

SCHEME & SYLLABUS
One Year Diploma Course
in
Web Designing



Department of Computer Science & Engineering

UIET

Sant Baba Bhag Singh University

2019

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SEMESTER- I

I. Theory Subjects

S No.	Subject Code	Subject Name	Contact Hours (L:T:P)	Credits (L:T:P)	Total Contact Hours	Total Credit Hours
1	CWD101	Introduction to Internet and Web	5:0:0	5:0:0	5	5
2	CWD103	Basics of HTML	5:0:0	5:0:0	5	5
3	CWD105	Introduction to Java Script	5:0:0	5:0:0	5	5
4	CWD107	Communication Skills-I	5:0:0	5:0:0	5	5
5	CWD109	Fundamentals of Computer Technology	5:0:0	5:0:0	5	5

I. Practical Subjects

S No.	Subject Code	Subject Name	Contact Hours (L:T:P)	Credits (L:T:P)	Total Contact Hours	Total Credit Hours
1	CWD111	HTML Lab	0:0:4	0:0:2	4	2
2	CWD113	Java Script Lab	0:0:4	0:0:2	4	2
3	CWD115	Communication Skill Lab	0:0:2	0:0:1	2	1

Total Credits: 30

Total Contact Hours: 31

SEMESTER- II

I. Theory Subjects

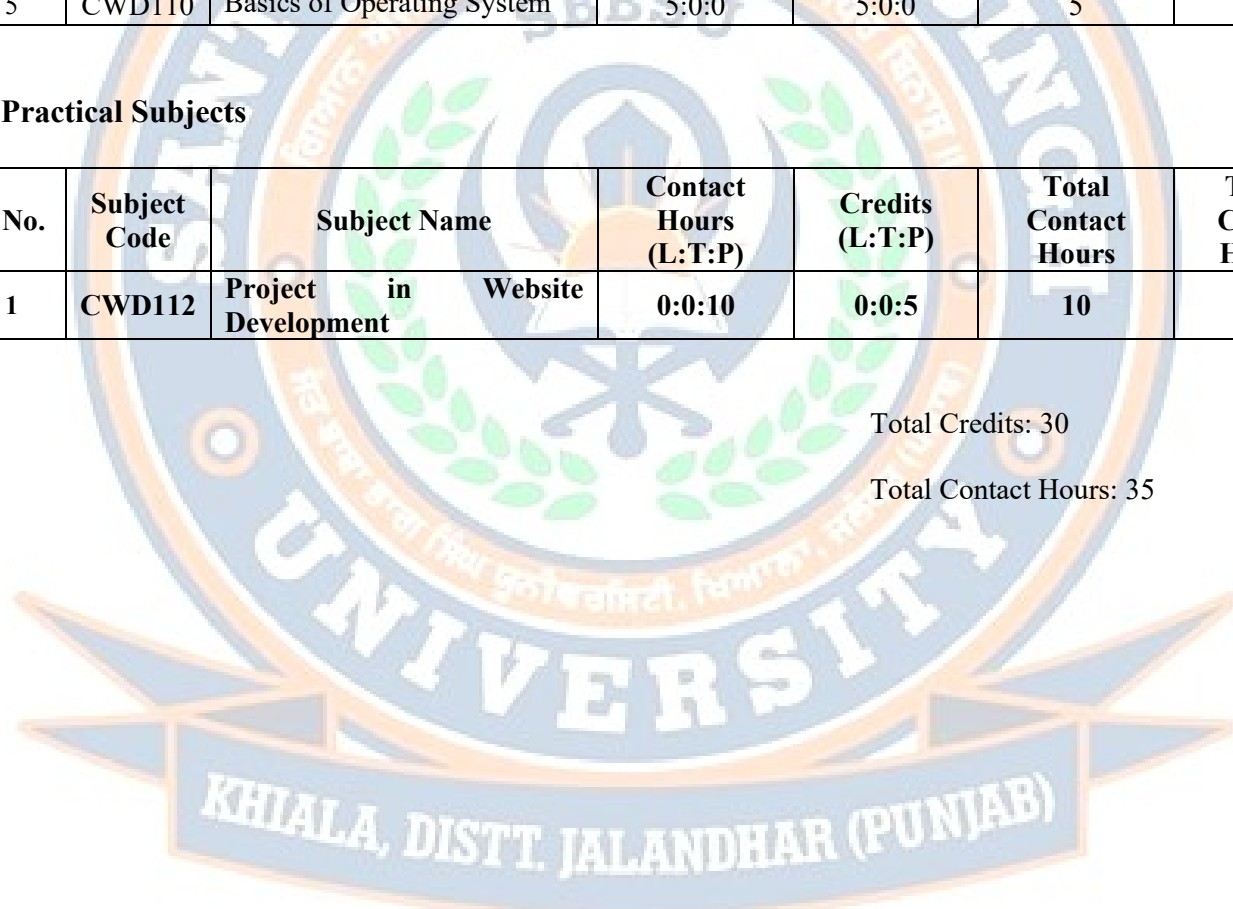
S No.	Subject Code	Subject Name	Contact Hours (L:T:P)	Credits (L:T:P)	Total Contact Hours	Total Credit Hours
1	CWD102	DHTML & CSS	5:0:0	5:0:0	5	5
2	CWD104	Advanced Concepts of HTML	5:0:0	5:0:0	5	5
3	CWD106	Basics of SQL Programming	5:0:0	5:0:0	5	5
4	CWD108	Introduction to Database Management System	5:0:0	5:0:0	5	5
5	CWD110	Basics of Operating System	5:0:0	5:0:0	5	5

