| Name: | | | | |
|-----------------------|--|--------------|-----------------|--|
| Enrolm | ent No: | | | |
| | UNIVERSITY OF PETROLEUM AND ENERGY STU | UDIES | | |
| Course | End Semester Examination, May 2022 E: Front-end Web Application Development | Semester: IV | | |
| Program: BCA (IOT) | | | Time : 03 hrs. | |
| Course Code: CSBC2016 | | | Max. Marks: 100 | |
| Instruc | ctions: Please attempt all the questions. | | | |
| | SECTION A (5Qx4M=20Marks) | | | |
| S. No. | | Marks | CO | |
| Q 1 | Differentiate between inline, internal and external CSS. Also mention their precedence order. | 4 | CO1 | |
| Q 2 | Explain following CSS properties: transform, float, inline-block, fixed. | 4 | CO1 | |
| Q 3 | What are static and dynamic web pages? | 4 | CO2 | |
| Q 4 | Explain the DOM concept in Javascript along with an example. | 4 | CO3 | |
| Q 5 | Explain the Java EE architecture with block diagram. Using that diagram explain web container and EJB container. | 4 | CO4 | |
| | | | | |
| | SECTION B | | 1 | |
| | (4Qx10M=40 Marks) | | | |
| Q 6 | i. What is servlet? Explain the advantages of using servlets. | 5+5 CO4 | | |
| | ii. Write a servlet code to display "hello world" message on a web page. | | | |

| | hover. Time Slot | 2:00 pm to 5:00 pm | | | | |
|-----|--|--------------------|-------------|-----------------------------|-------|-----|
| | Monday to Friday | Theory classes | Lunch break | Lab sessions | 5 + 5 | CO2 |
| | Saturday | Doubt sessions | Lunch break | Extra curricular activities | | |
| | Sunday | | Holiday | | | |
| | ii. Explain with example how to use tooltip and flexbox. | | | | | |
| | | | | | | |
| Q 8 | i. What do mean by responsive web design? What are the requirements for creating a responsive web design? | | | | | |
| | ii. Create a grid structure in a web page with 5 rows and 4 columns. Merge 3 columns in first row and 3 rows in third column. | | | | | CO2 |
| Q9 | What are the different events of Javascript? Explain any three with examples. Write complete code to create a div element and change the content and style of a div element when mouse pointer is over it and return to the original style when the mouse leaves the div. | | | | | |
| | Or | | | | | |
| | Write a HTML and Javascript code for number guessing game. Initially, the code generates a random number between 0 to 10. When user presses the start button, he is asked to enter a number between 0 to 10. If the number entered by the user matches the random number, display "You guessed correct", else generate an alert "you guessed wrong. Make another guess". The user can either press ok to make the next guess or press cancel to quit the game. | | | | | CO3 |

| | SECTION-C (2Qx20M=40 Marks) | | |
|------|---|--------|-------------|
| Q 10 | i. Design a customer registration form for online shopping using HTML and CSS. The form will have Customer Name, Mobile number, Gender (radio button), Email Id, and Address as fields and Submit and Reset. All fields are required. | 10 +10 | CO3, CO4 |
| | ii. Read the above customer details at backend using Servlet or JSP. | | |
| Q 11 | Write HTML, CSS and Javascript code for a basic calculator that can perform addition, subtraction, multiplication and division. | | |
| | Or | | |
| | Write HTML, CSS and Javascript code for Strings Game. A user presses a start button and is asked to enter a String. The string is then displayed in a div section. The user can perform following string operation by pressing the required button for them: | 20 | CO3 |
| | a. Palindrome - Check if the string it is a palindrome or not. b. Reverse - Display the reversed string. c. Vowels - Display the number of vowels. The game should also give an alert if the user leaves the string input blank. | | |