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**PRESIDENCY UNIVERSITY**

**Bengaluru**

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| **End - Term Examinations – JANUARY 2025** |
| **Date:** 10 – 01- 2025 **Time:** 09:30 am – 12:30 pm |

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| **School:** SOCSE | **Program:** B Tech -COM/CEI/CCS/CIT/  CSG/CST/CDV/CBC/CSD/CBD/ISE/ISR/ISB/IST/ISD | |
| **Course Code :** CSE2067 | **Course Name : Web Technologies** | |
| **Semester**: V | **Max Marks**: 100 | **Weightage**: 50% |

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| **CO - Levels** | **CO1** | **CO2** | **CO3** | **CO4** | **CO5** |
| **Marks** | **26** | **36** | **38** |  |  |

**Instructions:**

1. *Read all questions carefully and answer accordingly.*
2. *Do not write anything on the question paper other than roll number.*

**Part A**

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| **Answer ALL the Questions. Each question carries 2marks. 10Q x 2M=20M** | | | | |
| **1** | How would you use hypertext links to connect related web pages? | **2 Marks** | **L1** | **CO1** |
| **2** | Explain the role of the <p>, <pre>, and <hr> elements in HTML. | **2 Marks** | **L2** | **CO1** |
| **3** | Name the list types in HTML? | **2 Marks** | **L1** | **CO1** |
| **4** | List any two features of XML. | **2 Marks** | **L1** | **CO2** |
| **5** | Describe Contextual selectors in CSS with an example. | **2 Marks** | **L2** | **CO2** |
| **6** | List any two differences between Block and Inline elements in CSS. | **2 Marks** | **L1** | **CO2** |
| **7** | What is the difference between local and global variables in PHP with a simple example? | **2 Marks** | **L1** | **CO3** |
| **8** | What is a superglobal array in PHP? Name any two superglobal arrays. | **2 Marks** | **L1** | **CO3** |
| **9** | Describe the purpose of $\_GET and $\_POST arrays with examples. | **2 Marks** | **L2** | **CO3** |
| **10** | Discuss the process of connecting to a MySQL database using PHP. | **2 Marks** | **L1** | **CO3** |

**Part B**

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| **Answer the Questions Total 80 Marks.** | | | | | |
| **11.** | **a.** | How can the different types of lists in HTML be used effectively? Provide detailed examples of each type and explain their structure, usage, and formatting in web design. | **10 Marks** | **L2** | **CO1** |
|  | **b.** | Design a webpage to display the statistics of placements in Presidency University. The table should contain company name, package offered and no of students placed. The table attributes like width, height, color , alignment and background color should be used. | **10 Marks** | **L3** | **CO1** |
| **Or** | | | | | |
| **12.** | **a.** | What is image mapping in HTML? Describe its purpose and explain how to create image maps using the <map> and <area> elements. Provide examples to demonstrate the creation of different types of image maps. | **10 Marks** | **L2** | **CO1** |
|  | **b.** | Design a Form to apply for the position of junior engineer in BESCOM. The form should contain the sections and fields in the following format 1) Personal details: First name, Last name and age 2) Certificate Upload section 3) Marks section: tenth and degree marks fields 4) Engineering Specialization: dropdown should have all engineering specialization options like (CSE, IT, ECE, EEE, CIVIL, MECHANICAL) 5) Submit and reset button | **10 Marks** | **L3** | **CO1** |
|  |  |  |  |  |  |
| **13.** | **a.** | What are the different types of CSS (Cascading Style Sheets)? Explain the characteristics, advantages, and use cases for each type of CSS. Provide examples to demonstrate how each type is applied. | **10 Marks** | **L2** | **CO2** |
|  | **b.** | Design a navigation bar with a logo, navigation links, and a search bar. The navigation bar should be fixed to the top of the page and have a dark background with light text.   * How would you style the navigation bar to have a dark background and light text? * How would you make the navigation bar fixed to the top of the page? * How would you create a responsive navigation bar that adjusts to different screen sizes, perhaps using a dropdown menu for smaller screens? | **10 Marks** | **L3** | **CO2** |
| **Or** | | | | | |
| **14.** | **a.** | How can you enhance the visual feedback of interactive elements (such as links and buttons) on a webpage using pseudo-classes? Discuss how you would style these elements for hover, focus, and active states, and provide code snippets to illustrate your styling choices. | **10 Marks** | **L2** | **CO2** |
|  | **b.** | Design a responsive image gallery that displays multiple images in a grid layout. The images should resize to fit the screen and have a hover effect.   * How would you use CSS to create the grid layout and style the images? * How would you use CSS to create a hover effect that changes the image opacity or adds a border? * How would you make the image gallery responsive, so it adapts to different screen sizes? | **10 Marks** | **L3** | **CO2** |

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| **15.** | **a.** | You are working on an employee directory system, and the employee data is stored in an XML file. Define an XML schema for student records with attributes such as name, Roll no, branch, and admission date. Develop an XSLT stylesheet to present this employee information in an HTML table. | **10 Marks** | **L3** | **CO2** |
|  | **b.** | You are designing a simple logging system where logs are stored in a file named logs.txt. Perform the following operations:   * Read and display all log entries. * Update a new log entry to the file. * Clear all older logs and write a new log entry to the file. | **10 Marks** | **L3** | **CO3** |
| **Or** | | | | | |
| **16.** | **a.** | Suppose you are managing sales data, and the sales data is stored in XML. Design an XML schema to represent sales details with attributes such as order ID, customer name, product ID, quantity, and price. Develop an XSLT stylesheet to transform this XML into an HTML page displaying the product inventory. | **10 Marks** | **L3** | **CO2** |
|  | **b.** | Ram wants to know the grade based on the marks he has scored in Maths exam. Write and execute a PHP program to check his grade based on the marks he has scored using if-else statement. Conditions: First get input form the user (through browser) then If marks are 60% or more, grade will be First Division, If marks between 45% to 59%, grade will be Second Division, If marks between 33% to 44%, grade will be Third Division, If marks are less than 33%, student will be Fail. | **10 Marks** | **L3** | **CO3** |

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| **17.** | **a.** | Build a system for managing a product inventory. It should allow users to add new products, update existing products, view product details, and delete products from the inventory.  Tasks:  •Design a database schema for storing product information such as name, description, price, and quantity.  •Create PHP scripts to interact with the database for CRUD (Create, Read, Update, Delete) operations.  •Implement forms for adding new products and updating existing ones.  •Display a list of products with their details, and provide options for editing or deleting each product.  Ensure proper error handling and validation for user input. | **20 Marks** | **L3** | **CO3** |
| **Or** | | | | | |
| **18.** | **a.** | Build a customer management system for a small business. It should allow employees to add new customers, update existing customer information, view customer details, and delete customers.  Tasks:  •Design a database schema to store customer information such as name, email, phone number, and address.  •Create forms for adding new customers and updating existing ones.  •Display a list of customers with their details, and provide options for editing or deleting each customer.  •Implement search functionality to allow users to find customers by name or email. | **20 Marks** | **L3** | **CO3** |

**\*\*\*\*\* BEST WISHES \*\*\*\*\***