OUTLINES OF TESTS,
SYLLABI AND COURSES OF READING

FOR

POST GRADUATE DIPLOMA IN ADVANCE WEB DESIGNING (PGDAWT)

(Semester I & II)

FOR

SESSION 2024-25

Programme Code; PGWDSSD

DEPARTMENT OF COMPUTER SCIENCE,

S.S.D GIRLS' COLLEGE, BATHINDA,

An Autonomous College

NAAC Accredited 'A' Grade

(Under aegis of SSD Sabha(regd.), Bathinda)

	POST GRADUATE DIPLOMA IN ADVANCE WEB DESIGNING Semester I Session 2024-2025 Program Code-PGWDSSD				
Code No.	**Title of Paper**	**Credits**	**Univ. Exam. Marks**	**Int. Ass. Marks**	**Maximum Marks**
PGWD111T	Fundamental of Information Technology and Operating System	4	70	30	100
PGWD112T	Internet and Web Technology	4	70	30	100
PGWD113T	ASP.Net	4	70	30	100
PGWD111P/112P	Software Lab — I (Based on PGWD111T and PGWD112T)	4	70	30	100
PGWD112P	Software Lab — II (Based on PGWD112T)	4	70	30	100
	Semester Il Session 2024-2025				
Code No.	**Title of Paper**	**Credits**	**Univ. Exam. Marks**	**Int. Ass. Marks**	**Maximum Marks**
PGWD121T	Office Automation	4	70	30	100
PGWD122T	Introduction to Java Script and Multimedia tools	4	70	30	100
PGWD123T	PHP and MySQL	4	70	30	100
PGWD121P/122P	Software Lab-Ill (Based on paper PGWDI21T and PGWD122T)	4	70	30	100
PGWD123P	Software Lab-IV (Based on paper PGWDI23T)	4	70	30	100

CONTINUOUS ASSESSMENT (THEORY/ PRACTICAL PAPERS)

1. **Two tests will be conducted during the Semester. Both the tests will be considered for assessment.** : **60% of the marks allotted for Continuous Assessment**
2. **Assignment** : **30% of the marks allotted for Continuous Assessment**
3. **Attendance** **10% of the marks allotted for Continuous Assessment.**

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PGWDl11T: FUNDAMENTALS OF INFORMATION TECHNOLOGY AND OPERATING SYSTEM

Maximum Marks : 70 **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

Course Objective: This course is meant to prepare students for work in industry in the information processing fields as well as prepare students for business and computer-related courses. On completion of this course, the students will be able to:

- Have basic knowledge of computer hardware and software;.
- Understand business areas to which computers may be applied;
- Provide an introduction to Software concepts and Operating systems
- Basic functionality and working with proprietary and open source operating systems

Course Content

SECTION A

Introduction to Information Technology, Applications of Information Technology. Computer Fundamentals: Block diagram of Computer, Classification and Generation of Computer, Terms: Hardware, Software, Types of Software, Concept of Bit and Byte. Input Devices: Keyboard, Mouse, Scanner, OMR, MICR, Video Cameras. Output Devices: Monitors, CRT, TFT, Plasma Panel Display

Printers: DOT Matrix, Inkjet, Laser, Plotter, Multimedia Projector, CPU Organization, Instruction Set, Processor Speed.

Memories: RAM, ROM, Cache, Storage Devices: Floppy Disk, Hard Disk, Compact Disk, Computer Languages: Machine Language, Assembly Language, High Level Language, 4GLs, Translators-Interpreters, Compilers, Assemblers.

Number System : non-positional and positional number system, base conversion, fractional numbers, various operations on numbers.

Computer Code : computer words, characters data, weighted and non weighted code, BCD, EBCDIC, ASCII, grey code.

SECTION B

Introduction to Computer Software, Operating System, its need and Operating System services, Definition, Early system, Introduction to various types of Operating Systems. Windows: Installing Windows with setup, starting and quitting Windows, basic elements, desktop, starts menu, my computer, Recycle Bin. Windows accessories, System Tools, Control Panel, Sharing information between programs, GUI Vs CUI.

