

	ITER, SIKSHA 'O' ANUSANDHAN (Deemed to be University)		Theory Assignment	
Branch	Computer Application		Programme	MCA
Course Name	Full Stack Web Development 1		Semester	I
Course Code	CA3117		Academic Year	2025/Odd
Assignment- 7	Topics: Using Web Protocols, Using Web Formats, Using Web APIs, Optimizing Websites for Accessibility, Implementing Mobile Applications			GP - 2
Learning Level (LL)	L1: Remembering	L3: Application	L5: Evaluation	
	L2: Understanding	L4: Analysis	L6: Creation	
Q's	Questions			COs LL
1	Explain the process of establishing an HTTP request. Describe the various <i>Header Fields</i> used in HTTP.			CO4 L2
2	What is meant by <i>Status Code</i> , and what does it represent? Define the HTTP status codes 200 and 400 , explaining what each represents.			CO4 L2
3	What are <i>Cookies</i> in the context of HTTP? Explain their purpose and functioning, using a diagram for illustration.			CO4 L2
4	Explain the differences between <i>WebSocket</i> and <i>Long Polling</i> .			CO4 L2
5	Describe XML <i>DTD</i> , including its key features, advantages, and disadvantages. Write the appropriate <i>DTD</i> for the given <i>XML</i> document: <pre> <?xml version="1.0" encoding="UTF-8"?> <booklib> <book> <author>Kunal Das</author> <title bksrl="IN234">IWT Book BCA</title> </book> <book> <author ac="OD1234" bank="SBI">Jamini Roy</author> <title bksrl="US213">OS Book BCA</title> </book> <pubinfo> <pcom>SOA ITER</pcom> <vol>IV</vol> <pdate> 13th <month>Jan</month> 2023 </pdate> </pubinfo> </booklib> </pre>			CO4 L6
6	Explain why <i>JSON</i> is used. Discuss the structure and significance of <i>JSON Schema</i> .			CO4 L4
7	Explain <i>AJAX</i> , including its key features and advantages. Explain how AJAX loads <i>data synchronously</i> and fetches <i>API</i> , illustrating its workflow with a flow diagram.			CO4 L4

8	Describe the differences between <i>Synchronous</i> and <i>Asynchronous Communication</i> , using diagrams to illustrate both.	CO4	L2
9	Write about the Web Content Accessibility Guidelines (<i>WCAG</i>) Explain any 2 of these Guidelines .	CO5	L2
10	Why are <i>Form Accessibility</i> and <i>Keyboard Support</i> important for a webpage? Explain their significance with an example that includes logical validation.	CO5	L4
11	Compare the 3 main types of mobile applications: <i>Native</i> , <i>Web</i> , and <i>Hybrid</i> .	CO6	L4

Note:

1. Assignment carries a weightage of **20 marks out of 100**
2. Course outcome CO4, CO5, and CO6 were covered.

Course Outcomes	CO1	Explain fundamental concepts of web development, including client–server interaction, software stacks, and developer tools.
	CO2	Create structured web pages using HTML elements, attributes, forms, links, tables, and multimedia.
	CO3	Apply CSS for styling and layout, utilizing selectors, positioning, flexbox, and grid systems to design visually appealing pages.
	CO4	Develop interactive and dynamic web pages using JavaScript, DOM manipulation, events, and Web APIs.
	CO5	Demonstrate best practices in accessibility, responsive design, and performance by applying standards, testing tools, and assistive technologies.
	CO6	Build modern frontend applications by integrating CSS preprocessors, React-based single-page applications, and cross-platform mobile development using React Native.