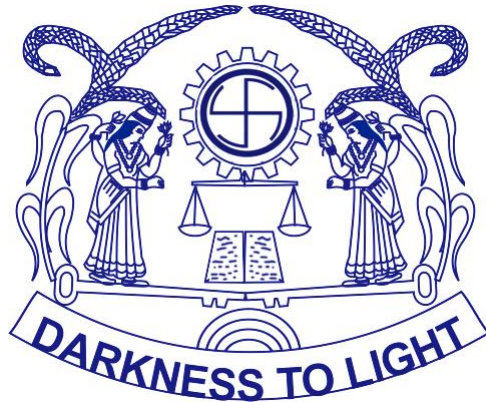


DHANRAJ BAID JAIN COLLEGE
(Autonomous)

Thoraipakkam, Chennai – 600097

Affiliated to the University of Madras

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		Hours per week
					IA	EA	
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		Hours per week
					IA	EA	
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 Kerninghan & 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 or 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 Servlets APT – servlet life cycle – HTML to servlet communication

BOOKS FOR STUDY AND REFERENCE:

1. Cay S. Horstmann, Gary Cornell – Core Java 2 Volume I – Fundamentals – 9th Edition – Perason – 2012.
2. P. Houghton 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 Servlets, TMH edition.
5. D.R. Callaway, Inside Servlets, 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	Administrating 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 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
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.