

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025

Fourth Semester

Information Technology

IT3401- Web Essentials

Regulations - 2021

Duration : 3 Hrs

Maximum Marks: 100

*PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)*

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	Define IP address.	L1	1	2
2.	What is a relative URL, and how does it differ from an absolute URL?	L1	1	2
3.	Define a style for a paragraph with the font: 12pt and style: Arial.	L1	2	2
4.	Compare GET and POST methods in HTML forms.	L2	2	2
5.	How do you declare a variable in JavaScript? Provide an example.	L1	3	2
6.	Mention how to access the value of textbox using JavaScript.	L1	3	2
7.	How do you concatenate two strings in PHP?	L1	4	2
8.	Explain the function of substr() in PHP.	L2	4	2
9.	Define Session in servlet.	L1	5	2
10.	Define cookies in web applications.	L1	5	2

*PART - B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)*

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a i Compare and contrast the roles of TCP/IP and UDP in data transmission over a network.	L4	1	8
	ii How do web servers handle requests from multiple clients concurrently and what strategies are employed to balance the load effectively?	L2	1	8
	Or			
	b i Analyze the working of Web based Client-Server Model.	L4	1	8
	ii Compare and contrast the client-side and server-side scripting.	L2	1	8
12.	a i Make the form for online railway reservation System with inclusion of all basic tags of HTML.	L3	2	8
	ii You are developing an educational website and need to add a tutorial video that should not rely on third-party platforms. How would you use the <video> element in HTML to embed a self-hosted video, and how would you handle browser compatibility and multiple video formats (e.g., MP4, WebM, Ogg)?	L3	2	8

Or

	b	i	You want to apply different styles to links based on their state (e.g., visited, active, hover). How would you use link pseudo-classes such as :link, :visited, :hover, and :active to style these different states of a hyperlink?	L3	2	8
		ii	You are designing the landing page's headline that says "Innovate with Us." You want each letter of the headline to appear one by one with a delay to create a typing effect. How would you implement this animation using CSS keyframes and animation-delay to reveal the text in sequence?	L3	2	8
13.	a	i	You have a credit card payment form with fields like card number, expiry date, CVV, and cardholder name. Construct JavaScript validation code to ensure: Card number should be a valid credit card number. Expiry date should be in the format MM/YYYY and should not be expired. CVV should be a 3 or 4-digit number. Cardholder name should contain only alphabets.	L3	3	8
		ii	You have an array that stores available products in the inventory. Each product has properties like name, price, and stock. Design a function that checks if an item is in stock before adding it to the cart. If it's not available, display an appropriate message. Or	L3	3	8
	b	i	In the task management application, each task has a name, a due date, a priority level, and a completed status (true or false). Construct a JavaScript code snippet that declares and initializes variables for a task named "Finish Project", due date of "2024-10-30", priority level of "High", and completion status as false.	L3	3	8
		ii	You need to create a shopping cart array where each item is represented as an object with properties like name, price, and quantity. Design a function to add an item to the cart and another function to remove an item by its name.	L3	3	8
14.	a	i	What is the difference between a constant and a variable in PHP, and when would you use one over the other?	L2	4	8
		ii	Construct a PHP script that checks if the username and password entered by a user match predefined value. Or	L3	4	8
	b	i	How would you handle the uploaded file to store it on the server?	L2	4	8
		ii	Construct a PHP script to create a simple file upload form.	L3	4	8
15.	a	i	Explain about Servlet Life cycle.	L2	5	8
		ii	Outline the significance of HTTP response headers in servlet programming. Or	L2	5	8
	b	i	Interpret database connectivity.	L2	5	8
		ii	Explain the application of database with an example.	L2	5	8