I. Practical Subjects

S No.	Subject Code	Subject Name	Contact Hours (L:T:P)	Credits (L:T:P)	Total Contact Hours	Total Credit Hours
1	CWD112	Project in Website Development	0:0:10	0:0:5	10	5

Total Credits: 30

Total Contact Hours: 35





Course Code	CWD101
Course Title	Introduction to Internet & Web
Type of Course	PC
L T P	5 0 0
Credits	5
Course Prerequisites	NA
Course Objectives (CO)	To learn basic concepts of e-mail, able to access the Internet, Worldwide Web.

SYLLABUS

UNIT -I

Introduction to internet and its applications, Domains, Types of Internet connectivity, Hardware requirements of internet, , Software requirements of internet, video conferencing, e-business. Internet service providers, internet address

UNIT-II

Intranet and Extranet, Advantage of Intranet, Applications of Intranet, Introduction to Extranet, Advantages if Extranet

UNIT-III

Applications of Internet-World Wide Web (WWW) , Email, Telnet, FTP, Browsers - Internet Explorer, Netscape Navigator, Opera, Firefox, Chrome, Mozilla, Uniform Resource Locator (URL)

UNIT-IV

Search Engines- Concept of search engines, Types of search engines, E-mail services, Concept of E-mail server, Advantages and Disadvantages of E-mail.

RECOMMENDED BOOKS

Sr. no.	Name	AUTHOR(S)	PUBLISHER
1	Fundamentals of Computers	R. S. Salaria	Salaria Publishing House
2	Computer Fundamentals	P.K. Sinha and P. Sinha	BPB Publication
3	Absolute Beginners Guide to Computer Basics	Miller M	Pearson Education
4	Fundamentals of Computers	Balagurusamy E	Tata McGraw-Hill
5	Fundamentals of Internet and www	Greenlaw R and Hepp E	Tata Mc-Graw Hill

Course Code	CWD103
Course Title	Basics of HTML
Type of Course	PC
L T P	5 0 0
Credits	5
Course Prerequisites	NA
Course Objectives (CO)	The course provides tags, script, and code that create web pages. It will help to understand how the web and web pages work.

SYLLABUS

UNIT-I

Introduction to HTML, Structure of HTML, Creating the web page, HTML tags, HTML Elements, Tag attributes, Hyperlink

UNIT-II

Lists- Ordered list, Unordered list, Definition List, Linking Documents- Image tag, Background, Uniform Resource locator, Limitations of HTML.

UNIT-III

Tables- Adding a table, Adding border to table, Merging table cells, Changing table height and width, Adding background to table, Aligning tables, Shading table cells, Adjusting table padding and spacing.

