MID-SEMESTER EXAMINATION, November-2025
Full Stack Web Development 1 (CA3117)

Program: MCA   **Semester:1st**

Full Marks: 30   **Time: 2 Hours**

Subject/Course Learning Outcome	*Taxonomy Level	Ques. Nos.	Marks
Explain fundamental concepts of web development, including client-server interaction, software stacks, and developer tools.	L1, L2	1, 2	12
Create structured web pages using HTML elements, attributes, forms, links, tables, and multimedia.	L2, L3, L4, L6	3, 4(a), 4(b)	10
Apply CSS for styling and layout, utilizing selectors, positioning, flexbox, and grid systems to design visually appealing pages.	L2, L3, L4, L6	4(c), 5	8
Develop interactive and dynamic web pages using JavaScript, DOM manipulation, events, and Web APIs.	L2, L3, L5, L6	-	-
Demonstrate best practices in accessibility, responsive design, and performance by applying standards, testing tools, and assistive technologies.	L2, L3, L4, L6	-	-
Build modern frontend applications by integrating CSS preprocessors, React-based single-page applications, and cross-platform mobile development using React Native.	L1, L2, L3, L4, L6	-	-

*Bloom's taxonomy levels: Remembering (L1), Understanding (L2), Application (L3), Analysis (L4), Evaluation (L5), Creation (L6)

Answer all questions. Each question carries equal mark.

1. (a) Describe any two Connectivity Techniques along with their Advantages and Disadvantages.   2

   (b) Describe each layer of TCP/IP using a proper diagram.   2

   (c) Write the differences between WWW & Internet. (Mention at least three points)   2

2. (a) Find the total number of zones and their names, and draw the 2 hierarchy for the following DNS:

   fax4.OdiTravel.wbtourism.gov.in

   (b) Discuss Client-Server Architecture with a proper diagram. 2

   (c) Differentiate between a Static Webpage and a Dynamic 2 Webpage. (at least four)

3. (a) Write an HTML Code for designing the following webpage that 2 contains a Table:

Ok	
Hello	
Day	Good
Night	Mode
Class	
	Web Develop

   (b) Write an HTML Code for designing the following webpage that 2 contains a List:
   - Storage Device
     A. Primary Storage
        o RAM
           i. SRAM
           ii. DRAM
        o ROM
           i. PROM
           ii. EPROM
     B. Secondary Storage
        - SSD
        - CD/DVD

   (c) i) Write the fundamental difference between the "*size*" and 2 "*maxlength*" attributes used with the "*input*" element in HTML.

   ii) What are the 4 major attributes used with the "*form*" element in HTML, and for what purpose and functionality is each attribute used?

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4. (a) Write an HTML program to design the following components of 2 the given webpage:

   Questionnaire

   Which browser do you use? Google Chrome

   Do you like our website?
   Yes   No

   Do you have any suggestions for improvement?

   Would you like to subscribe to our newsletter?

   Submit form

   (b) In HTML, what is the purpose of the "*figure*" element, and 2 which elements are typically included within it as its child elements?

   (c) Rewrite the following HTML code with CSS if we want to modify 2 its background color to YELLOW, text color to RED, set the text size to "20pt", & text style to " sans-serif ".

   HTML Code: **<p>**
   IWT Mid-Term Exam for BCA
   </p>

5. (a) i) Which HTML Tag is used to define the Internal Stylesheet? 2 Mention the reason why it might be recommended to place it in the "*body*" section instead of the "*head*" section?

   ii) Write the proper syntax (Tag & Attributes) to connect the External CSS file with your HTML file.

   (b) Write the fundamental difference in functionality between the 2 following background positions in CSS:

   i) **Relative** ii) **Absolute** iii) **Fixed** iv) **Z-index**

   (c) Describe any two of the following CSS selectors, including their 2 syntax and an example for each.

   i) **ID Selector** ii) **Attribute Selector** iii) **Class Selector**

   End of Questions

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