

Paper 1.1 INTERNET AND MULTIMEDIA FUNDAMENTALS

Unit I:

Internet - Introduction – History of Internet-Internet communication protocols-Types of Internet connections –Internet service providers-Domain Name systems-Internet Addressing (**Text Book-1**)-Internet protocols-TCP/IP-FTP-Telnet (**Text Book-2**)

Unit II:

WWW-E-Mail Basics-Web Browsers -An Introduction to Internet Explorer-Internet search Engines.

Unit III:

HTML – Introduction-Core Elements-Links-Images-colors and Backgrounds-Tables-Frames-Forms-CSS.

Unit IV:

DHTML – What is DHTML?-Dynamic styles-positioning and Animation-Dynamic content-Text Range object-Filters and Transition.

Unit V:

Introduction-what is Multimedia?-Text-Sound-images-Animation-Video.

Text Books:

1. Margaret Levine Young, Internet: The complete Reference, Second Edition, Tata McGraw Hill Publishing company Limited, New Delhi. (UNIT- I)
2. SYBEX, Internet complete, Second Edition, BPB Publications, New Delhi (UNIT-I)
3. Thomal Powell, HTML&XHTML: The complete Reference, Forth Edition, Tata McGraw Hill, New Delhi. (UNIT-III)
4. All Williams, Kom Barber, Paul NewKirk, Active Server pages Solutions, Dream tech Press, New Delhi. (UNIT-IV)
5. “Multimedia Making it Work” , Tay Vaughan, Fifth Edition, Tata Mc Graw-Hill Publications, 2001. (UNIT-V)

Paper 1.2 IMAGE EDITING

Unit –I

Image Editing theory – Desktop – Tools – Tool box controls – Tool options bar – Tool presets – Using palettes – navigation – Zoom tool – Zoom commands – Customizing the Interface.

Unit – II

Image Management – Open duplicating and saving Images – File format roundup – Adding Annotations – Defining Colors – Selecting and Editing Colours – Working in different colour modes – Introducing colour channels – Channel functions and Effects, Painting and Brushes.

Unit – III

Filling and stroking – Applying gradient Fills and strokes – About selections – Making Selections – Changing Selections – Moving and Duplicating Selections – Edit paths.

Unit – IV

Masks and Extractions – Working in mask mode – Generating and Creating Mask – Corrective filtering – Filter Basics – Contrast – blurring – Noise factors – Distortions and Effects – Filters.

Unit - V

Working with Layers – Creating Layers – Selecting the contents of Layers - Moving , Linking and Aligning Layers – Masking Layers – Shapes and Styles – Drawing shapes – Layer Styles.

Text Book

1. Deke Mcclelland, “Photoshop Version 8 CS Bible” Wiley-dreamtech publications, 1st Edition, 2006

Reference Books

2. Ben Willmore, “Adobe Photoshop 7.0 studio Techniques” Peachpitt Press, 2002
3. Savvy, “Photoshop CS2”, Wiley-dreamtech publications, 2005

Paper 1.3 Programming Lab I (INTERNET) : List of Programs

S No	Particulars
1.	Design a HTML Page with blue Background, set text color to white and write a poem in the output.
2.	Design a HTML page. Add Images, Video and Lines to it.
3.	Create a HTML page which has frames in it, set the Left frame as menu frame and Top frame as banner frame and create lines in the menu frame to update page in the Mainframe.
4.	Create HTML Form using all the Form Objects.
5.	Create HTML Page with Internal Links (Anchors).
6.	Create HTML Page with absolute positioning, place a text 100 pixels from the left and 150 pixels from the top of the page.
7.	Use Filter in HTML Page and Mark an Image.
8.	Use Filter in HTML Page and create moving light effect.
9.	Create a HTML Page with watermark in its background.
10.	Assignments

Paper 1.4 Programming Lab II (IMAGE EDITING) : List of Programs

S.No.	Particulars
1	Selection tools
2	Layer concepts
3	Text tool and its options
4	Print screen options, wall paper layouts
5	Brush and restoration tools, Healing and patch tools, Brush strokes
6	Shape tools, Vector Masks and Vector Shapes
7	Image colour adjustments, Quick mask mode, Blending options
8	Painting tools, audio annotation tool
9	Filters, Web Gallery, Contact sheets
10	Assignments

Paper 2.1 JAVA PROGRAMMING

Unit I:

Fundamentals of Object Oriented Programming - Object and Classes - Data Abstraction and Encapsulation - Inheritance - Polymorphism - Dynamic Binding – Benefits of OOPs-Application of OOPs - Java History-Features - Java Program Structure – Java Tokens-Java Statements - Implementing Java Program-Java virtual Machine.