UNIT-IV

FrontPage- Introduction to FrontPage, Creating a web page using a wizard, Various toolbars in FrontPage.

RECOMMENDED BOOKS

Sr. no.	Name	AUTHOR(S)	PUBLISHER
1	HTML 5 in simple steps	Kogent Learning Solutions Inc.	Dreamtech press
2	HTML : Beginner's guide	Wendy Willard	Mc Graw Hill
3	HTML, XHTML, and CSS Bible	Steven M. Schafer	Wiley India
4	Internet Applications and Web Designing	Sandeep Sood, Manohar Singh	AP Publication

Course Code	CWD105
Course Title	Introduction to JavaScript
Type of Course	PC
L T P	50 0
Credits	5
Course Prerequisites	NA
Course Objectives (CO)	To learn basic concepts of JavaScript.

SYLLABUS

UNIT-I

Introduction to JavaScript, data types, literal, variables, strings and functions.

UNIT-II

JavaScript Programming expressions- Expressions, Operators- Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++ (Increment), -- (Decrement), - (Unary Negation), Logical Operators, Short-Circuit Evaluation, String Operators, Special Operators, ? (Conditional operator), (Comma operator), delete, new, this, void. operator precedence.

Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security.

Statements: Break, comment, continue, delete, do ... while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while.

Core JavaScript (Properties and Methods of Each) : Array, Boolean, Date, Function, Math, Number, Object, String, RegExp.

UNIT-III

JavaScript programming Flow of control- Flow of control, if-else statement, Switch-case statement, while statement, do-while statement, for statement, break and continue statements, Label statement, return statement.

UNIT-IV

ARRAY Constructors, Arrays with mixed elements types, Events, Forms.

RECOMMENDED BOOKS

Sr. no.	Name	AUTHOR(S)	PUBLISHER
1	JavaScript: The Definitive Guide,	David Flanagan	O'Reilly Media
2	Learn JavaScript VISUALLY	Ivelin Demirov	Kindle Edition

Course Code	CWD107
Course Title	Communication Skills--I
Type of Course	HS
L T P	5 0 0
Credits	5
Course pre-requisite	NA
Course Objectives	The objective of this course is to provide the students sufficient practice for speaking and writing English efficiently.

SYLLABUS

UNIT-I

Basics of Communication Skills:

Communication, Process of Communication, Types of Communication-Verbal and Non verbal communication, Channels of Communication- Upward, Downward, Horizontal, Barriers to Communication, Role of Communication in society.

UNIT-II

Listening Skills:

Listening Process, Hearing and Listening, Types of Listening, Effective Listening, Barriers of Effective Listening, Note Taking

Reading Skills:

Purpose of reading, Process of reading, reading skills Models and strategies, scanning, skimming, SQ3R, Approaches of Reading, Comprehension passages for practice.

UNIT-III

Writing Skills:

Purpose of writing, Effective writing, Types of writing, Business Correspondence, Precise writing, Memo writing, minutes of meeting.

