

The Bhopal School of Social Sciences, Bhopal

PGDCA-II

Semester I		Marks		
Paper	Title of the paper	Theory		Total Marks
		Max	Min	
I	Internet and Web Design	50	17	50
II	Visual Basic & Oracle	50	17	50
III	Software Engineering	50	17	50
Total Marks : 150				
	Practical	Max	Min	Total
I	Practical & Viva Voce	70	24	70
Sessional		30	10	30
Project		100	33	100
		Grand Total :		350

P.G.D.C.A. II Semester
INTERNET AND WEB DESIGN
Session : 2016-17

Max Marks: 50
Min Marks : 17

UNIT I

Introduction to Internet & World Wide Web , Introduction Internet Addressing , Browsers, URL, Web Server, Web Site, Homepage, Domain Names – Basic concepts. Facilities available over the Internet - email, www, ftp, telnet, usenet, blog, faq, chat. Components of Internet - client/server, modem, cable, modem, backbone, router, IP addresses, address classes, DNS names, subnet, UDP & TCP, Uses of Internet.

UNIT II

Internet : Evolution, Concepts, Internet Vs. Intranet, Growth of Internet, ISP, ISP in India, Types of connectivity – Dial-up, Leased line, DSL, Broadband, RF, VSAT etc. Methods of sharing of Internet connection, Use of Proxy Server.

Concept of Search Engines, Search engines types, searching the Web, Web Servers

E-mail : Concepts, POP and WEB based E-mail, merits, address, Basics of Sending & Receiving, E-mail Protocols, Mailing List, Free E-mail services, e-mail servers and e-mail clients programs

UNIT III

Introduction to HTML – HTML Overview, Structure of HTML documents, Types of Documents, HTML Elements and Attributes

Basic Formatting of HTML documents layout – Font, Lists, Paragraph, Break Rule, Horizontal Rule, Colors, Backgrounds, text elements, <PRE>, etc., Links in html – anchor element and its attributes, images and anchors, using META information. HTML Media Types – media like element <MARQUEE>, Audio & Video support in Web browsers.

UNIT IV

Advanced Layout: Tables, Frames, Layers.

Tables – layout, elements and attributes, ROWSPAN, COLSPAN.

Frames – using frames, layout of frames, problems using frames.

Layers – Concept of layers, Positioned and Inflow Layers.

UNIT V

Style Sheets – Basic Concept of Style sheet, using style sheet, Cascading Style sheets(css), using style sheets - basics and properties , positioning with style sheets.

Basic Interactivity in html: Forms – Concept of Forms, <FORM> element, attributes, Controls used for forms, examples of form ,examples of form design.

TEXT BOOKS:

1. Internet For Everyone By Leon Alexin, Mathews Leon-Techworld
2. Web Design –The Complete Reference BY Powell-TMH

PGDCA Semester II
VISUAL BASIC & ORACLE
Session : 2016-17

Max Marks: 50
Min Marks : 17

UNIT I

RDBMS Concepts: Introduction To Network: Hierarchical Relational Models DBMS Terminology's DBMS Components (Overview) Normalization (1, 2,3rd) ER Diagrams.

INTERACTIVE SQL: Invoking SQL Plus, The Oracle Data Type, Two Dimension Matrix Creation,

Insertion Of Data Into Tables, Updating The Contents of Table Deletion Operations The Many Faces of The Select Command, Modifying The Structure of Tables, Removing Deleting Dropping Table's Data Constraints Computation Expression.

UNIT II

Lists Used to Select Data, Logical Operators, Range Searching, Pattern Match Oracle Function, Grouping Data From Tables In SQL, Manipulating Dates In Constructing English Sentence With Data From Table Columns, Subque Using The Union , Intersect and Minus Clause Indexes, Views, Sequences, Grant Permission Revoking The Permission Given, Creation of Reports In SQL Plus.PL/SQL: Introduction, The PL/SQL Execution Environment, The PL/SQL Syntax, Understanding The PL/SQL Block Structure, Oracle Transaction, Concurrent Control In Oracle, Looks, Cursors, Error Handling In PL/SQL.

UNIT III

Visual Basic: Visual Basic Programming Environment: Menu Bar, Toolbars, Project Explorer, Toolbox, Properties Window, Form Layout Window, Object Browser, Control of VB Project, Visual Development and Event-Driven Programming.

UNIT IV

Programming Fundamentals: Modules, Data Types, Variables, Constants, Array Procedures, Control Structure, Built-In Functions.

UNIT V

Working With Form And Controls: Using Form Template: Creating and Using Controls, Classification of Controls, Properties of Control, Method, Control Array, Menu Interface, Menu Editor, Pop-Up Menu, Mouse Events, Dialog Boxes, Model And Modeless, Debugging Tolls, Handling Runtime Errors, Graphical Control, Multiple Document Interface (MDI), Creating a Toolbar, Creating Status bar, Active-X Controls In VB, Calling API Functions Form VB.

Reference:

1. Oracle – The Complete Reference (TMH).
2. Oracle & D2k By *Ivan Byross* (BPB).
3. Oracle: Performance Tuning & Optimization By *Edward Whalen* (SAMS).
4. Visual Basic From The Ground Up, By *Gray Cornell* (THM).
5. Programming With VB 6.0 *Mohammed Azam*

PGDCA Semester II
SOFTWARE ENGINEERING
Session : 2016-17

Max Marks: 50
Min Marks : 17

UNIT I

Introduction To Software Engineering: Software Characteristics & Components, Software Paradigms, Software Consideration, Software Project Planning, Matrices For Software Productivity & Equality, Various Project Estimation Techniques & Software Project Scheduling.

UNIT II

Requirement Analysis: Analysis Principles, Complexity Measures, Object Oriented Analysis Methods, Storage & Processing Time Analysis, Database Requirements.

UNIT III

Software Design Process: Design Fundamentals, Top Down Bottom Up Design, Design Representations, Modular Design, Architectural Design, Procedural Design, Data Directed Design, Data Structure Oriented Design, Object Oriented Design, Real-Time Design, Software Tools.

UNIT IV

Software Implementation Language & Coding, Language Classes, Coding Style, Coding Efficiency, Software Quality Assurance. Software Testing Techniques, Software Testing Strategies, Comparison of Test Methods, Choice of Test Data, Classification of Tests.

UNIT V

Software Maintenance & Management: Maintenance Characteristics, Software Maintain Ability, Maintenance & Task, Maintenance Organization, Maintenance Side-Effect & Issue, Software Configuration Management (SCM), SCM Process & Standards.

Reference:

1. Software Engineering- By *Roger S. Pressman* (TMH)
2. Software Engineering Fundamentals – By *Behforroz*.
3. Software Engineering – By *Ian Somerville* (AWL). Note: - Paper Setters Are Requested To Set Two Questions From Each Unit.

PAPER –IV: PROJECT REPORT & VIVA - VOCE M. M.:100

PRACTICAL VIVA VOCE –Practical based on theory papers.
M.M.: 100