Linux: Introduction to Linux,. Basics of files, directories and filenames, permissions, inodes, directory hierarchy. Common file and directory Commands Meta characters, pipes and filters : grep, sort and wc.

Pedagogy:

The Instructor is expected to use leading pedagogical approaches in the class room situation, research-based methodology. innovative instructional methods, extensive use of technology in the class room, online modules of MOOCS, and comprehensive assessment practices to strengthen teaching efforts and improve student learning outcomes.

The Instructor of class will engage in a combination of academic reading, analyzing case studies, preparing the weekly assigned readings and exercises, encouraging in class discussions, and live project based learn'

Case/Class Discussion Assignments:

Students will work in groups of up to four to prepare a brief write-up due before the start of each class covering the case study or class material to be discussed in the next session. Questions may include a quantitative analysis of the problem facing the decision-maker in the case.

Class Participation:
Attendance will be taken at each class. Class participation is scored for each student for each class

Text and Readings: Students should focus on material presented in lectures. The text should be used to provide further explanation and examples of concepts and techniques discussed in the course:

Text Books :

1. Computer Fundamentals-P.K.Sinha-BPB Publication

Suggested Reading:

1. Sukhmeen Kaur, Vikram Gupta, S. S. Bhatia and Navneet Kaur. "Fundamentals of Information Technology", Kalyani Publishers.
2. Fundamentals of Computers — V. Rajaraman - PHI
3. Windows for Dummies- Andy Rathbone-Pustak Mahe!
4. The Unix Programming Environment : B.W. Kernighamand Rob Pike - PHI
5. Understanding UNIX-Stan Kelly-Bootle-BPB Publications

Scheme of Examination

- English will be the medium of instruction and examination.
- Written Examinations will be conducted at the end of each Semester as per the Academic Calendar notified in advance
- Each course will carry 100 marks of which 30 marks shall be reserved for internal assessment and the remaining 70 marks for written examination to be held at the end of each semester.
- The duration of written examination for each paper shall be three hours.
- The minimum marks for passing the examination for each semester shall be 40% in aggregate as well as a minimum of 40% marks in the semester-end examination in each paper.
- A minimum of 75% of classroom attendance is required in each subject.

Instructions to the External Paper Setter
The question paper will consist of three Sections: A, B and C. Sections A and B will have four questions each from the respective section of the syllabus and will carry 12 marks for each question. Section C will consist of 11 short answer type questions covering the entire syllabus uniformly and will carry a total of 22 marks.

Instructions for candidates

- Candidates are required to attempt five questions in all, selecting two questions each from section A and B and compulsory question of section C.
- Use of non-programmable scientific calculator is allowed.

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PGWD112T: INTERNET & WEB TECHNOLOGY

Maximum Marks : 70 **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

Course Objective: This course is designed to explore the features of web technology and its significance in developing web-based applications. Students will be able to **learn and** Understand the concepts of web programming. On completion of this course, the students will be able to

- Understand the basics of computer networks, Internet and web technologies
- Using HTML for creation of web pages
- Create forms for interactive applications
- Integrate HTML
- Understand the design of applets.

Course Content

SECTION A

Definition of Internet, Internet organisation and committees, Growth of Internet, Internet Application, Portals, Introduction to WWW, Definition of DNS (Domain Name System).

Internet Protocols - Data Transmission Protocols, Client/Server Architecture & its Characteristics, FTP & its usage. Telnet Concepts, Remote Logging. Internet chatting - Voice chat, text chat.

Definition of Networks, Types of Networks (LAN,MAN,WAN),Network Topologies, Introduction to search engines (Mozila, Netscape, Opera) Email.OSI Reference model, TCP/IP Model Addressing in Internet Definition of Ethernet, Intranet, Telnet.

SECTION B

Introduction to HTML : Hyper Text Markup Language; HTML tags (The structure of an HTML program, Document Head, Document Body); Titles and Footers; Text Formatting (Paragraph Breaks, Line Breaks); Emphasizing Material in a Web Page (Heading Styles. Drawing Lines); Text Styles ; Text Effects; Lists :Types of Lists, Web Server; Web Client/Browser (Understanding how a Browser communicates with a Web Server)

Adding Graphics to HTML Documents: Using the Border attribute; Using the Width and Height Attribute; Using the Align Attribute; Using the ALT Attribute.

