ORDINANCES AND OUTLINES OF TESTS, SYLLABI AND COURSES OF READING

FOR

ONE-YEAR DIPLOMA IN COMPUTER APPLICATIONS

Programme Code: DCASSD

(SEMESTER SYSTEM)

(Semester 1 and 2)

For

SESSION 2024-25

DEPARTMENT OF COMPUTER SCIENCE

SHRI SANATAN DHARAM GIRLS' COLLEGE, BATHINDA

An Autonomous College

Re-Accredited 'A' Grade by NAAC

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

ORDINANCES OF

ALL DIPLOMA COURSES OF ONE YEAR DURATION

UNDER

DEPARTMENT OF COMPUTER SCIENCE

Notwithstanding the integrated nature of a course spread over more than one semester, the ordinances in force at the time, a student joins a course shall hold good only for the examination held during or at the end of the semester. Nothing in these ordinances shall be deemed to debar the College from amending the ordinances subsequently and the amended ordinances, if any, shall apply to all the students whether old or new.

1. Structure and Duration of the Programme:

a) The course for the diploma courses shall be spread over one year to be called Semester I and II. The end-semester examination for odd semesters, i.e. Semester 1 shall be held in the month of November/ December and for even semesters, i.e. Semester II in the month of May/June or on such other dates as may be decided by College.

b) The programme of instruction will consist of:

- Core theory courses
- Laboratory courses

The nomenclature, modalities and other details of the core theory courses and the laboratory work will be as decided by the concerned academic bodies of the College.

c) Semester I and II will be regular semesters consisting of theory and practical classes.

d) The outlines of tests and syllabi and the evaluation shall be such as prescribed by the concerned Board of Studies from time to time.

e) Maximum period for completing the degree shall be two years for one year Diploma course.

f) The medium of instructions as well as examination shall be English.

2. Number of Seats:

Total number of seats in Diploma course shall be 30. The distribution of seats and other additional seats will be as per College norms as decided upon from time to time.

3. Eligibility of Admission:

The admission to one year diploma course shall be open to candidates who are eligible under the following conditions:

a) Passed 10+2 from any state or central board of education in any stream with at least 50% marks in aggregate (45% marks for SC/ST and differently-abled persons with at least 40% disability).

4. Basis for Admission:

Admission to one-year Diploma course will be made purely on the basis of the merit of the qualifying examination and/or entrance test to be determined by Board of Studies.

5. Attendance:

Attendance is taken compulsorily by the teacher.

A candidate admitted to the Diploma Course must fulfill the following requirements:

i. Has been on the rolls of the Department throughout the semester preceding the examination.
ii. Every candidate will be required to attend a minimum of 75% of the delivered number ofperiods in each paper.
iii. For late admission, the counting of lectures will be considered from the date of deposit offee.
iv. In case of students, whose names are struck off on account of non-payment of fee, their periods, for the time they were not on the rolls, shall not be accounted for.
v. The shortage in the attendance of lectures by the candidate will be condoned as College rules applicable from time to time.

6. Schedule for Examination Fees:

Candidates shall submit their Examination forms for admission to the examination duly countersigned by the Head of the Department/ Principal of the College. The candidate will be required to pay examination fees as per the schedule prescribed by the College from time to time.

7. Minimum Requirements to Continue the Programme:

1) In each theory paper, 30% of the total marks are assigned to the continuous assessment and 70% marks to the External examination; and in each laboratory practical paper, 100% of the marks are assigned for continuous assessment. The minimum number of marks required to pass each theory and practical examination shall be 35% in each paper in aggregate, provided the candidate gets minimum 35% marks individually in the continuous assessment as well as minimum 35% marks individually in the External examination.
2) When a candidate has failed or is placed under reappear in the External examination but passes in the continuous assessment, the marks of continuous assessment shall be carried forward for subsequent examinations. If a candidate has failed or is placed under 'reappear' in the continuous assessment, but passes in the External examination, the marks in the External examination shall be carried forward for subsequent examinations. In that case, the candidate will have to improve his/her score in the continuous assessment by taking only a single test covering entire syllabus for that subject, which will consist of total

marks assigned to internal Assessment for that paper (theory or practical). Such candidate will have to inform the Department in writing and in turn the test will be scheduled by the Department. The grace marks shall be allowed to the student as per general ordinances of College.