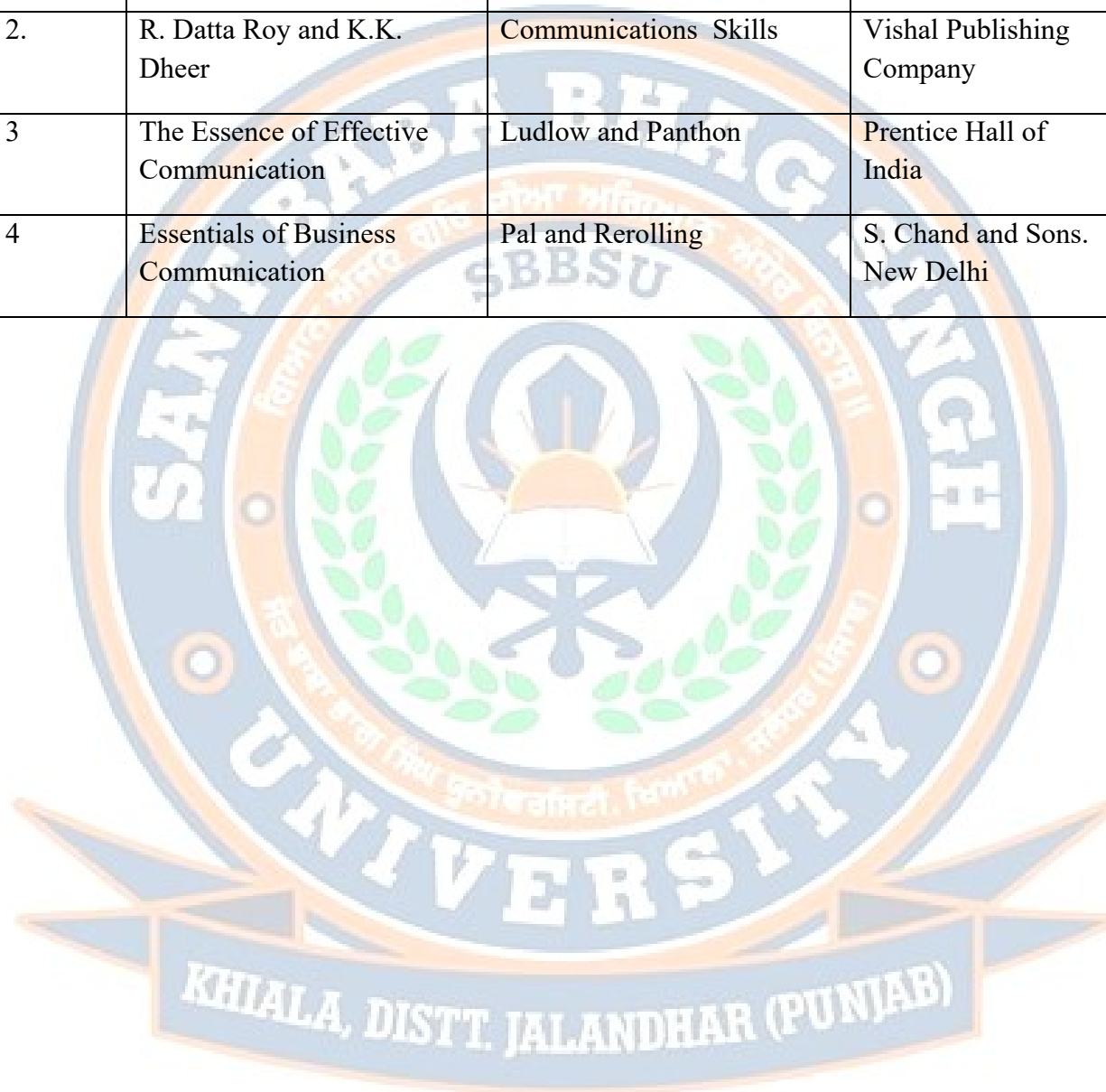
UNIT-IV

Speaking Skills:

Speech process, Skills of effective speaking, Role of audience, Feedback Skill, Oral Presentation.

Text and Reference Books:

Sr No	Author(s)	Title	Publisher
1.	Bhupender Kaur	Effectual Communication Skills	S.K. Kataria and Sons
2.	R. Datta Roy and K.K. Dheer	Communications Skills	Vishal Publishing Company
3	The Essence of Effective Communication	Ludlow and Panthon	Prentice Hall of India
4	Essentials of Business Communication	Pal and Rerolling	S. Chand and Sons. New Delhi



Course Code	CWD109
Course Title	Fundamentals of Computer Technology
Type of Course	ES
L T P	5 0 0
Credits	5
Course Prerequisites	Basics of computer and any high level language
Course Objectives (CO)	To familiarize the students of all branches in engineering with computer organization, operating systems, problem solving and programming in C++.

SYLLABUS

UNIT-I

Introduction to Computers: Define a Computer System, Block diagram of a Computer System and its working, associated peripherals, memories, RAM, ROM, secondary storage devices, Computer Software and Hardware.

Working Knowledge of Computer System and Office automation: Introduction to the operating system, its functions and types, working knowledge of GUI based operating system, introduction to word processors and its features, creating, editing, printing and saving documents, spell check, mail merge, creating power point presentations, creating spreadsheets and simple graphs

Problem Solving & Program Planning: Need for problem solving and planning a program; program design tools – algorithms, flow charts, and pseudo code; illustrative examples.