Tables : Introduction (Header, Data rows, The Caption Tag); Using the Width and Border Attribute; Using the Cellpadding Attribute; Using the Cell spacing Attribute; Using the BGCOLOR Attribute; Using the COLSPAN and ROWSPAN Attributes.

Linking Documents: Links, Images as Hyperlinks, Introduction to Frames.

Pedagogy:

The Instructor is expected to use leading pedagogical approaches in the class room situation, research-based methodology, innovative instructional methods, extensive use of technology in the class room, online modules of MOOCS, and comprehensive assessment practices to strengthen teaching efforts and improve student learning outcomes.

The Instructor of class will engage in a combination of academic reading, analyzing case studies, preparing the weekly assigned readings and exercises, encouraging in class discussions, and live project based learning.

Case/Class Discussion Assignments:

Students will work in groups of up to four **to** prepare a brief write-up due before the start of each **class covering** the case study or class material to be discussed in the next session. Questions may include a quantitative analysis of the problem facing the decision-maker in the case.

Class Participation:
Attendance will be taken at each class. Class participation is scored for each student for each class

Text and Readings: Students should focus on material presented in lectures. The text should be used to provide further explanation and examples of concepts and techniques discussed in the course:

Text Books :

1. HTML.DHTML, JAVA SCRIPT AND CGI- Evan Bayross-BPB Publications.

Suggested Readings:

1. Data and Computer Communication-William Stallings
2. Computer networks-Andrew S. Tanenbaum-PHI Publication
3. Computer network and internets-D.E. Corner- Pearson Education.
4. HTML-E.Stephen Mack and Janam Platt-BPB Publications
5. The Complete Reference-HTML-Powell Thomas-Tata Macgraw Hill

Scheme of Examination

- English will be the medium of instruction and examination.
- Written Examinations will be conducted at the end of each Semester as per the Academic Calendar notified in advance
- Each course will carry 100 marks of which 30 marks shall be reserved for internal assessment and the remaining 70 marks for written examination to be held at the end of each semester.
- The duration of written examination for each paper shall be three hours.
- The minimum marks for passing the examination for each semester shall be 40% in aggregate as well as a minimum of 40% marks in the semester-end examination in each paper.
- A minimum of 75% of classroom attendance is required in each subject.

Instructions to the External Paper Setter
The question paper will consist of three Sections: A, B and C. Sections A and B will have four questions each from the respective section of the syllabus and will carry 12 marks for each question. Section C will consist of 11 short answer type questions covering the entire syllabus uniformly and, will carry a total of 22 marks.

Instructions for candidates

- Candidates are required to attempt five questions in all, selecting two questions each from section A and B and compulsory question of section C.
- Use **of** non-programmable scientific calculator is allowed.

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PGWD113T: ASP.NET

Maximum Marks : 70 **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

Course Objective: This course is designed to enable the students to learn about basic features of ASP.NET and its controls, create an ASP.NET application using standard .NET Controls and learn about connecting data sources using ADO.NET and managing them.. On completion of this course students will be able to

- design web applications using ASP.NET
- use ASP.NET controls in web applications
- create database driven ASP.NET web applications and web services

Course Content

SECTION A

Web Form Basics : Introduction, Declaring an ASP.NET Page, Using a Codebehind File with an ASP.NET Page, Dynamically Adding Literal Text or HTML to a Web Form, Submitting Data to Another Page Using ASP.NET, Creating a Scrolling Table within a Web Form, Selectively Hiding or Revealing Portions of a Web Form Programmatically. Displaying a Calendar in a Web Form, Validating User Form Input, Working With DropDown Lists. Creating Dependent DropDownList Control, Working with ListBoxes, Persisting Data on a Web Form Between Postbacks, Adding Client-Side Script to a Web Form

User Controls : Introduction. Declaring a User Control, Adding a User Control to a Web Form, Getting and Setting User Control Properties, Partial Page Output Caching, Dynamically Adding User Controls to a Web Form, Raising Events from a User Control.