3) There will be no condition of passing papers for promotion from odd semester to even semester in an academic session.

4) A candidate placed under re-appear in any paper, will be allowed two chances to clear the reappear which should be availed within consecutive two years/chances, i.e. to pass in a paper, the candidate will have a total of three chances, one as regular student and two as a reappear candidate.

The examination of the reappear papers of odd semester will be held with regular examination of the odd semester and reappear examination of even semester will be held with regular examination of even semester. But if a candidate is placed under reappear in the last semester of the course, he/she will be provided chance to pass the reappear with the examination of the next semester, provided his/her reappear of lower semester does not go beyond next semester. Option of re-evaluation shall be available to the candidates as per the general ordinances of the College.

8. System of Tests and Weightage:

The system of tests will comprise of Internal assessment and External examination for theory papers and laboratory papers for Semester I and Semester II for one-year Diploma course. The following will be the criteria of weightage for each theory paper/ practical lab paper:

Continuous Assessment (Theory Papers)	**Continuous Assessment (Practical Labs)**
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.	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. Assignments/Quizzes: 20% of the marks allotted for continuous assessment.	2. Lab Assignments: 30% of the marks allotted for continuous assessment.
3. Attendance: 10% of the marks allotted for continuous assessment.	3. Attendance: 10% of the marks allotted for continuous assessment.
4. Class Participation and behaviour: 10% of the marks allotted for continuous assessment.	
External Examination (Theory Papers)	
Maximum Marks for End-Semester theory examination: 70.	

End-Semester Examination for theory papers will be of 3 hours duration. The question paper will consist of three Sections: A, B and C. Sections A and B will have fourquestions - each from the respective section of the syllabus and each question will carry 12 marks. Section C will consist of 11 short-answer type questions of 2 marks each covering the entire syllabus uniformly and will warry 22 marks in all. Candidates arerequired to attempt five questions in all. Candidates are required to attempt five questions in all, selecting two questions each from section Aand B and compulsory question of section C.	

9. Declaration of Results:

After the termination of examination or as soon thereafter as possible, the Registrar shall publish the result of the candidates. Each candidate shall receive a certificate indicating details of marks obtained in each examination. Successful candidates at the end of Semester II examination shall receive a Diploma certificate stating the Division according to Ordinance 10.

10. Award for Division and Distinction:

Successful candidates who obtain 60% or more of the aggregate number of marks of all the Two semester examinations taken together, shall be placed in the First division, those who obtain 50% marks or more but less than 60% in the Second division and below 50% marks, shall be placed in the Third Division. Successful candidates who obtain 75% marks or morein aggregate in a single attempt without any reappear in any subject/paper shall be placed in First division with distinction.

ONE YEAR DIPLOMA IN COMPUTER
Programme Code: DCASSD
(SEMESTER FIRST AND SECOND)
FOR
SESSION 2024-25
Total Marks:500 (Theory:350, Practical: 150)

DCA SEMESTER I						
Subject Code	**Credit**	**Title**	**External Examination**	**Internal Assessment**	**Total Marks**	**Exam. Duration**
DCA111T	4	Computer Fundamentals	70	30	100	3 Hours
DCA112T	4	Fundamentals of Operating System	70	30	100	3 Hours
DCA113T	4	Introduction to Computer programming	70	30	100	3 Hours
DCA112P	2	Software Lab-I (Based on paper DCA112T Operating System and office automation)	---	50	50	3 Hours
DCA113P	2	Software Lab-II (Based on paper DCA113T Computer Programming Lab)	---	50	50	3 Hours
	16	Total	210	190	400	

DCA SEMESTER II						
Subject Code	**Credit**	**Title**	**External Examination**	**Internal Assessment**	**Total Marks**	**Exam. Duration**
DCA121T	4	Computer Networks and Internet	70	30	100	3 Hours
DCA122T	4	Database Management System	70	30	100	3 Hours
DCA123T	4	Web Development Fundamentals	70	30	100	3 Hours
DCA122P	2	Software Lab-III (Based on paper DCA122T Database Management System Lab)	---	50	50	3 Hours
DCA123P	2	Software Lab-IV (Based on paper DCA123T Web Development Fundamentals Lab)	---	50	50	3 Hours
	16	Total	210	190	400	

