

**RV COLLEGE OF ENGINEERING®**  
(An Autonomous Institution affiliated to VTU)  
I Semester B. E. Examinations May-2023

Common to all programs

**INTRODUCTION TO WEB PROGRAMMING (ELECTIVE)**

Time: 03 Hours

Maximum Marks: 100

Instructions to candidates:

1. Answer all questions from Part A. Part A questions should be answered in first three pages of the answer book only.
2. Answer SIX full questions from Part B. In Part B question numbers 2 and 11 are compulsory. Answer any one full question from 3 and 4, 5 and 6, 7 and 8 & 9 and 10.

**PART-A**

1	1.1	Which method does not support transparency for representing images?	01
	1.2	_____ protocol is used to transmit information on the world wide web.	01
	1.3	Discuss the usage of rowspan and colspan attribute.	02
	1.4	Write the output of the following: JavaScript Code: < script type = "text/javascript" > var a = 8 + "hello"; var b = 10 + "10"; document.write(a); document.write(b); </script >	01
	1.5	List any two applications of Javascript.	01
	1.6	State the purpose of External Style sheet.	01
	1.7	In what order must property values appear in the list of a shorthand font property?	01
	1.8	Discuss the purpose of text-indent property.	01
	1.9	What are the types of lists available in HTML?	01

**PART-B**

2	a	Define URL. Explain all parts of a URL. For the URL: <u>https://mars.jpl.nasa.gov/msl/images/PIA16082_Mitrofanov1F-thm.jpg,</u> What does each of the following mean? https, marsjpl.nasa.gov, msl/images, PIA16082_Mitrofanov1F-thm.jpg	07
	b	With an example, describe the general format of HTTP Response.	07
3	a	Discuss the basic table structure in XHTML along with the important table tags.	04
	b	Demonstrate lists in XHTML. Give examples to implement various types of lists.	10

**OR**

4	a	Define form in XHTML. List the major attributes of the form. Summarize any six form components with examples.	10																																				
	b	Compare and contrast HTML and XHTML.	04																																				
5	a	Explain the following selector forms with an example for each: i) Simple Selector ii) Class Selector iii) Generic Selector iv) ID Selector v) Universal Selector	10																																				
	b	Give an example for Conflict resolution in CSS by considering different selectors and weight of the specification.	04																																				
OR																																							
6	a	Describe different levels of CSS with relevant examples.	10																																				
	b	Design an XHTML page to demonstrate wrapping of text around an image. The image should be placed right.	04																																				
7	a	Illustrate keyboard input and screen output in JavaScript with examples.	06																																				
	b	Design a javascript code to find sum of N natural numbers using user defined function.	08																																				
OR																																							
8	a	Explain the different ways to include javascript into an XHTML document.	07																																				
	b	Design a javascript code to find largest and smallest element in an array of numbers.	07																																				
9	a	Define DBMS. Discuss Relational Database Management System with examples.	04																																				
	b	Consider tables Table 1: Employee Details and Table 2: Employee Salary.  <div style="text-align: center;"><b>Table 1: Employee Details</b></div> <table border="1"><thead><tr><th>Empld</th><th>FullName</th><th>ManagerId</th><th>DateOfJoining</th><th>City</th></tr></thead><tbody><tr><td>121</td><td>John Snow</td><td>321</td><td>01/31/2019</td><td>Toronto</td></tr><tr><td>321</td><td>Walter White</td><td>986</td><td>01/30/2020</td><td>California</td></tr><tr><td>421</td><td>Kuldeep Rana</td><td>876</td><td>27/11/2021</td><td>New Delhi</td></tr></tbody></table> <div style="text-align: center;"><b>Table 2: Employee Salary</b></div> <table border="1"><thead><tr><th>Empld</th><th>Project</th><th>Salary</th><th>Variable</th></tr></thead><tbody><tr><td>121</td><td>P1</td><td>8000</td><td>500</td></tr><tr><td>321</td><td>P2</td><td>10000</td><td>1000</td></tr><tr><td>421</td><td>P1</td><td>12000</td><td>0</td></tr></tbody></table> i) Remove a record from Employee Details table ii) Drop Employee salary table from the database. iii) Find the information of employees whose salary is greater than 8000. iv) List the details of employees who is working on the project P1.	Empld	FullName	ManagerId	DateOfJoining	City	121	John Snow	321	01/31/2019	Toronto	321	Walter White	986	01/30/2020	California	421	Kuldeep Rana	876	27/11/2021	New Delhi	Empld	Project	Salary	Variable	121	P1	8000	500	321	P2	10000	1000	421	P1	12000	0	10
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10	a	Explain the three schema architecture in Database Management System.	04
	b	Consider tables Table 1: Employee Details and Table 2 : Employee Salary (From Q.No 9b) <ul style="list-style-type: none"> <li>i) Write an <i>SQL</i> query to fetch those employees who live in Toronto and work under the manager with ManagerId-321.</li> <li>ii) Write an <i>SQL</i> query to find the employee id whose salary lies in the range of 9000 and 15000.</li> <li>iii) Write an <i>SQL</i> query to find the maximum, minimum, and average salary of the employees.</li> <li>iv) Write an <i>SQL</i> query to fetch the EmpId and FullName of all the employees working under the manager with id -'986'.</li> <li>v) Write an <i>SQL</i> query to fetch the different projects available from the EmployeeSalary table.</li> </ul>	10
11	a	Explain pattern matching. Discuss various methods used in pattern matching? Design an <i>XHTML</i> document with a JavaScript code that contains a function called test_USN which tests the University Seat Number of the format: [1 - 4][A - Z][A - Z]22[A - Z][A - Z][0 - 9][0 - 9][0 - 9].	10
	b	Illustrate selection and looping statements in Javascript with syntax. Design an <i>XHTML</i> document with a JavaScript code to create a simple multiplication table by reading the number of rows and columns from the user.	10