ASP.NET Application Configuration : Introduction, Storing and Reading Custom Settings from the web.config File, Creating Custom Application Settings in the web.config File, Configuring Application Tracing, Configuring Application Debuging, Configuring Application Error Handling, Configuring Application Security. Configuring Sessions in your ASP.NET Application.

State Management : Introduction, Reading and Writing Values to the Application Object, Reading and Writing Values to the Session Object, Reading and Storing Data in Cookies, Reading and Storing Data in ViewState

SECTION B

Basic Data Operations with ADO.NET : Introduction, Connecting to SQL Server, Connecting to Oracle, Connecting to a Microsoft Access Database. Connecting to ODBC Datasource.

Working with Datasets : Creating a Datasets Consisting of Several Data tables, Filtering .Contents of a Datasets, Sorting the Contents of a Datasets, Finding a Particular Row in a Datasets.

Renderring Data with ASP.NET Web Controls : Introduction, Renderring Data Directly on a Web Form, Data Binding to a Drop Downlists, Data Binding to a Repeater, Data Binding to a Data Lists, Data Binding to a Data Grid

Manipulating Strings : Introduction, Dissecting Strings, Various Operations on Strings. Working with a Numbers, Dates, and Times, Working with Files and Folders, Working with Collections

Pedagogy:

The Instructor is expected to use leading pedagogical approaches in the class room situation, research-based methodology, innovative instructional methods, extensive use of technology in the class room, online modules of MOOCS, and comprehensive assessment practices to strengthen teaching efforts and improve student learning outcomes.

The Instructor of class will engage in a combination of academic reading, analyzing case studies, preparing the weekly assigned readings and exercises, encouraging in class discussions, and live project based learning.

Case/Class Discussion Assignments:
Students will work in groups of up to four to prepare a brief write-up due before the start of each class covering the case study or class material to be discussed in the next session. Questions may include a quantitative analysis of the problem facing the decision-maker in the case.

Class Participation:
Attendance will be taken at each class. Class participation is scored for each student for each class

Text and Readings: Students should focus on material presented in lectures. The text should be used to provide further explanation and examples of concepts and techniques discussed in the course:

Text Books :

1. ASP.NET Developer's Cookbook- Steven A. Smith, Rob Howard, PEARSON Education, New Delhi

Suggested Reading:

1 Microsoft NET framework 2.0 Windows based client development (Mathew A. stocker and Steven J.Stein, with Tony Northup PHI)

2 Building Web Solutions with ASP.NET and ADO.NET (Dino Esposuto)

3 Developing More Secure Microsoft ASP.NET 2.0 Application Dominick Baier.

4 Complete Reference of ASP. Net-Black Book.

Scheme of Examination

- English will be the medium of instruction and examination.
- Written Examinations will be conducted at the end of each Semester as per the Academic Calendar notified in advance
- Each course will carry I00 marks of which 30 marks shall be reserved for internal assessment and the remaining 70 marks for written examination to be held at the end of each semester.
- The duration of written examination for each paper shall be three hours.
- The minimum marks for passing the examination for each semester shall be 40% in aggregate as well as a minimum of 40% marks **in** the semester-end examination in each paper.
- A minimum of 75% of classroom attendance is required in each subject.

Instructions to the External Paper Setter
The question paper will consist of three Sections: A, B and C. Sections A and B will have four questions each from the respective section of the syllabus and will carry 12 marks for each question. Section C will consist of 11 short answer type questions covering the entire syllabus uniformly and will carry a total of 22 marks.

Instructions for candidates

- Candidates are required to attempt five questions in all, selecting two questions each from section A and B and compulsory question of section C.
- Use of non-programmable scientific calculator is allowed.

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PGWD111P/112P : SOFTWARE LAB — I)

Maximum Marks : 100* **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

This lab will consist of exercises based on PGWD11IT and PGWDI12T.

