



VIT

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

REG.NO.:

SCHOOL OF COMPUTER SCIENCE ENGINEERING AND INFORMATION SYSTEMS CAT-2

WINTER SEMESTER(WEI) 2025-2026

SLOT:C2+TC2

Programme Name & Branch : B.Tech(IT)
Course Code and Course Name : BITE304L- Web Technologies
Faculty Name(s) : Dr.P.Ushapreethi, Dr.Kavitha B.R, Dr. Vijayan R, Dr.Mareeswari V
Class Number(s) : VL2025260502997, 2994, 2986, 3006
Date of Examination :17-03-2026
Exam Duration : 90 minutes
Maximum Marks: 50

General instruction(s):

- Answer All Questions
 - M - Max mark; CO – Course Outcome; BL – Blooms Taxonomy Level (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)
- Course Outcomes
CO2- Use JavaScript and JQuery to create dynamic web pages.
CO3- Formulate web applications that employ the MVC architecture and integrate Client and Server using the AJAX.
CO4- Exhibit the working of server-side scripts and open-source databases

Q. No	Question	M	CO	BL
1.	Design an interactive Stress Buster webpage using jQuery . The page contains multiple paragraphs with nice jokes. Write a jQuery program that: a) Colors the first paragraph in blue and Colors the last paragraph in red when "Alter-Color" button is pressed. b) Hides all odd-indexed paragraphs when "Hide-odd" button is pressed.. c) Adds a border to even-indexed paragraphs when "even-border" button is pressed. d) Hidden paragraphs become visible, when a "Show-All"button is clicked e) The styles reset dynamically if the "Reset" button is clicked.	10	2	6
2.	Develop an Employee Management Web Application.Employee data is stored in a JSON file (employees.json) on the server. a) Write a jQuery/Javascript AJAX program to Fetch employees.json; Display employees based on selected department; Show employee details (ID, Name, Salary, Department) b) Modify the program so that Only employees with salary above ₹50,000 are displayed; A loading message appears while fetching data and an error message is shown if the file fails to load	10	3	6
3.	Develop a Movie Ticket Booking System using Node.js and Express.js . Write an Express.js program that Displays a movie booking form which accepts movie_name, show_time, and ticket_count using GET method; Calculates total cost and displays confirmation page; If tickets_count> 5, display "Maximum 5 tickets allowed"; If any field is missing, return 400 Bad Request; Display available seats dynamically (assume 50 total seats).	10	3	6



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4.	Write MongoDB Queries for the Following: i. Create a database named “StudentMgmt” and create a collection called “StudentDetails” without using createCollection(). Verify whether the database and collection are created or not. ii. Insert any four documents using insertOne() similar to table given. iii. Retrieve all students belonging to the CSE department. iv. Find students who Scored more than 150 total marks and Belong to semester 5 v. Add 5 grace marks to students who Scored totalMarks between 140 and 149 vi. Insert a new field with value (VAC:50) in all the documents. vii. Delete the first student record where: examYear is before 2020 and department is "IT" viii. Show the documents in descending order based on mark 1. <table><tr><th>studentId</th><th>name</th><th>departm ent</th><th>semes ter</th><th>marks 1</th><th>marks 2</th><th>total Marks</th><th>result</th><th>exam Year</th></tr><tr><td>101</td><td>Anitha</td><td>CSE</td><td>5</td><td>85</td><td>72</td><td>157</td><td>Pass</td><td>2019</td></tr><tr><td>102</td><td>Rahul</td><td>IT</td><td>4</td><td>78</td><td>69</td><td>147</td><td>Pass</td><td>2025</td></tr><tr><td>103</td><td>Meena</td><td>CSE</td><td>5</td><td>90</td><td>88</td><td>178</td><td>Pass</td><td>2024</td></tr><tr><td>104</td><td>Karthi</td><td>ECE</td><td>4</td><td>60</td><td>55</td><td>115</td><td>Pass</td><td>2020</td></tr><tr><td>105</td><td>Divya</td><td>IT</td><td>5</td><td>45</td><td>40</td><td>85</td><td>Fail</td><td>2018</td></tr><tr><td>106</td><td>Arun</td><td>CSE</td><td>4</td><td>70</td><td>65</td><td>135</td><td>Pass</td><td>2025</td></tr></table>	studentId	name	departm ent	semes ter	marks 1	marks 2	total Marks	result	exam Year	101	Anitha	CSE	5	85	72	157	Pass	2019	102	Rahul	IT	4	78	69	147	Pass	2025	103	Meena	CSE	5	90	88	178	Pass	2024	104	Karthi	ECE	4	60	55	115	Pass	2020	105	Divya	IT	5	45	40	85	Fail	2018	106	Arun	CSE	4	70	65	135	Pass	2025	10	4	3
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5.	A company plans to develop an Event Management Web Application using Node.js, Express.js, and MongoDB. Consider the collection with the fields EventId(int), EventName(string), EventCapacity(int) ManagerID(int) and EventStatus(String). Create an HTML form using NodeJS and express i. To receive options from user (n,x) to shortlist only first n number of events based on eventCapacity with value x. ii. To receive update option for a new field (rating) with value (1-10) and update it the documents where EventStatus is “completed”.	10	4	6																																																															