DCA111T: Computer Fundamentals

Maximum Marks for External examination: 70 **Lectures to be delivered: 40-50**
Maximum Marks for continuous assessment: 30 **Time allowed: 3 Hr**
Minimum Pass Marks: 35%

A) Course Objective: The objective of this course is making students learn the basics of computers, software, and how technology impacts our lives. Through simple explanations, students will explore concepts like digital tools, internet usage, and basic troubleshooting. By the end, students will have a clear understanding of the role of technology in various fields, equipping them with essential skills for navigating the digital world with confidence.

B) Instructions For the Paper Setter: The question paper will consist of three sections, Section A, B & C. Section A & B will have four questions each from the respective sections of the syllabus. Each question will carry 12 marks, which may be segregated into sub parts. Section C will be compulsory with 11 short answer type questions of 02 marks each, which will cover the entire syllabus.

C) Instructions For the Candidate: Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

SECTION-A

Introduction to Computer: Definition of Computer, Block Diagram of Computer, Characteristics of Computer Evolution, Classification of Computer, Components of computer, Computer Generations, **Input Devices**- Mouse, Keyboard, Trackball, Joystick, Digitizer, Scanner, Touch Screen, Speech Recognition Devices, Optical Recognition Devices - OMR, OBR, OCR.

Output devices- Monitor, Plotter, Printers Impact Printers, Non-Impact Printers, Memories - RAM, ROM, PROM, EPROM, Flash Memory, **Storage Fundamentals** - Primary Vs Secondary Data storage and **Retrieval Methods** – Sequential, Direct and Indexed. **Various Storage devices** - Magnetic Tape, Magnetic Disk, Hard Disk Drives, Floppy Disks, Optical Disks, CD, VCD, CD-R, CD-W, Zip Drive, DVD.

SECTION-B

Computer Software - Types of Software: System Software, Application Software, Utility Software, Firmware, **Number system of computers** - Binary, Octal, Decimal, Hexadecimal - Representation & their conversion, **Coding system** - BCD, ASCII, EBCDIC etc. Computer Languages - Machine Language, Assembly Language, High Level Language, 4GL.

Text Books:

1.P.K. Sinha and P. Sinha, Foundation of Computing, First Edition, 2002, BPB.

2. ChetanSrivastva, Fundamentals of Information Technology, Kalyani Publishers.

DCA112T: Fundamentals of Operating System

Maximum Marks for External examination: 70 **Lectures to be delivered: 40-50**
Maximum Marks for continuous assessment: 30 **Time allowed: 3 Hr**
Minimum Pass Marks: 35%

A) Course Objective: The objective of this course is making students learn a comprehensive understanding of the principles and functionality of modern computer operating systems. Students will delve into key concepts such as process management, memory allocation, file systems, and security protocols. By the end of the course, students will be equipped with the knowledge and skills necessary to effectively manage, troubleshoot, and optimize operating systems, enabling them to support efficient computing environments.

B) Instructions For the Paper Setter: The question paper will consist of three sections, Section A, B & C. Section A & B will have four questions each from the respective sections of the syllabus. Each question. will carry 12 marks, which may be segregated into sub parts. Section C will be compulsory with 11 short answer type questions of 02 marks each, which will cover the entire syllabus.

C) Instructions For the Candidate: Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

SECTION-A

Basics of Operating Systems: Definition Generations of Operating systems Types of Operating Systems- batch system, time sharing system, parallel system, distributed system, real time system, personal computer system.

Operating system components, operating System Service, System Calls, OS structure: Layered, Monolithic, Microkernel Operating Systems-Concept of Virtual Machine.

Process Management: Process definition, process state, process scheduling, operations on processes, Basic concepts of thread, Difference between process and thread.

SECTION-B

Storage Management: Disk Management: creating and managing partitions, Files and folders: Various Commands, File/Folder sharing.

User Management: Different types of users, Creating and managing users, granting access permissions.

Customizing Operation System: Desktop Customization, File and Folder Customization, User Interface Customization, Application Customization, Advanced Customization. Device Drivers: Definition, Audio drivers, Video drivers, Printer drivers, Network drivers, Display drivers, Bluetooth drivers, scanner drivers, Keyboard and Mouse Drivers.