The splitting of marks is as under

- Maximum Marks for Continuous Assessment : 30
- Maximum Marks for External Examination : 70

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PGWD113P: SOFTWARE LAB — II

Maximum Marks: 100* **Lectures to be Delivered: 40-50**

Minimum Pass Marks: 40% **Time Allowed: 3 Hrs.**

This lab will consist of exercises based on PGWD113T

*The splitting of marks is as under

- Maximum Marks for Continuous Assessment : 30
- Maximum Marks for External Examination: 70

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PGWD121T: Office Automation

Maximum Marks : 70 **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

Course Objectives: This course would familiarize the students in preparation of documents and presentations with office automation tools and will enable them in crafting professional word documents, excel spreadsheets, PowerPoint presentations. By learning the course the students will be able to

- perform documentation
- perform accounting operations
- perform presentation skills

Course Content

SECTION A

Introduction to Word and Documents: Creating a File, Saving and File Formats, File views,
Font/Character Formatting: Styles and Character/Font Formatting, Character Formatting.
Paragraph Formatting: Styles and Paragraph Formatting, Structural Formatting, Paragraph Decoration
Styles: Styles Group, Styles Task Pane.
Page Setup and Sections: Page Borders, Header and Footer Layer, Header and Footer Navigation and Design, Adding Header and Footer Material
Tables and Graphics: Basics, Table, Table Layout and Design, Inserting Pictures from Files. Mail
Merge, Document Security.
Introduction to Excel, Creating and Using Worksheets and Workbooks: Understanding workbooks and worksheets, Moving Around a Worksheet
Entering and Editing Worksheet Data: Exploring the types of Data, Entering Text and Values, Entering Dates **and** Times, Modifying Cell Contents, Applying Number Formatting.
Essential Worksheet and Cell Range Operations: Fundamentals of Excel Worksheets, Controlling the Worksheet View, Working with Rows and Columns, Understanding Cells and Ranges, Copying and Moving Ranges, Using Names to Work with Ranges, Adding Comments to Cells.
Formula and Functions: Understanding Formula Basics, Entering Formula, Editing Formula, Cell References in Formula, Using Formula in Tables, Correcting Common Formula Errors, Dates and times Handling, Date-Related Functions, Time-Related Functions, Working with Charts, Understanding Chart Types, Understanding Tables, Working with a Database or Table, Sorting and Filtering Data, Using Excel Data in Mail Merge.

SECTION B

Introduction to PowerPoint, Starting and Exiting PowerPoint, Changing the View, Zooming In and Out, Enabling Optional Display Elements, Creating New Slides, Inserting Content from External Sources, Managing Slides, Using Content Placeholders, Creating Text Boxes Manually, Working with Text Boxes, Understanding layouts and Themes, Changing a Slide's Layout, Applying a Theme, Changing Colors, Fonts, and Effects, Creating and Managing Custom Color and Font Themes, Changing the Background, Working with Preset Placeholders, Customizing and Creating Layouts, Managing Slide Masters, Managing Themes, Printing Slides.
Building Animation Effects, Transitions, and Support Materials: Understanding Animation and Transitions, Assigning Transitions to Slides, Using an Animation Preset.
Outlook: Organizing Messages, Contents, and Time with Outlook: Setting up E-mail Accounts, Modifying Account Settings, Composing and Sending Messages, Reading and Replying to Messages, Understanding the Inbox Display, Outlook Data Files, Working the Outlook Folders, Setting Options for an Individual E-Mail Message.
Introduction to Database Development: Databases, Tables, Records and Fields.

Creating Access Tables: Creating a Database. Creating a New Table, Setting the Primary Key, Printing a Table Design, Saving the Completed Table, Manipulating Tables in a Database Window, Adding Records to a Database Table, Navigating Records in a Datasheet, Changing Values in a Datasheet.

Creating and Entering Data with Basic MS Access Forms: Adding Forms Using the Ribbon, Adding Controls, Selecting Controls, Manipulating Controls, Understanding Properties, Using Form View, Changing Values in a Form, Printing a Form.

Selecting Data with Queries: Types of Queries. Query Capabilities, Record sets, working with Fields, Changing the Sort Order, Displaying Only Selected Records, Printing a Query's Record set, Saving a Query, Adding More Than One Table to a Query, Working with the Table/Query Pane, Adding Fields from More Than One Table, Understanding Multi-Table Query Limitations.

