

TR/Sem V/CBCGS/IT/MJ2019/15-05-2019

(3 Hours)

[Total Marks: 80]

N.B.

- 1) Question No. 1 is compulsory
- 2) Solve any three questions out of the remaining five questions.

- 1
  - a) Draw and illustrate 3-tier Web Architecture. (5)
  - b) What are the characteristics of Rich Internet Application? (5)
  - c) Explain string functions in PHP. (5)
  - d) Explain UDDI. (5)
- 2
  - a) Explain Geo-location and media query with an example in HTML5 and CSS3. (10)
  - b) Create a HTML form to accept name (TextField), address (TextArea), gender (Radio), and Country (DropDown) fields from user, store it into the My SQL database using PHP program. (10)
- 3
  - a) Write an external stylesheet and link it with HTML code. The stylesheet should include the following (10)
    - i. The web page will have the background image "img1.jpg".
    - ii. The table headings will have red background color.
    - iii. Background color of alternate paragraphs are different.
    - iv. The hyperlinks on the web page will not have underline.
  - b) Draw the diagram for AJAX Web application model and Traditional Web application model and compare them. (10)
- 4
  - a) Design a web page to maintain a Library Catalogue using XML. It should maintain the name of the book, author, publisher, and year of publishing. Format it in the tabular manner using XSLT. (10)
  - b) Explain "Window" object of JavaScript DOM. Write a JavaScript code to change the background color of the webpage automatically after every 5 seconds. (10)
- 5
  - a) Write code to process online Alumni information for your college. Create forms to get name, address, date of birth, and email id. Use check boxes for taking hobbies and radio buttons for selecting branch. Write JavaScript code to validate the following: (10)
    - i. User has filled all the fields prior to form submission
    - ii. Valid email-id (with '@' and '.')
    - iii. Age validation using DOB ( $\geq 22$  years)
  - b) Write HTML5 code for embedding the audio and video elements in the web page. (10)
- 6
  - a) Explain in detail JSON mash ups with neat diagram. (8)
  - b) Explain the role of a cookie and differentiate it from sessions. Write a PHP script to check whether the cookie is set or not. (6)
  - c) Explain the features and applications of Django. (6)

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