Text Books:

1. Abraha MSilberschatz, Peter B. Galvin, Operating System concepts, Addison-WesleyPublishing Co. Engineering, Third Edition 2005

2. A book of Fundamentals of Information Technology.2nd Edition Dr. Hardeep Singh, S.K.Kakkar, Anshuman Sharma.

3. Operating System. Third Revised Edition - Swati Jain, RuchitaRathi

DCA113T: Introduction to Computer Programming

Maximum Marks for External examination: 70 **Lectures to be delivered: 40-50**
Maximum Marks for continuous assessment: 30 **Time allowed: 3 Hr**
Minimum Pass Marks: 35%

A) Course Objective: The objective of this course is making students equip with a strong foundation in coding and problem-solving. Through hands-on exercises and projects, students will learn essential programming concepts, logic structures, and algorithm development. By the course's culmination, participants will possess the skills to write efficient code, tackle complex challenges, and create software solutions across various domains.

B) Instructions For the Paper Setter: The question paper will consist of three sections, Section A, B & C. Section A & B will have four questions each from the respective sections of the syllabus. Each question. will carry 12 marks, which may be segregated into sub parts. Section C will be compulsory with 11 short answer type questions of 02 marks each, which will cover the entire syllabus.

C) Instructions For the Candidate: Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

SECTION-A

Introduction to Programming: Definition of a program, program development process: planning, coding and testing.
Program Planning: algorithm, flowchart, pseudocode, decision table, decision tree.
Coding: Programming paradigms, different programming languages viz. C, C++, Java and Python. Common Programming Languages Features: Character set, keywords, identifiers, constants, variables, operators, operands, operator precedence, control statements, arrays, functions and files.

SECTION-B

Case Study Introduction to C++: Character set, keywords, identifiers, constants, variables, operators, operands, operator precedence, control statements, arrays, functions and files, introduction to classes and objects and inheritance.

Text Books:

1. Andrew Hunt and David Thomas, The Pragmatic Programmer- Pearson Addison-Wesley
Professional: 1st edition.
2. Donald E. Knuth, The Art of Computer Programming- Addison-Wesley; 1st edition.
3. Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, and Clifford Stein, Introduction to Algorithms-The MIT Press, 3rd edition
4. Balagurusamy, E, Object Oriented Programming with C++, McGraw Hills, 8th Edition

DCA112P: Software Lab-1 (Based on paper DCA112T Operating system and office automation Lab)

Maximum Marks for continuous examination: 50 **Lectures to be delivered: 40-50**
Minimum Pass Marks: 35% **Time allowed: 3 Hr**

A) Course Objective: This laboratory course will comprise exercises to supplement what is learnt under paper DCAD1101T and DCAD1102T

1. Introduction to Operating Systems:

- Installing and configuring different operating systems (e.g., Windows, Linux)
- Exploring the file system and directory structure
- Working with file management operations (create, copy, delete files and folders)
- Task management (running processes, terminating processes)

2. Introduction to Document Processing:

- Creating and formatting documents using word processing software (e.g., Open Office Writer, Google Docs)
- Inserting and formatting text, images, tables, and other elements
- Applying styles, fonts, and paragraph formatting
- Working with headers, footers, and page numbering
- Spell checking and proofreading

3. Spreadsheet Operations:

- Creating and formatting spreadsheets using spreadsheet software (e.g., Open Office Calc, Google Sheets)
- Entering and editing data in cells
- Using formulas and functions for calculations
- Creating charts and graphs to visualize data
- Sorting and filtering data

4. Computer Hardware and Assembly:

- Disassembling and assembling a computer system
- Identifying and labeling hardware components
- Understanding the role and functionality of each component
- Troubleshooting hardware issues and replacing components
- Exploring computer architecture and memory hierarchy

The break up of marks for the practical will be as under:

Lab Record : 20 Marks
Viva Voce : 10 Marks

Practical Work : 20 Marks

DCA113P: Software Lab-II (Based on paper DCA113T Computer Programming Lab)

Maximum Marks for continuous examination: 50 **Lectures to be delivered: 40-50**
Minimum Pass Marks: 35% **Time allowed: 3 Hr**