UNIT-II

Overview of C++ Language: Introduction to C++ language, structure of a C++ program, concepts of compiling and linking, IDE and its features; Basic terminology - Character set, tokens, identifiers, keywords, fundamental data types, literal and symbolic constants, declaring variables, initializing variables, type modifiers.

Operators and expressions: Operators in C++, precedence and associativity of operators, expressions and their evaluation, type conversions.

Beginning with C++ program: Input/output using extraction (>>) and insertion (<<) operators, writing simple C++ programs, comments in C++, stages of program execution.

UNIT-III

Control Structures and Functions: Decision making statements: if, nested if, if – else. Else if ladder, switch, Loops and iteration: while loop, for loop, do – while loop, nesting of loops, break statement, continue statement, goto statement, Advantages of using functions, structure of a function, declaring and defining functions, return statement, formal and actual arguments, const argument, default arguments,

Arrays and Strings: Declaration of arrays, initialization of array, accessing elements of array, I/O of arrays, passing arrays as arguments to a function, multidimensional arrays. String as array

of characters, initializing string variables, I / O of strings, string manipulation functions (strlen, strcat, strcpy, strcmp), passing strings to a function. Use of arrays and strings through illustrative programming examples.

Classes and Objects: Concept of classes, Declaration of classes, Defining access specifier, Public, Private, Protected derivations, defining member functions in a class, use of scope resolution operator outside the class definition. Defining objects. Friend function.

