CBCS SCHEME

20MCA41

Fourth Semester MCA Degree Examination, Jan./Feb. 2023 Advances in Web Technologies

Max. Marks: 100

MANGALOR Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1 a. How to create functions in PHP? Explain pass by value program. (10 Marks)
b. Explain string handling functions in PHP with suitable examples. (10 Marks)

OR

2 a. Explain file handling functions in PHP with examples. (10 Marks)

 What are Arrays in PHP? Explain creation of arrays and predefined functions dealing with arrays.

Module-2

- 3 a. Explain the following string methods in Ruby capitalize, append, chomp, swap case and concatenation. (10 Marks)
 - b. Illustrate built-in methods of arrays and lists in Ruby with simple example. (10 Marks)

OR

4 a. Write a Ruby code to add two integers.

(07 Marks)

b. Explain the directory structure of rails application with a neat diagram.

(08 Marks)

c. Explain form handling in Rails with an example.

(05 Marks)

Module-3

- 5 a. Differentiate between classical web application and AJAX enables web application with a neat diagram and also list out limitations of traditional web application. (10 Marks)
 - b. What is AJAX? List out AJAX principles and also technologies behind AJAX. (10 Marks)

OR

6 a. Explain steps for creating AJAX applications.

[Note: create Javascript, create XMLHttpRequest objet, use GET for passing data to server, fetch data from the server and display it to client]. (10 Marks)

b. List out built-in properties, methods of XMLHttpRequest object and also explain status codes for the status property of XMLHttpRequest object. (10 Marks)

Module-4

- 7 a. Write a AJAX program for handling multiple XMLHttpRequest objects (2 objects) in the same page. [Use any one method GET/POST]. (10 Marks)
 - b. What are AJAX patterns? Explain predictive fetch and multi-stage download in detail.

(10 Marks)

OR

- 8 a. Illustrate handling of multiple XMLHttpRequest object by using Arrays. (10 Marks)
 - b. Explain the following:
 - (i) Periodic Refresh and Fallback Patterns (ii) Submission Throttling (10 Marks)

Module-5

- 9 a. What is Bootstrap? Explain basic file structure and global styles of Bootstrap. (10 Marks)
 - b. Explain the following:
 - i) Default Grid System ii) Fluid Grid System.

(10 Marks)

OF

- 10 a. Write a short note on:
 - i) Emphasis class
 - ii) Lists
 - iii) Code
 - iv) Tables

v) Buttons

(10 Marks)

b. Explain forms and optional form layouts in Bootstrap with an example. (10 Marks)

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