

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY-GURUJADA VIZINAGARAM**  
**III B. Tech II Semester Regular/Supplementary Examinations November -2025**  
**WEB TECHNOLOGIES**  
 (Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions **ONE** Question from **Each unit**  
 All Questions Carry Equal Marks

		<b>UNIT-I</b>	
1.	a)	Describe the structure of an HTML table and discuss the significance of the rowspan and colspan attributes with examples.	[7M]
	b)	Identify the purpose of a Document Type Definition (DTD) in XML.	[7M]
		(OR)	
2.	a)	Define the <img> and <frame> tags and explain their purpose in HTML.	[7M]
	b)	Explain the purpose of the Document Object Model (DOM) and how it is used to manipulate HTML documents with JavaScript.	[7M]
		<b>UNIT-II</b>	
3.	a)	Explain control statements in JavaScript with examples	[7M]
	b)	What is an array in JavaScript? Explain how to create, initialize, and pass arrays to functions.	[7M]
		(OR)	
4.	a)	Write a function in JavaScript that uses recursion to calculate the n <sup>th</sup> Fibonacci number.	[7M]
	b)	Define AJAX and explain the working of XMLHttpRequest in AJAX.	[7M]
		<b>UNIT-III</b>	
5.	a)	What is a web server and List the key features of IIS and XAMPP.	[7M]
	b)	Define a servlet. How do Java Servlets handle HTTP requests and responses? Explain with examples.	[7M]
		(OR)	
6.	a)	What is the role of Tomcat Server in web applications? Define server-side scripting with an example.	[7M]
	b)	What is Java Server Pages (JSP)? Explain the directives in JSP with examples.	[7M]
		<b>UNIT-IV</b>	
7.	a)	Define a variable and explain variable scope in PHP.	[7M]
	b)	What is a regular expression, How are regular expressions used in PHP for pattern matching.	[7M]
		(OR)	
8.	a)	Explain operator precedence, associativity, and their purpose in PHP with a suitable example.	[7M]
	b)	Describe string processing in PHP in detail with suitable examples.	[7M]
		<b>UNIT-V</b>	
9.	a)	Describe the steps involved in executing a SQL query using JDBC and explain each step.	[7M]
	b)	Develop JSP code to insert student records into a MySQL database.	[7M]
		(OR)	
10.	a)	Define the role of DriverManager in JDBC.	[7M]
	b)	Create a PHP script to display records from a MySQL database in a table format.	[7M]

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