சுற்றுலாவியல்

1. சுற்றுலா – விளக்கம் - வகைகள் - நோக்கங்கள்
2. இந்தியச் சுற்றுலாத் தலங்கள் - தமிழகச் சுற்றுலாத்தலங்கள்
3. சுற்றுலா வளர்ச்சி - சுற்றுலாவும் பண்பாட்டுத் தேசியப் பொருளாதார முக்கியத்துவமும்.

அலகு – 5 இதழியல்

1. இதழ்களின் வகைகள்
2. இதழாசிரியர் கடமைகள்
3. விளம்பரங்கள்

குறிப்பு :

இலக்கணக்குறிப்பு, இடஞ்சுட்டிப் பொருள் விளக்கம் ஆகியன செய்யுட் பகுதியில் இடம்பெற வேண்டும்.

பார்வை நூல்கள்

செயராமன், ந.வீ., சிற்றிலக்கியத் திறனாய்வு, மணிவாசகர் பதிப்பகம், சென்னை, முதல் பதிப்பு, 1977.

கண்ணன், சிற்றிலக்கிய வரலாறு

பிரபாகர், சிற்றிலக்கியங்கள்

வேங்கடராமன், கா.கோ., தமிழிலக்கிய வரலாறு, கலையக வெளியீடு, நாமக்கல், 2008.

ஜெயம், அ., சந்திரலேகா வைத்தியநாதன், தமிழிலக்கிய வரலாறு, ஜனகா பதிப்பகம், சென்னை, 2013.

ஈஸ்வரன், ச., சுற்றுலாவியல் ஓர் அறிமுகம், சாரதா பதிப்பகம்.

முகிலை இராசபாண்டியன், இதழியல் உலகம், உலகத் தமிழாராய்ச்சி நிறுவனம்.

மா.பா.குருசாமி, இதழியல் கலை, குரு-தேமொழி, திருச்செந்தூர்.

அடித்தளப்படிப்பு

பகுதி – 1 தமிழ்

Foundation Course

Part – I TAMIL

இளங்கலை, இளம் அறிவியல் பட்டப்படிப்புகளுக்குரியது

B.A., B.Sc., Degree Courses

(2017-2018 கல்வி ஆண்டிலிருந்து செயல்படுத்தப்படுவது)

மூன்றாம் பருவம்

தாள் - 3 இலக்கியமும் மொழிபெயர்ப்பும்

பாடக்குறியீடு : 17L13AC

மதிப்பெண் : 80

தகுதிப்புள்ளி (Credits) : 3

நோக்கம்: சங்கம் மருவியகால தமிழிலக்கிய வளர்ச்சி மற்றும் போக்குகளை அறிதல், அறஇலக்கியங்கள் முன்வைக்கும் மதிப்பீடுகளைக் கற்றல், காப்பியங்களின் இலக்கியநயம் மற்றும் அவை முன்வைக்கும் மானுடவிழுமியங்களைக் கற்றல் - பயன்பாட்டுத்தமிழ் பயிற்சி பெறுதல்.

கற்பித்தல் முறைகள்

கற்றலின் நோக்கம் மற்றும் பயனை உணர வைத்தல் - கற்றலுக்கு உகந்த சூழலை வழங்குதல் - அறிவுசார் மற்றும் உணர்வுசார் கல்விக்கூறுகளை சமமாக வழங்குதல்.

விரிவுரை முறை – வினாவுதல் முறை – கலந்துரையாடல் முறை – மாணவர் வினா தொடுக்க ஊக்கமளித்தல் - மாணவர் பங்கேற்கும் கருத்தரங்கமுறை – குழுவாக கற்பிக்கும் முறை – விளையாட்டு முறை – மரபுவழிப்பட்ட விரிவுரை கரும்பலகை முறையோடு நவீன கற்றல் உபகரணங்களை பயன்படுத்துதல் - கணினிவழி கற்பித்தல், இணையப் பயன்பாடு – காணொலி காட்சிகளை பயன்படுத்துதல்.

மூன்றாம் பருவம்

தாள் - 3 இலக்கியமும் மொழிபெயர்ப்பும்

பாடக்குறியீடு : 17L13AC

மதிப்பெண் : 80

தகுதிப்புள்ளி (Credits) : 3

அலகு – 1

1. திருக்குறள் - செய்ந்நன்றி அறிதல், கேள்வி
2. நாலடியார் - நல்லினம் சேர்தல் - 171,172,173,174,175 பாடல்கள்)
கல்வி – 131,132,135,138,139- ஆம் பாடல்கள்
3. சிறுபஞ்சமூலம் - 16,22,26,32,34-ஆம் பாடல்கள்)
4. இனியவை நாற்பது – 12,16,27,31,37-ஆம் பாடல்கள்
5. திரிகடுகம் - 30,31,59,65,68-ஆம் பாடல்கள்