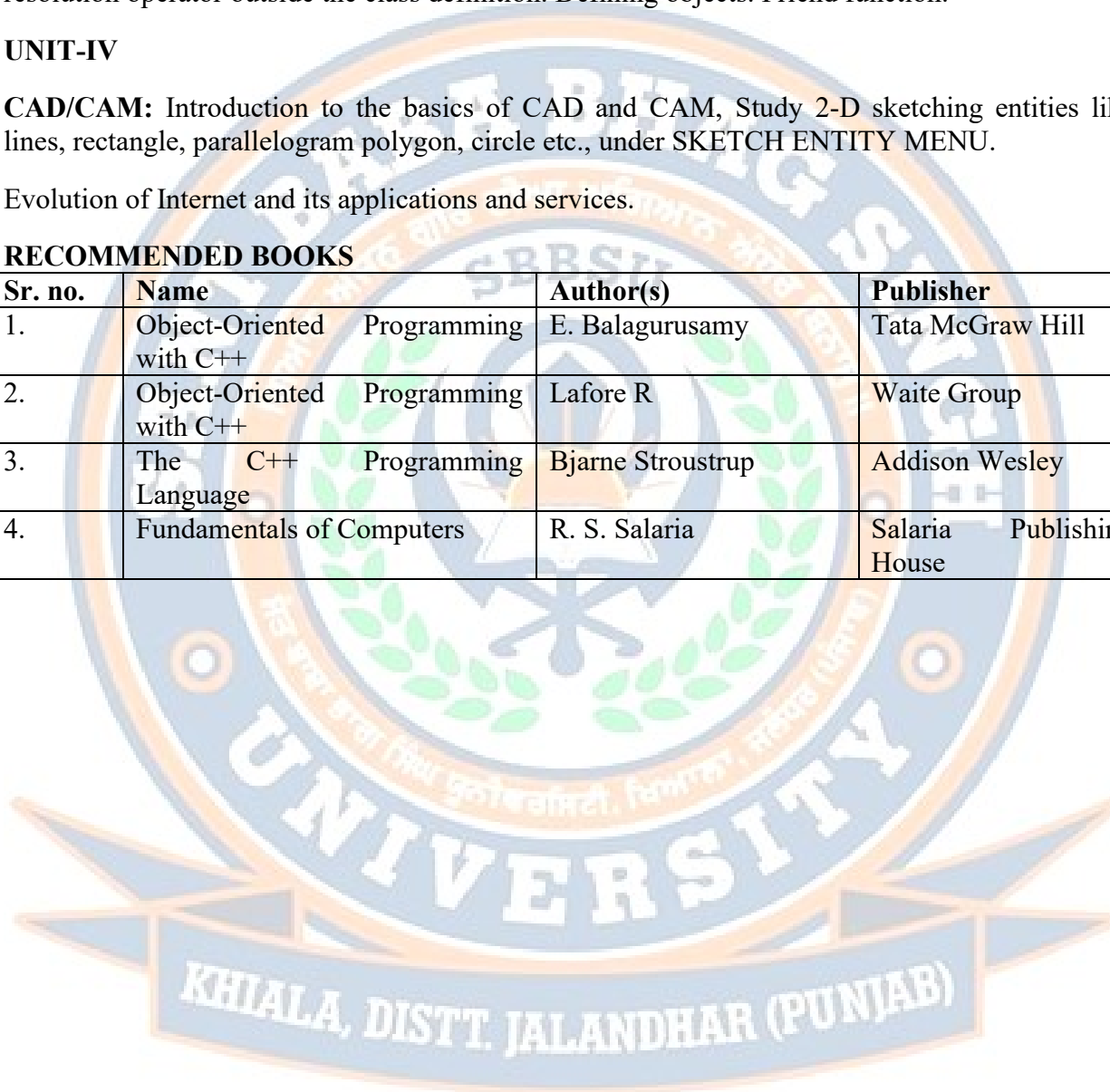
UNIT-IV

CAD/CAM: Introduction to the basics of CAD and CAM, Study 2-D sketching entities like lines, rectangle, parallelogram polygon, circle etc., under SKETCH ENTITY MENU.

Evolution of Internet and its applications and services.

RECOMMENDED BOOKS

Sr. no.	Name	Author(s)	Publisher
1.	Object-Oriented Programming with C++	E. Balagurusamy	Tata McGraw Hill
2.	Object-Oriented Programming with C++	Lafore R	Waite Group
3.	The C++ Programming Language	Bjarne Stroustrup	Addison Wesley
4.	Fundamentals of Computers	R. S. Salaria	Salaria Publishing House



Course Code	CWD111
Course Title	HTML Lab
Type of Course	PC
L T P	0 0 4
Credits	2
Course Prerequisites	NA
Course Objectives (CO)	To recognize the components of an HTML and tailor web design.

SYLLABUS

List of Practical's

1. Introduction to HTML.
2. Basic tags in HTML
3. Implementation of text formatting tags
4. Write a program to add image in web page.
5. Write a program implement hyperlink.
6. Write a program to create ordered lists.
7. Write a program to create unordered lists.
8. Write a program to create table.
9. Write a program to create table with merged cells.
10. Write a program to create table where Cells span several rows or columns.

RECOMMENDED BOOKS

Sr. no.	Name	AUTHOR(S)	PUBLISHER
1	HTML 5 in simple steps	Kogent Learning Solutions Inc.	Dreamtech press
2	HTML : Beginner's guide	Wendy Willard	Mc Graw Hill
3	HTML,XHTML, and CSS Bible	Steven M. Schafer	Wiley India
4	Internet Applications and Web Designing	Sandeep Sood, Manohar Singh	AP Publication

Course Code	CWD113
Course Title	JavaScript Lab
Type of Course	PC
L T P	0 0 4
Credits	2
Course Prerequisites	NA
Course Objectives (CO)	To develop familiarity with the JavaScript language and understand advanced language features.

SYLLABUS

List of Practical's

1. Introduction to JAVASCRIPT.
2. Write a program for Fibonacci sequence.
3. Write a program to Copy Text from Different Field.
4. Write a program for JavaScript form validation.
5. Write a program to find area of circle.
6. Write a program to create a multiplication table asking the user the number of rows and columns he wants.
7. Write a program to Display a message "Welcome!!!" on your webpage and when the user hovers over the message, a popup should be displayed with a message "Welcome to my Webpage".
8. Write a program using if-else statement.
9. Write a program using switch statement.
10. Write a program to display array elements.

RECOMMENDED BOOKS

Sr. no.	Name	AUTHOR(S)	PUBLISHER
1	JavaScript: The Definitive Guide	David Flanagan	O'Reilly Media
2	Learn JavaScript VISUALLY	Ivelin Demirov	Kindle Edition

Course Code	CWD115
Course Title	Communication Skill Lab
Type of Course	HS
L T P	0 0 2
Credits	1
Coursepre-requisite	NA
Course Objectives	The objective of this course is to provide the students sufficient practice for speaking and writing English efficiently.