Presenting Data with Access Reports: Understanding report types. Distinguishing Between Reports and Forms, Understanding the process of creating a report. Printing a Report, Saving the Report.

Pedagogy:

The Instructor is expected to use leading pedagogical approaches in the class room situation, research-based methodology, innovative instructional methods, extensive use of technology in the class room, online modules of MOOCS, and comprehensive assessment practices to strengthen teaching efforts and improve student learning outcomes.

The Instructor of class will engage in a combination of academic reading, analyzing case studies, preparing the weekly assigned readings and exercises, encouraging in class discussions, and live project based learning.

Case/Class Discussion Assignments:

Students will work in groups of up to four to prepare a brief write-up due before the start of each class covering the case study or class material to be discussed in the next session. Questions may include a quantitative analysis of the problem facing the decision-maker in the case.

Class Participation:

Attendance will be taken at each class. Class participation is scored for each student for each class

Text and Readings: Students should focus on material presented in lectures. The text should be used to provide further explanation and examples of concepts and techniques discussed in the course:

Suggested Reading :

1. Office **2007** Bible- John Walkenbach, Herb Tyson, Faithe Wempen, Cary N. Prague, Michael R. Groh, Peter G. Aitken, Michael R. Irwin, Gavin Powell and Lisa A.Buci.
2. Working With MS-Office 2007, Tata McGraw-Hill Publishing, Content Development Group. Chennai.

Scheme of Examination

- English will be the medium of instruction and examination,
- Written Examinations will be conducted at the end of each Semester as per the Academic Calendar notified in advance
- Each course will carry 100 marks of which 30 marks shall be reserved for internal assessment and the remaining 70 marks for written examination to be held at the end of each semester.
- The duration of written examination for each paper shall be three hours.
- The minimum marks for passing the examination for each semester shall be 40% in aggregate as well as a minimum of 40% marks in the semester-end examination in each paper.
- A minimum of 75% of classroom attendance is required in each subject.

Instructions to the External Paper Setter

The question paper will consist of three Sections: A, B and C. Sections A and B will have four questions each from the respective section of the syllabus and will carry 12 marks for each question. Section C will consist of 11 short answer type questions covering the entire syllabus uniformly and will carry a total of 22 marks**.**

Instructions for candidates

Candidates are required to attempt five questions in all, selecting two questions each from section A and B and compulsory question of section C.

Use of non-programmable scientific calculator is allowed. .

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PGWDl22T: INTRODUCTION TO JAVA SCRIPT AND MULTIMEDIA TOOLS

Maximum Marks : 70 **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

Course Objective: This course is designed to explore the features of web technology and its significance in developing web-based applications and multimedia. Students will be able to learn and Understand the concepts of web programming multimedia tools. On completion of this course, the students will be able to

- Understand the basics of Java script and HTML for creation of web pages
- Create forms for interactive applications
- Understand forms of multimedia
- Multimedia content creation and manipulation using tools like Photoshop

Course Content

SECTION A

Introduction to Javascript : JavaScript in Web Pages, The Advantages of JavaScript Writing JavaScript into HTML; Building Up JavaScript Syntax; Basic Programming Techniques ; Operators and Expressions in JavaScript; JavaScript Programming Constructs: Conditional Checking Functions in JavaScript, Dialog Boxes
The JavaScript Document Object Model : Introduction (Instance, Hierarchy); The JavaScript Assisted Style Sheets DOM ; Understanding Objects in HTML (Properties of HTML objects, Methods of HTML objects); Browser Objects .Handling Events Using JavaScript

Forms Used by a Web Site : The Form Object; The Form Object's Methods (The Text Element, The Password Element, The Button Element, The Submit (Button) Element. The Checkbox Element, The Radio Element, The TextArea Element, The Select and Option Element, The Multi Choice Select Lists Element); Other Built-In Objects in JavaScript (The String Object, The Math Object, The Date Object); User Defined