Unit II:

Constant Variables and Data Types - Constants - Variables - Data Types - Declaring Variables - Giving Values to Variables –scope of Variables-Symbolic constants- Type Casting - Standard Default Values -Operators and Expressions – Arithmetic, Relational, Logical, Assignment, Increment, Decrement, Conditional, Bitwise, Special Operators-Arithmetic Expressions-Evaluation of Expression-Precedence of operators-Decision making and Branching - If Statements - If Else Statements - Nested If Else Statements - Else if Ladder - The Switch Statements - Decision making and Looping - The While, Do While, For Statements.

Unit III:

Class, Objects and Methods –Defining class-Adding object & Methods-Constructors-Methods Overloading-Inheritance-Overriding Methods-final keyword-Visibility control- Arrays, Strings and Vectors - Interfaces: Multiple Inheritance.

Unit IV:

Packages- Java API Packages - Naming Conventions - Creating and Using Packages - Multithreaded Programming- Creating Threads - Extending Thread Class - Stopping and Locking Thread – Life cycle of thread- Thread Exceptions-priority Synchronization - Managing Errors and Exceptions-catch,finally statements.

Unit V:

Applet Programming - Building Applet Code - Applet Life Cycle - Creating an Applet - Applet Tag - Running the Applet - Passing Parameter to Applet - Getting User Inputs - Managing Input/Output Files in Java - Concept of Streams – stream class-Byte & character stream class-simple program.

Text Book:

1. E.Balagurusamy “programming with java”,Second edition,Tata Mc Graw Hill Publications,1999.

Reference Books:

- 1.Herbert Schildt , “*Java 2: The Complete Reference*”, Fifth Edition, Osborne, 2002
- 2.Steven Holzner,”Java Black Book”,coriolis,2001.

Paper 2.2 – 2D Animation

Unit: I

Flash Basics – Title bar, Menu bar, Dialog box, Tool box – Flash file / Movie – creating, Saving & Closing – The stage and Time line – Symbols and instances – Creating a symbol – Flash library – Creating and Changing an Instance.

Unit: II

Flash tool box – Selecting objects – Moving objects – Smoothing & Straightening objects – Rotating objects – Irregular shapes – Rulers – Grid lines – Out lines – Frames and Key frames – Animation – Creating simple animation – Importing Graphics – Controlling the movie clip.

Unit: III

Working with solid and bit map fills – Tweening - Motion Tweening – Rotate / Spin – Shape Tweening – Shape Hints – working with layers – Inserting, Deleting - Guided layers.

Unit: IV

Understanding Action Script – Getting a Handle on Action Script – Objects, Classes, Methods and Properties – Actions Panel – Editing Action Script – Advanced Buttons & Event Detection – Events and Event Handles – Button class – Manipulating Buttons – Keyboard Detection – Mouse Detection – Creating Continuous Actions with set interval.

Unit: V

Controlling sound – Playing sound, attaching sound, Modifying sound, Transforming sound, Loading & detecting sound publishing flash movies – Controlling information flow – controlling text.

Text Books:

1. Anushka Wirasinha, “Flash in a Flash Web Development”, Prentice Hall of India, 2002.
2. Russell Chun with H.Paul Robertson, Pearson Education, 2004.

Reference Book:

3. Brain Underdahl, “Macromedia flash – The Complete Reference”, Osborne.

Paper 2.3 Programming Lab III (JAVA): List of Programs

S.No	Particulars
1.	Write a program, which creates, and display a message on the window.
2.	Write a program to draw several shapes in the created window.
3.	Write a program to draw grid lines.
4.	Write and create two buttons father and mother and use click father button the details of father is to display and mother button is clicked and similar details will appear.
5.	Write a program to create 4 text fields and one button when you click the button the detail will be appear on the text fields.
6.	Create a frame with three text fields for name, age and qualification and text fields of multiple line of address.
7.	Write a program to create a window when we press M or m, Good Morning is printed on that window similarly A or a pressed Good Afternoon and E or e Good Night is printed on the Window.
8.	Write a program to move different shapes Circle, Ellipse, Rectangle, and Square according to the arrow key pressed

Paper 2.4 Programming Lab IV(2D ANIMATION) : List of Programs

S No	Particulars
1	Artwork, Vector graphics, Bitmap graphics
2	Symbols and instances, Creating a new movie and setting its properties - Previewing, Testing, Buttons
3	Text Box, Panels, Context Menus, Timeline, Library Window, Movie Explorer
4	Working with the fill Panel, Modifying Colour Palettes
5	Importing files, Using Quick time movies,
6	Importing Sounds, Adding sounds
7	Layers – Creation, Viewing and Editing, Mask Layers, Layers in Animation
8	Extended Still Images, Tweening – Motion and Shape, Motion Guide
9	Frame by Frame Animations
10	Action Scripts

Paper 3.1 -Active Server Pages

Unit:I

Active Server Pages - Getting Set Up – Why active Server Pages? – The Development Environment – ASP: An Overview – ASP and the Web – Programming Basics – Web Site coding Language – Static web pages – Dynamic applications.