SYLLABUS

UNIT-I

Speaking and Discussion Skills:

Oral Presentation, Planning and organizing content for presentation, Use of audio /Visual Aids, Making Slides for presentation , Group Discussion ,Debate, Extempore speaking, Interview Skills, Mock interview, Mock Dialogues (Pair Speaking),Cue Card Speaking, Meeting/ Conferences.

UNIT-II

Listening Skills:

Listening to any recoded material and asking oral/written questions for listening comprehension.

Reading Skills:

Active Reading of passages for Reading comprehensions, paraphrase, Summary writing.

UNIT-III

Writing Skills:

Guidelines of effective writing, Paragraph Writing, Email Writing.

UNIT-IV

Grammar and Vocabulary:

Parts of Speech, Tenses, GRE words (List of 50 Words).



Second Semester

Course Code	CWD102
Course Title	DHTML & CSS
Type of Course	PC
L T P	5 0 0
Credits	5
Course Prerequisites	NA
Course Objectives (CO)	To use HTML to implement structure, rather than presentation, in ways that get the best out of CSS

SYLLABUS

UNIT-I

Introduction to DHTML, Features of DHTML, Nested DOM REFERENCES, Dynamic Select boxes.

UNIT-II

Accessing collections, Tables, image, link, dynamic styles, changing color, changing font size, dynamic expressions.

UNIT-III

Window object model – window object, frames, window child objects, component of DHTML.

UNIT-IV

Style Sheets: What are style sheets? Why are style sheets valuable? Different approaches to style sheets, Using Multiple approaches, Linking to style information in separate file, Setting up style information, Using the <LINK> tag, embedded style information, Using <STYLE> tag, Inline style information, setting the page margins.

RECOMMENDED BOOKS

Sr. no.	Name	AUTHOR(S)	PUBLISHER
1	HTML : Beginner's guide	Wendy Willard	Mc Graw Hill
2	HTML, XHTML and CSS Bible	Steven M. Schafer	Wiley India
3	Web Enabled Commercial Application Development Using HTML, DHTML, JavaScript, Perl CG	Ivan Bayross	Tech Publications
4	HTML5 and CSS3 Made Simple	Ivan Bayross	BPB Publications

Course Code	CWD104
Course Title	Advanced Concepts of HTML
Type of Course	PC
L T P	5 0 0
Credits	5
Course Prerequisites	NA
Course Objectives (CO)	To create links, tables, use graphics, validate and publish web pages.

SYLLABUS

UNIT-I

Frames:

Frames, Navigation Frame, Frame and its type, IFrame.

Forms:

Creating form using wizard, adding text boxes, adding radio buttons, adding check box, adding drop down menus, adding pushbutton & pictures.

UNIT-II

Linking documents- image tag with src attribute, ALT attribute, background, Uniform resource locator, Limitations of HTML.

UNIT-III

Hyperlink- Adding a hyperlink to text or images, Creating bookmarks, Adding an email hyperlink.

UNIT-IV

Forms- Named Input fields, The <INPUT> tag, Multiple lines text windows, Drop down and list boxes, Hidden, Text, Text Area, Password, File Upload, Button, Submit, Reset, Radio, Checkbox, Select, Option, Forms and Scripting, Action Buttons, Labelling input files, Grouping related fields, Disabled and read-only fields, Form field event handlers, Passing form data.

RECOMMENDED BOOKS

Sr. no.	Name	AUTHOR(S)	PUBLISHER
1	HTML : Beginner's guide	Wendy Willard	Mc Graw Hill
2	HTML,XHTML and CSS Bible	Steven M. Schafer	Wiley India

Course Code	CWD106
Course Title	Basics of SQL Programming
Type of Course	PC
L T P	5 0 0
Credits	5
Course Prerequisites	NA
Course Objectives (CO)	To create links, tables, use graphics, validate and publish web pages.
SYLLABUS	

UNIT-I

Introduction to DBMS and its applications, Study Of SQL Statements (DDL, DML)

UNIT-II

Data types, creating tables, retrieval of rows using select statement, conditional retrieval of rows, alter and drop statements.