A) Course Objective: This laboratory course will comprise exercises to supplement what is learnt under paper DCAD1103T

1. Introduction to Programming Concepts Writing a program to print "Hello, World!" in a programming different language

2. String Manipulation. Writing a program to concatenate two strings

3. Array Manipulation Writing a program to find the largest and smallest elements in an array

4. Function Implementation

5. File Handling

The break up of marks for the practical will be as under:

Lab Record	: 20 Marks
Viva Voce	: 10 Marks
Practical Work	: 20 Marks

DCA121T Computer Network and Internet

Maximum Marks for External examination: 70 **Lectures to be delivered: 40-50**
Maximum Marks for continuous assessment: 30 **Time allowed: 3 Hr**
Minimum Pass Marks: 35%

A) Course Objective: The objective of this course is making students learn the basics of computers, software, and how technology impacts our lives. Through simple explanations, students will explore concepts like digital tools, internet usage, and basic troubleshooting. By the end, students will have a clear understanding of the role of technology in various fields, equipping them with essential skills for navigating the digital world with confidence.

B) Instructions For the Paper Setter: The question paper will consist of three sections, Section A, B & C. Section A & B will have four questions each from the respective sections of the syllabus. Each question will carry 12 marks, which may be segregated into sub parts. Section C will be compulsory with 11 short answer type questions of 02 marks each, which will cover the entire syllabus.

C) Instructions For the Candidate: Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

SECTION-A

Introduction to Computer networks, Applications, Advantages and Disadvantages, Network Topology, Network hardware and Software, Network structure and architecture- point to point, multicast, broadcast, Classification of networks - LAN, MAN and WAN. Reference models, the OSI reference model,

TCP/IP reference model. Comparison between OSI and TCP/IP models, Networks connecting device. Data Communication: Introduction, Relays, Repeaters, Bridges, Routers, Gateways

SECTION-B

Internet Concepts: History of the internet, advantages and disadvantages of internet, WWW, IP addressing, domain name system, introduction and working of e-mail. Introduction to Web browser, Definition features and type internet explorer, Mozilla Firefox and Netscape Navigator, Electronic meeting system.

Text Books:

1. BForousan, Introduction to data communication and networking
2. ASTanenbaum, Computer Networks.

DCA122T Database Management System

Maximum Marks for External examination: 70 **Lectures to be delivered: 40-50**
Maximum Marks for continuous assessment: 30 **Time allowed: 3 Hr**
Minimum Pass Marks: 35%

A) Course Objective: The objective of this course is making students a comprehensive understanding of database principles and management techniques. Participants will learn to design, implement, and optimize databases, gaining proficiency in data modeling, SQL querying, and database administration. By the end of the course, students will be equipped to develop and maintain efficient and secure database systems that meet the data storage and retrieval needs of modern applications.

B) Instructions For the Paper Setter: The question paper will consist of three sections, Section A, B & C. Section A & B will have four questions each from the respective sections of the syllabus. Each question will carry 12 marks, which may be segregated into sub parts. Section C will be compulsory with 11 short answer type questions of 02 marks each, which will cover the entire syllabus.

C) Instructions For the Candidate: Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

SECTION-A

Introduction - Database Management System: Characteristics, Database: Definition, components, definition, characteristics, advantages over traditional file processing system, User of database, DBA and its responsibilities, Database schema, instance. Roles in Database Environment: Database Administrators, Database Designers, End Users, Application Developers. DBMS architecture, data independence. Database languages: DDL, DML, DCL. Database utilities, Data Models, Keys: Super, candidate, primary, unique, foreign. Entity relationship model: Concepts, mapping cardinalities, entity relationship diagram, weak entity sets, strong entity set, aggregation, generalization, converting ER diagrams to tables. Overview of Network and Hierarchical model. Relational Data Model: concepts, constraints. Relational algebra: Basic operations, additional operations.

SECTION-B

Open Office Base: introduction to Open Office Base, working with databases and tables, queries in Access, Applying integrity constraints, Introduction to forms, sorting and filtering, controls, Reports and Macro: creating reports, using Macro.

Text Books:

1. ElmisryNavathe, "Introduction to Database System", Pearson Education India.
2. Open Office Documentation, URL: https://wiki.openoffice.org/wiki/Documentation.