SECTION B

Introduction to Multimedia: Different forms of Multimedia--text, Graphics, images, audio and video Applications of Multimedia. Flash Basics : Panels, Tools panel, Time line, Properties Panel, Stage, Current Layer, Current Frame. Current Symbol. File types: source files, exported files.
Introduction to Photoshop: The tool box and Menu Bar Options. Color modes and color models: Color Models, the modes and Models of Color, Color bit depth. Adjusting Color: Making other Adjustments, Adjustments layers, understanding Channels. Paint Brushes and Art Tools: The Brushes menu, The Painting Tools, Digital Painting: foreground and background colors. Selecting colors, Blending modes. Moving Paint, Smudges focus tools, the toning tools. Layers: Using the layers palette, working with multiple layers, using masks, applying masks, using quick mask, layer mask, paths creating paths, editing paths, using paths.

Pedagogy:
The Instructor is expected to use leading pedagogical approaches in the class room situation, research-based methodology, innovative instructional methods, extensive use of technology in the class room, online modules of MOOCS, and comprehensive assessment practices to strengthen teaching efforts and improve student learning outcomes.

The Instructor of class will engage in a combination of academic reading, analyzing case studies, preparing the weekly assigned readings and exercises, encouraging in class discussions, and live project based learning.

Case/Class Discussion Assignments:

Students will work in groups of up to four to prepare a brief write-up due before the start of each class covering the case study or class material to be discussed in the next session. Questions may include a quantitative analysis of the problem facing the decision-maker in the case.

Class Participation:

Attendance will be taken at each class. Class participation is scored for each student for each class

Text and Readings: Students should focus on material presented in lectures. The text should be used to provide further explanation and examples of concepts and techniques discussed in the course:

Suggested Reading :

I. Multimedia Communications: Fred Halsall- Pearson Education 2001.
2. Adobe Flash CS3 Professional- Phillip Kerman-Pearsons Education
3. Adobe Photoshop CS2 in 24 hours-Carla Rose, Kate Binder.
4. The Complete Reference: Photoshop Elements 2-Ken Milburn and Gene Hirsh
5. Sams Teach Yourself Javascript in 24 hours
6. The Complete Reference,Javascript, second edition

Scheme of Examination

- English will be the medium of instruction and examination.
- Written Examinations will be conducted at the end of each Semester as per the Academic Calendar notified in advance
- Each course will carry 100 marks of which 30 marks shall be reserved for internal assessment and the remaining 70 marks for written examination to be held at the end of each semester.
- The duration of written examination for each paper shall be three hours.
- The minimum marks for passing the examination for each semester shall be 40% in aggregate as well as a minimum of 40% marks in the semester-end examination in each paper.
- A minimum of 75% of classroom attendance is required in each subject.

Instructions to the External Paper Setter

The question paper will consist of three Sections: A, B and C. Sections A and B will have four questions each from the respective section of the syllabus and will carry 12 marks for each question. Section C will consist of 11 short answer type questions covering the entire syllabus uniformly and will carry a total of 22 marks.

Instructions for candidates

- Candidates are required to attempt five questions in all, selecting two questions each from section A and B and compulsory question of section C.
- Use of non-programmable scientific calculator is allowed.

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PGWD123T: PHP AND MYSQL

Maximum Marks : 70 **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

Course Objective: Personal Home Page (PHP) is the most prominent scripting language for web improvement while MySQL is a relational database management system for adding and managing content in a database. PHP and MySQL are the most vital developers used in the website. On completion of this course, the students will be able to

- Understanding the basic concepts of PHP and its applications.
- Demonstrate various MySQL database queries.
- Demonstrate backup and restore a MySQL database.

Course Content

SECTION A

Installing and Configuring : Current and Future Versions of MySQI and PHP, How to Get MySQL, Installing MySQL on Windows, Trouble Shooting your Installation, Basic Security Guidelines, Building PHP on Windows with Apache, Windows, php. n i.Basics,
The Basics of PHP scripts. The Building blocks of PHP: Variables, Data Types, Operators and Expressions, Constants.Flow Control Functions in PHP: Switching Flow, Loops, Code Blocks and Browser Output

Working with Functions: What is function?, Calling functions, Defining Functions, Returning the values from User-Defined Functions, Variable Scope, Saving state between Function calls with the static statement, more about arguments. Working with Arrays: What are Arrays, Creating Arrays, Some Array-Related Functions.
Working with Objects: Creating Objects, Object Instance Working with Strings, Dates and Time: Formatting strings with PHP. Investigating Strings with PHP, Manipulating Strings with PHP, Using Date and Time Functions in PHP.
Working with Forms: Creating Forms, Accessing Form Input with User defined Arrays, Combining HTML and PHP code on a single Page, Using Hidden Fields to save state, Redirecting the user, Sending Mail on Form Submission, Working with File Uploads.

