

24NN804

Roll No. _____

Total No. of Pages.: 02

24NN804**MCA II Semester (New Scheme) Main/Back Exam-2023-24****MCA 224 – Full Stack Development****Time : 3 Hours****Maximum Marks: 80****Min. Passing Marks: 26****Instructions to Candidates:**

- Student has to attempt all 10 very short answer type questions (2 marks each).
- Student has to attempt all 5 short answer types questions (4 marks each).
- Student has to attempt all 5 questions (8 marks each).

Use of following supporting materials is permitted during examination. (Mentioned in form No. 205)

1 _____

2 _____

PART A**Attempt all 10 questions. Each question carries two marks.****[2x10=20]**

- Q.1 What are the advantages of using React?
- Q.2 Why do we use ES6?
- Q.3 Why is Redux used?
- Q.4 What is React Router?
- Q.5 What is meant by REST API?
- Q.6 What are Templates in Angular?
- Q.7 What do you mean by the Mobile-first paradigm?
- Q.8 What is Node Package Manager?
- Q.9 What is MongoDB?
- Q.10 Why would you use NoSQL?

P.T.O.

PART B

Attempt all 5 questions. Each question carries four marks.

[4x5=20]

- Q.1. With a suitable example, explain React State and Props.
- Q.2. What is JSON? What are different JSON data types? Explain using supportive examples.
- Q.3. What is data binding? Which type of data binding does Angular support?
- Q.4. What are Pipes in Angular? Explain with the help of a supportive example.
- Q.5. What are the different data types of MongoDB? Explain any two of them in detail using illustrative examples.

PART C

Attempt all 5 questions. Each question carries eight marks.

[8x5=40]

- Q.1. Write a short note on:
 - i. Declaring Variables in ES6
 - ii. ReactDOM
- Q.2. In the context of Redux, explain each of the following in detail:
 - i. State,
 - ii. Actions, and
 - iii. Reducers
- Q.3. What is the Express web framework? What does it do? Explain in detail.
- Q.4. What is interpolation? Why interpolation is used in Angular? Justify.
- Q.5. In the context of MongoDB, perform the following tasks:
 - i. Display a List of Collections in a Database
 - ii. Create a new Collection
 - iii. Add a Document to the created Collection
 - iv. Delete a Document from the Collection