DCA123T Web Development Fundamentals

Maximum Marks for External examination: 70 **Lectures to be delivered: 40-50**
Maximum Marks for continuous assessment: 30 **Time allowed: 3 Hr**
Minimum Pass Marks: 35%

A) Course Objective: The objective of this course is making students learn the basics of core concepts and tools essential for creating functional and visually appealing websites. Through practical lessons in HTML, CSS, and basic scripting, students will learn to structure web content, style layouts, and add interactivity. Upon completing the course, participants will have a solid foundation in web development, enabling them to embark on more advanced projects and continue their journey in the field.

B) Instructions For the Paper Setter: The question paper will consist of three sections, Section A, B & C. Section A & B will have four questions each from the respective sections of the syllabus. Each question will carry 12 marks, which may be segregated into sub parts. Section C will be compulsory with 11 short answer type questions of 02 marks each, which will cover the entire syllabus.

C) Instructions For the Candidate: Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

SECTION-A

Introduction to the Web: Understanding the basic architecture of the World Wide Web, Exploring web browsers and their functionalities, Introduction to URLs and HTTP, Introduction to HTML: Overview of HTML, Creating basic HTML documents and understanding the structure, Working with common HTML tags (e.g., headings, paragraphs, lists), Adding links and images to web pages, Introduction to CSS: Introduction to CSS and its role in web design, Applying basic styles to HTML elements (e.g., colors, fonts, backgrounds), Introduction to CSS selectors and applying styles using classes and IDs, Working with simple layouts and positioning elements.

SECTION-B

Introduction to JavaScript: Overview of JavaScript and its role in adding interactivity to web pages, Basic JavaScript syntax, variables, and data types Working with alerts, prompts, and basic JavaScript functions, Web Page Structure and Layout: Understanding the structure of a web page using HTML5 semantic elements (e.g., header, nav, main, footer), creating simple layouts using HTML and CSS (e.g., header, content, sidebar, footer), Introduction to responsive design and basic media queries

Text Books:

1. Terry Felke-Morris, Web Development and Design Foundations with HTML5- Pearson; 9th edition.
2. Jon Duckett, HTML and CSS: Design and Build Websites -Wiley; 1st edition

DCA122P: Software Lab - III (Based on paper DCA122T Database Management System Lab)

Maximum Marks for continuous examination: 50 **Lectures to be delivered: 40-50**
Minimum Pass Marks: 35% **Time allowed: 3 Hr**

A) Course Objective: This laboratory course will comprise of exercises to supplement what is learnt under paper DCA1202T.

Students are required to practice following:

- Creating tables in Open Office Base By using different ways.
- Creating queries in Open Office Base for selection, projection, Cartesian product, union, Intersection and difference.
- Creating queries in Open Office Base for different types of joins.
- Creating forms in Open Office Base.

The break up of marks for the practical will be as under:

Lab Record : 20 Marks
Viva Voce : 10 Marks
Practical Work : 20 Marks

DCA123P : Software Lab-IV (Based on paper DCA123T Web Development Fundamentals Lab)

Maximum Marks for continuous examination: 50 **Lectures to be delivered: 40-50**
Minimum Pass Marks: 35% **Time allowed: 3 Hr**

A) Course Objective: This laboratory course will comprise of exercises to supplement what is learnt under paper DCA1203T.

1. Creating a Basic HTML Page
2. Styling with CSS
   - Create a CSS file and link it to the HTML page.
   - Apply basic styles to HTML elements such as changing colors, fonts, and backgrounds.
   - Experiment with different CSS selectors to target specific elements.
3. Adding Interactivity with JavaScript:
   - Write a JavaScript function that displays an alert message when a button is clicked.
   - Manipulate the DOM (Document Object Model) by dynamically updating content or changing styles.
4. Responsive Design
   - Design a webpage that adapts to different screen sizes using CSS media queries.
   - Test the responsiveness of the page by resizing the browser window or using a mobile device emulator.
5. Implementing Navigation
   - Build a navigation menu with multiple links using HTML and CSS.
   - Apply styles to indicate the active page or selected menu item.

The break up of marks for the practical will be as under:

Lab Record	: 20 Marks
Viva Voce	: 10 Marks
Practical Work	: 20 Marks