Unit:II

VB Script language - Elements – Constants – Variables & Data types – Mathematical Operations – Logical operators – Looping and Decision Structures.

Unit:III

ASP Objects – Request object – ASP object model – Request object – Collections – Request object properties – Request object method – Example.
Response object – Collection, Properties and methods – Example.

Unit:IV

Server Object – Properties – Methods – Example - Session Object – Session Collections - properties - method – Example
Application object – Collections - method – Example.

Unit:V

ActiveX Data object – Connection object – Record Set Object – Fields Collection and Field Object – Command and Parameter Objects – Error Object and Error Collection – Example.

Text Books

1. Dave Mercer, “ASP 3.0 - A Beginner’s Guide”, Tata McGraw Hill Publishing, New Delhi, 2001 (Unit I)
2. Eric A.Smith, “ASP 3 Programming Bible”, IDE Books India (P) Ltd, New Delhi, 2000 (Unit II)
3. Greg Buczek,” ASP Developers Guide”, Tata McGraw Hill, New Delhi, 2000 (Unit III, IV, V)

Paper 3.2 Web designing

UNIT – I.

Introduction to fire works – Transforming text – Effects – strokes – gradients – filling with patterns and textures – Animation basics – working with symbols and instances – working with frames – Tweening.

UNIT II

Working with vector tools- vector tools –vector path freeform drawing tools – feliting with pen tool – Project – working a decorative ornament .

UNIT III

Bitmap drawing and Editing – Bitmap mode – working with selection tools – repairing and altering images – composing and masking images.

UNIT IV

Navigation – Using button Editor – using library panel – Navigation bars – rollovers – popup menu – project – making a popup menu using images.

UNIT V

Slicing and optimizing – slicing – adding hotspots – optimization – compression – importing scanned images – importing from other application.

Text Book.

1. jaya .J.Evans, “integrating flash, fire works and freehand “, first edition, dream tec publication ,2001.

Reference Books.

2. Joseph w.lowery,fireworks 3 bible,1bg books world wide 2000.
3. linda rathgebar ,davit & c.nicholls,” Playing with fire: Tapping the power of macromedia fireworks 4”, Hungry minds,2001.

Paper 3.3 Programming Lab V(ASP) : List of Programs

S. No.	Particulars
1.	Create a welcome Cookie.
2.	Interact with a user in form that uses the “get” method / “post” method.
3.	Write a program in ASP to Count the total number of bytes the user sent.
4.	When was a file last Modified – Open a text file for Reading.
5.	Display a different image each time a user visits a page and the image or links.
6.	Display simple records from a database.
7.	Display records in HTML table – Display records where “Company name” starts with letter A.
8.	Display only specified customers from the database and let the user choose what column to sort on.
9.	Sort the records in the database according to the user preference.
10.	List, Edit, Update and delete Database Records – Add New Record.

Paper 3.4 Programming Lab VI(WEB DESIGN): List of Programs

S.No.	Particulars
1.	Creating and Importing Documents - Drawing Objects.
2.	Editing Objects - Color and Transparency.
3.	Using Text - Editing and Painting Pixels.
4.	Applying Effects to Objects.
5.	Composting and Masking - Optimizing Graphics - Exporting.
6.	Creating Hotspots and Image Maps - Slicing Images - Creating Buttons.
7.	Creating Advanced Rollovers.
8.	Creating Animation - Automating Repetitive Tasks.

KONGU ARTS & SCIENCE COLLEGE, ERODE – 638 107

DEPARTMENT OF COMPUTER SCIENCE

CAREER ORIENTED PROGRAMME

WEB TECHNOLOGY

SCHEME OF INSTRUCTIONS AND HOURS OF EXAMINATIONS

For students admitted from 2008 – 09 onwards

Year	P.No	Title	No. of Hrs	Marks			Credits
				CIA	Final	Total	
I	1.1	Internet and Multimedia Fundamentals	75	25	75	100	5
	1.2	Image Editing	75	25	75	100	5
	1.3	Programming Lab – I (Internet)	75	25	75	100	5
	1.4	Programming Lab – II (Image Editing)	75	25	75	100	5
II	2.1	Java Programming	75	25	75	100	5
	2.2	2D Animation	75	25	75	100	5
	2.3	Programming Lab – III (Java Programming)	75	25	75	100	5
	2.4	Programming Lab – IV (2D Animation)	75	25	75	100	5
III	3.1	Server Programming-ASP	60	25	75	100	4
	3.2	Web Design	60	25	75	100	4
	3.3	Programming Lab – V (ASP)	60	25	75	100	4
	3.4	Programming Lab – VI (Web Design)	60	25	75	100	4

I – Certificate course in WEB TECHNOLOGY

II – Diploma in WEB TECHNOLOGY

III – Advanced Diploma in WEB TECHNOLOGY