Batch 2024-2025

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MASTER OF COMPUTER APPLICATIONS (MCA)

EXAMINATION : DECEMBER - 2025

SEMESTER – III

Sub : Full Stack Development (MCA24-305)

Date : 26/12/2025 **Total Marks : 60** **Time: 2.00 pm To 4.30 pm**

Instruction:

1. *All questions are compulsory unless and otherwise stated.*
2. *Bold figures to the right of every question are the maximum marks for that question.*
3. *Candidates are advised to attempt questions in order.*
4. *Answers written illegibly are likely to be marked zero.*
5. *Use of scientific calculators, Log tables, Mollier Charts is allowed.*
6. *Draw neat and labelled diagram wherever necessary.*

Q. 1. Answer the following in 2 - 3 lines. (Any 5) **(10)**

1. What is the CSS Box Model?
2. What is DOM?
3. What is a React component?
4. What is middleware?
5. What is JWT?
6. What is a collection?
7. Define CRUD.

Q. 2. Answer the following in short. (Any 4) **(20)**

1. Write short notes on Flexbox layout with an example.
2. Explain arrow functions, template literals, and destructuring with examples.
3. Explain JSX rules and how JSX is transformed.
4. Explain REST API with examples of routes.
5. Explain schema and model in Mongoose.
6. What is password hashing? Explain with bcrypt.

Q. 3. Answer the following in detail. (Any 3) **(30)**

1. Explain different CSS selectors with examples.
2. Explain array methods with examples.
3. Build a React component that displays products using props (explain code).
4. Explain RESTful API design principles with example project.
5. Explain user authentication workflow.