Department of Computer Science and Engineering

Semester: Spring 2023-24
Course Title: Internet and Web Technology
Full Marks: 30
Course Instructor: Dr. Akhilesh Kumar

Examination: Mid Semester
Course Code: CA3403
Duration: 2 Hrs.
Semester: MCA 4th Semester

(Answer All Questions)

1. Create a form program that collects the First Name, Last Name, Email, User ID, Password and Confirm Password from the user. All the input are mandatory and Email address entered should be in Correct format. Also, the value entered in the password and confirm password textboxes should be the same. After validating using JavaScript, In output display proper error message in red color just next to the textbox where there is an error. [5]

2.
   a. Write a Java Script program to calculate Area and circumference of a Circle. [3]

   b. Explain about AJAX and its Application. [3]

3.
   a. Create a JavaScript program to convert temperature from Celsius to Fahrenheit andvice-versa. [3]
   b. Define XML Parser and its types. [3]

4.
   a. Create a calculator with digit buttons and *, / ,+, - ,= buttons. There will be a textbox as a calculator screen, which will be updated according to the click button. The result will be also be show on calculator screen, on clicking = button. [5]

   b. Describe MVC Architecture and also explain its components, features and advantages. [4]

5. Write a program in JavaScript and enter valid marks in the Textbox and Find Grade according to following Condition. [4]

   - >=80 then Result = "A" Grade
   - >=60 then Result = "B" Grade
   - >=45 then Result = "C" Grade
   - >=33 then Result = "D" Grade
     Otherwise "F" Grade.

Department of Computer Science and Engineering

Semester: Spring Semester 2023-24
Course Title: Internet and Web Technology
Full Marks: 50
Course Instructor: Dr. Akhilesh Kumar
Date of Exam: 06.05.2024

Examination: End Semester
Course Code: CS 3403
Duration: 3 Hrs.
Semester: MCA 4th Semester

(Answer All Questions)

1.

    a. Prepare Electricity bill from user input based on a given tariff. [5]
    Write a PHP program to input previous reading and present reading and prepare an electricity bill using the following conditions

Units consumed	Rate
<100	Rs 3 /unit
Between 100 to 200	Rs 4/unit
Between 200 to 300	Rs 5/unit
>300	Rs 6/unit

    b. Selection for an army camp for boys is based on the following criteria
        i)   Age group – 18 to 25
        ii)   ii) Height - >=160cms
        iii)   iii) Weight – 60Kgs
    SC/St students are given a relaxation of 5cms height & 5kgs weight.
    Accept the necessary details through form, do necessary validations and prepare selection list using PHP. [5]

2. [5]

    a. Create a HTML file name as exam .html.
    (i)   Display four Question and have four optional answers using Radio Buttons.
    (ii)   Display the Result in Alert box.
    (iii)   Reset the Page into initial condition for the next Exam.

    b. Create a Node.js Application that accepts first name, last name of a Person and define a Module that concatenate first name and last name. [3]

    c. How Does Transmission Control Protocol (TCP)/IP Work? [2]

3.   a. Design a PHP form for online driving license issue. Consider the fields- Name, Age and Address (text boxes). If the age is less than 18, issue an error message. Otherwise compute the expiry date [Today's date+ 15years] of the license. Assume that the validity of the driving license is for 15 years. Display the license with details using PHP. [5]

b. Explain the following Internet Protocol with different uses. [1+1+1=3]

- SFTP (Secure File Transfer Protocol)
- HTTPS (Hyper Text Transfer Protocol Secure)
- UDP (User Datagram Protocol)

c. Write an HTML code to illustrate the usage of the following. [1+1=2]

(i) Order list

(ii) Unorder list

4. a. Write a PHP program to check which number nearest to the value 100 among two given integers. Return 0 if the two numbers are equal. [4]
Input:
88, 94
95, 95
99, 80

b. Explain with suitable example of following PHP function. [4]
(i) abs ()
(ii) floor()

c. Describe the advantages of using PHP. [2]

5. a. What do you mean by GET and POST methods with different uses in PHP. Elaborate with suitable example. [4]

b. Compare and contrasts the different features of JSP and ASP. [3]

c. Demonstrate the any two pseudo-elements in CSS with suitable examples. [3]

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