அலகு – 2

1. சிலப்பதிகாரம் - மங்கல வாழ்த்துப்பாடல்
2. மணிமேகலை – உலக அறவி புக்க காதை
3. கம்பராமாயணம் - ஆற்றுப்படலம்
4. பெரியபுராணம் - பூசலார் நாயனார் புராணம்
5. இரட்சணிய மனோகரம் - இறையருளைச் சான்றோர் புகழ்வர் - 10
பாடல்கள்

(அலகு 1, அலகு 2 ஆகிய பகுதிகளில் பாடந்தழுவிய அணி இலக்கணம் அமைதல் வேண்டும்)

அலகு – 3

1. நேர்காணல்
2. நூல் மதிப்புரை
3. விளம்பரம் தயாரித்தல்
4. தலையங்கம் எழுதுதல்
5. கடிதங்கள் (அலுவலகம்)

அலகு – 4 இலக்கிய வரலாறு

1. பதினெண்கீழ்க்கணக்கு நூல்கள்
2. காப்பியங்கள்

அலகு – 5 மொழிபெயர்ப்பு

அலுவலக மொழிபெயர்ப்பு

(ஆங்கிலத்திலிருந்து தமிழ்)

குறிப்பு :

இடஞ்சுட்டிப் பொருள் விளக்கம், அணியிலக்கணம் செய்யுட்பகுதியில் இடம் பெற வேண்டும்.

பார்வை நூல்கள்:

கோபாலகிருஷ்ணமாச்சாரியார், வை.மு.கம்பராமாயணம்

தமிழண்ணல், புதிய நோக்கில் தமிழிலக்கிய வரலாறு

வேலுப்பிள்ளை, (1985), தமிழர் சமய வரலாறு

வையாபுரிப்பிள்ளை, எஸ்.தமிழிலக்கிய சரிதத்தில் காவிய காலம், வையாபுரிப்பிள்ளை, நினைவு மன்றம், சென்னை.

ஜெயம், அ., சந்திரலேகா வைத்தியநாதன், தமிழிலக்கிய வரலாறு, ஜனகா பதிப்பகம், சென்னை, 2013.

பட்டாபிராமன், மொழிபெயர்ப்பியல் அடிப்படைகள்

சிவசண்முகம், சீ.தயாளன், மொழிபெயர்ப்பியல், அன்னம் வெளியீடு, சிவகங்கை.

அடித்தளப்படிப்பு

பகுதி – 1 தமிழ்

Foundation Course

Part – I TAMIL

இளங்கலை, இளம் அறிவியல் பட்டப்படிப்புகளுக்குரியது.

B.A., B.Sc., Degree Courses

(2017-2018 கல்வி ஆண்டிலிருந்து செயல்படுத்தப்படுவது)

நான்காம் பருவம்

தாள் - 4 இலக்கியமும் தகவல் தொடர்பியலும்

பாடக்குறியீடு : 17L14AD

மதிப்பெண்: 80

தகுதிப்புள்ளி (Credits) : 3

நோக்கம்: தமிழ் செவ்விலக்கியச் சிறப்புகளை அறிதல், தமிழரின் பண்பாடு மற்றும் வரலாற்றுச் சிறப்பை அறிதல் - மக்கள் தகவல் தொடர்பு ஊடகங்களின் முக்கியத்துவம் - பயன்பாடு பற்றி அறிதல்.

கற்பித்தல் முறைகள்

கற்றலின் நோக்கம் மற்றும் பயனை உணரவைத்தல் - கற்றலுக்கு உகந்த குழுவை வழங்குதல் - அறிவுசார் மற்றும் உணர்வுசார் கல்விக் கூறுகளை சமமாக வழங்குதல்.

விரிவுரை முறை – வினாவுதல் முறை – கலந்துரையாடல் முறை – மாணவர் வினா தொடுக்க ஊக்கமளித்தல் - மாணவர் பங்கேற்கும் கருத்தரங்கமுறை – குழுவாக கற்பிக்கும் முறை- விளையாட்டு முறை.

மரபுவழிப்பட்ட விரிவுரை கரும் பலகை முறையோடு நவீன கற்றல் உபகரணங்களைப் பயன்படுத்துதல்.

நான்காம் பருவம்

தாள் - 4 இலக்கியமும் தகவல் தொடர்பியலும்

பாடக்குறியீடு : 17L14AD

மதிப்பெண்: 80

தகுதிப்புள்ளி (Credits) : 3

அலகு – 1

1. நற்றிணை - 1, 80, 211, 248, 397 – ஆம் பாடல்கள்
2. குறுந்தொகை - 4, 7, 33, 40, 167- ஆம் பாடல்கள்
3. ஐங்குறுநூறு - இளவேனிற்பத்து - ஓதலாந்தையார்
4. புறநானூறு - 87, 107, 188, 195, 315 – ஆம் பாடல்கள்
5. பரிபாடல் - திருமால் வாழ்த்து - மூன்றாம் பாடல் - கடுவன் இளவெயினனார்

அலகு – 2

1. திருமுருகாற்றுப்படை - நக்கீரர் - திருச்சீரலைவாய் என்னும் திருச்செந்தூர்
2. சிறுபாணாற்றுப்படை -