SECTION B

Understanding the database design process: The Importance of Good Database Design, Types of Table Relationships, Understanding Normalization.
Learning basic SQL Commands: Learning the MySQL Data types, Learning the Table Creation Syntax, Using Insert Command, Using SELECT Command, Using WHERE in your Queries,Selecting from Multiple Tables, Using the UPDATE command to modify records, Using the DELETE Command, Frequently used string functions in MySQL, Using Date and Time Functions in MySQL.

Interacting with MySQL using PHP: MySQL Versus MySQLi Functions, Connecting to MySQL with PHP, Working with MySQL Data.
Creating an Online Address Book: Planning and Creating Database Tables, Creating Menu, Creating Record Addition Mechanism, Viewing Records, Creating the Record Deletion Mechanism, Adding Sub-entities to a Record.

Pedagogy:
The Instructor is expected to use leading pedagogical approaches in the class room situation, research-based methodology, innovative instructional methods, extensive use of technology in the class room, online modules of

MOOCS, and comprehensive assessment practices to strengthen teaching efforts and improve student learning outcomes.

The Instructor of class will engage in a combination of academic reading, analyzing case studies, preparing the weekly assigned readings and exercises, encouraging in class discussions, and live project based learning.

Case/Class Discussion Assignments:
Students will work in groups of up to four to prepare a brief write-up due before the start of each class covering the case study or class material to be discussed in the next session. Questions may include a quantitative analysis of the problem facing the decision-maker in the case.

Class Participation:
Attendance will be taken at each class. Class participation is scored for each student for each class

Text and Readings: Students should focus on material presented in lectures. The text should be used to provide further explanation and examples of concepts and techniques discussed in the course:

Suggested Readings:

- Sams Teach Yourself PHP in 24 Hours, Third Edition
- Wrox, Beginning PHP, Apache, MySQL Web Development
- Wrox, Beginning PHP

Scheme of Examination

- English will be the medium of instruction and examination.
- Written Examinations will be conducted at the end of each Semester as per the Academic Calendar notified in advance
- Each course will carry 100 marks of which 30 marks shall be reserved for internal assessment and the remaining 70 marks for written examination to be held at the end of each semester.
- The duration of written examination for each paper shall be three hours.
- The minimum marks for passing the examination for each semester shall be 40% in aggregate as well as a minimum of 40% marks in the semester-end examination in each paper.
- A minimum of 75% of classroom attendance is required in each subject.

Instructions to the External Paper Setter
The question paper will consist of three Sections: A, B and C. Sections A and B will have four questions each from the respective section of the syllabus and will carry 12 marks for each question. Section C will consist of I I short answer type questions covering the entire syllabus uniformly and will carry a total of 22 marks.

Instructions for candidates

- Candidates are required to attempt five questions in all, selecting two questions each from section A and B and compulsory question of section C.
- Use of non-programmable scientific calculator is allowed.

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PGWD121P/122P : SOFTWARE LAB — III

Maximum Marks : 100* **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

This lab will consist of exercises based on PGWD121T and PGWD122T.

*The splitting of marks is as under

- Maximum Marks for Continuous Assessment : 30
- Maximum Marks for External Examination: 70

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PGWD123P : SOFTWARE LAB—IV

Maximum Marks : 100* **Lectures to be Delivered : 40-50**

Minimum Pass Marks : 40% **Time Allowed : 3 Hrs.**

This lab will consist of exercises based on PGWD123T

*The splitting of marks is as under

- Maximum Marks for Continuous Assessment : 30
- Maximum Marks for External Examination: 70