UNIT-III

Working with null values, matching a pattern from a table, ordering the result of a query, aggregate functions, grouping the result of a query, update and delete statements.

UNIT-IV

Operators: arithmetic operators- add, subtract, multiply, divide, rename field, logical operations-and, or, not ,aggregate function- average, minimum, maximum, sum, count, count(*)
 numeric functions- absolute, power, sqrt, round, string functions: lower, upper, initcap, length, ltrim, rtrim, substring, lpad, rpad

RECOMMENDED BOOKS			
Sr. no.	Name	Author(S)	Publisher
1	An introduction to Database Systems	Bipin C. Desai.	West Publishing
2	SQL,PL/SQL ,The programming language of oracle	Ivan Bayross	BPB Publication

Course Code	CWD108
Course Title	Introduction to Database Management System
Type of Course	PC
L T P	5 0 0
Credits	5
Course Prerequisites	NA
Course Objectives (CO)	To create links, tables, use graphics, validate and publish web pages.
SYLLABUS	

UNIT-I

Introduction: Data, Information,, need of information, difference between data and information, Qualities of Information

UNIT-II

Database: Database, Features of data in Database, Significance of Database in real world, need of storing database in computers

UNIT-III

Traditional approach to Data Management(File System Approach), Limitations of File System Approach, Database Approach, Database System, Components of Database System

UNIT-IV

DBMS: DBMS, Requirement of a DBMS, Database Languages(DDL, DML), Structure of DBMS, Advantages of DBMS, disadvantages of DBMS, Data Models(Object based data models, Record based data models, physical data models, hierarchical model)

RECOMMENDED BOOKS			
Sr. no.	Name	Author(S)	Publisher
1	Fundamentals of Database Systems, Third Edition	Elmasri/Navathe	Addison Wesley
2	Database Concepts	Korth and Silberschatz Abraham,	McGraw Hall
3	An introduction to Database Systems	C.J.Date.	Addison Wesley

Course Code	CWD110
Course Title	Basics of Operating Systems
Type of Course	PC
L T P	5 0 0
Credits	5
Course Prerequisites	Overview of Computer Architecture
Course Objectives (CO)	This course provides the knowledge about the role of an operating system, issues in the management of resources like processor, memory and input-output, design of an operating system.

SYLLABUS

UNIT-I

Introduction: Operating Systems functions, Types of operating systems, Multiprogramming systems, Batch systems, Time-sharing systems, Operating system operations, Special purpose operating systems, distributed systems, Different computing environments.

UNIT-II

Operating System Organization: Processor and user modes, user operating system interface, Kernels, System calls and its types, System programs, Operating system structures, Virtual machines.

UNIT-III

Memory Management: Physical and virtual address space, Memory allocation strategies, Paging, Segmentation, Virtual memory and Demand paging, Page replacement algorithms.

UNIT-IV

Security: Security breaches, types of attacks, attack prevention methods, security policy and access control.

RECOMMENDED BOOKS

Sr. no.	Name	Author(S)	Publisher
1	Operating Systems Concepts	A Silberschatz, P.B. Galvin, G. Gagne	John Wiley Publications
2	Operating Systems: A Modern Perspective	G. Nutt	Pearson Education
3	Modern Operating Systems	A.S. Tanenbaum	Pearson Education
4	Operating Systems, Internals & Design Principles	W. Stallings	Prentice Hall of India

Course Code	CWD112
Course Title	Project on Website Development
Type of Course	PC
L T P	0 0 10
Credits	5
Course Prerequisites	NA
Course Objectives (CO)	The objective of this is to make students understand the real life web development and become a web developer using latest tools and trending technologies of current and future.

SYLLABUS

Student develops real time websites using concepts of HTML, DHTML, Java script and CSS. It covers wide areas –

- Tourism Management System
- Railway Ticket reservation website
- Online shopping website
- College Management system website
- Hotel Management System website
- Hospital Management system website
- Wedding Planner website
- Inventory Management system website
- Pharmacy website
- Library Management Website