அலகு – 3 இலக்கணம்

பொருள் இலக்கணம்

1. திணை, துறை விளக்கம்
2. முதல், கரு, உரிப் பொருள்

அலகு – 4 இலக்கிய வரலாறு

1. எட்டுத் தொகை நூல்கள்
2. பத்துப்பாட்டு நூல்கள்

அலகு – 5

1. மக்கள் தகவல் தொடர்பு ஊடகங்கள் - அச்சு ஊடகம், தொலைக்காட்சி, வானொலி
2. தமிழ் இதழியல், வானொலி, தொலைக்காட்சி வரலாறுகள்

குறிப்பு:

இடஞ்சுட்டி பொருள் விளக்கம் செய்யுட் பகுதியில் இடம்பெற வேண்டும்.

பார்வை நூல்கள்:

தமிழண்ணல், புதியநோக்கில் தமிழிலக்கிய வரலாறு

ஜெயம், அ., சந்திரலேகா வைத்தியநாதன், தமிழிலக்கிய வரலாறு, ஜனகா பதிப்பகம், சென்னை, 2013.

ராசா, கி., மக்கள் தகவல் தொடர்பியல், பாவை பப்ளிகேஷன்ஸ், சென்னை.

**வினாத்தாள் அமைப்பு முறை: வினாக்கள் பகிர்வு
முதல் பருவம்**

தாள் - 1 இலக்கியமும் மொழித்திறனும்

வ.எண்	பாடம்	பகுதி - அ 2 மதிப்பெண் வினாக்கள்	பகுதி - ஆ 6 மதிப்பெண் வினாக்கள்	பகுதி - இ 10 மதிப்பெண் வினாக்கள்
1	செய்யுள் (அலகு - 1)	3	2	2
2	செய்யுள் (அலகு - 2)	3	2	1
3	சிறுகதை மற்றும் படைப்பிலக்கியம் (அலகு - 3)	1	1	1
4	இலக்கிய வரலாறு (அலகு - 4)	2	2	1
5	மொழித்திறன் (அலகு-5)	3	1	-

இரண்டாம் பருவம்

தாள் - 2 இலக்கியமும் இதழியலும்

வ.எண்	பாடம்	பகுதி - அ 2 மதிப்பெண் வினாக்கள்	பகுதி - ஆ 6 மதிப்பெண் வினாக்கள்	பகுதி - இ 10 மதிப்பெண் வினாக்கள்
1	செய்யுள் (அலகு - 1)	3	2	1
2	செய்யுள் (அலகு - 2)	3	2	1
3	இலக்கிய வரலாறு (அலகு - 3)	2	1	1
4	சுற்றுலாவியல் (அலகு - 4)	2	2	1
5	இதழியல் (அலகு - 5)	2	1	1

மூன்றாம் பருவம்

தாள் - 3 இலக்கியமும் மொழிபெயர்ப்பும்

வ.எண்	பாடம்	பகுதி - அ 2 மதிப்பெண் வினாக்கள்	பகுதி - ஆ 6 மதிப்பெண் வினாக்கள்	பகுதி - இ 10 மதிப்பெண் வினாக்கள்
1	செய்யுள் (அலகு - 1)	4	2	1
2	செய்யுள் (அலகு - 2)	4	2	1
3	பயன்பாட்டுத் தமிழ் (அலகு - 3)	2	2	1
4	இலக்கிய வரலாறு (அலகு - 4)	2	2	1
5	மொழிபெயர்ப்பு(அலகு-5)	-	-	1

நான்காம் பருவம்

தாள் - 4 இலக்கியமும் தகவல் தொடர்பியலும்

வ.எண்	பாடம்	பகுதி - அ 2 மதிப்பெண் வினாக்கள்	பகுதி - ஆ 6 மதிப்பெண் வினாக்கள்	பகுதி - இ 10 மதிப்பெண் வினாக்கள்
1	செய்யுள் (அலகு - 1)	3	2	2
2	செய்யுள் (அலகு - 2)	3	2	1
3	இலக்கணம் (அலகு-3)	2	1	-
4	இலக்கிய வரலாறு (அலகு - 4)	2	2	1
5	மக்கள் தகவல் தொடர்பியல் (அலகு-5)	2	1	1

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2017 – 2018

DEPARTMENT OF ENGLISH

U.G SOFT SKILLS FOR ODD SEMESTER

ESSENTIALS OF LANGUAGE AND COMMUNICATION SKILLS

SYLLABUS

UNIT-I

Punctuation

UNIT-II

Phrasal verbs and vocabulary

UNIT-III

One word substitution

UNIT-IV

Dialogue writing

UNIT-V

Sentence pattern

U.G SOFT SKILLS FOR EVEN SEMESTER
ESSENTIALS OF SPOKEN AND PRESENTATION SKILLS
SYLLABUS

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Body language

UNIT-II

Presentation etiquette

UNIT-III

Extempore

UNIT-IV

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UNIT-V

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