Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 30143

M.C.A. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2022.

Second Semester

MC 4201 — FULL STACK WEB DEVELOPMENT

(Regulations 2021)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Out line GET and POST methods in HTML.

2. Write an example for an image tag in CSS.

3. What is Web server?

4. List the advantages of NodeJS.

5. Outline the use of Cookies.

6. List out the types of NoSQL databases.

7. What is the purpose of the ReactDOM render( ) method?

8. Compare JS and JSX.

9. Define docker container.

10. What is a community cloud?

PART B — (5 × 13 = 65 marks)

11. (a) Explain JavaScript primitive data types with an example.

Or

(b) Explain the CSS Flexbox properties with an example.

12. (a) Explain the Express framework for developing a Web application.

Or

(b) Write JSON structure for a registration system with full name, DOB, contact number, address, and mail id.

13. (a) How you will add and retrieve data in MongoDB from NodeJS? Explain the process in detail with an example.

Or

(b) Explain the user authentication process in NodeJS with an example.

14. (a) (i) How to use the local storage in JavaScript. Give example. (10)

(ii) What are the limitations in using local storage? (3)

Or

(b) Explain the JavaScript Fetch API process in detail with an example.

15. (a) XConn company established a new data center with the necessary IT infrastructure 5 yrs. back. Now, with an increasing need for new servers for the projects, the company needs to scale up its resources. Which type of scaling methods will be suitable for this requirement? Explain with an example.

Or

(b) Compare Type 1 and Type 2 hypervisors with an example

PART C — (1 × 15 = 15 marks)

16. (a) Explain the steps to implement server-side scripting in the JavaScript for an online ticket booking website.

Or

(b) (i) Why private cloud is considered to be secure when compared with the public cloud services? Justify your answer. (6)

(ii) Compare the merits and demerits of various cloud services. (9)

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