

CMR ENGINEERING COLLEGE: : HYDERABAD

UGC AUTONOMOUS

III-B.TECH-II-Semester End Examinations (Supply) - December- 2025

FULL STACK DEVELOPMENT

(IT)

[Time: 3 Hours]

[Max. Marks: 60]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 10 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A**(10 Marks)**

1. a) Name the tag used to define a paragraph in HTML. [1M]
- b) Which attribute is used to specify the destination URL in a link? [1M]
- c) Which object is used to make HTTP requests in AJAX? [1M]
- d) What is a constructor in JavaScript classes used for? [1M]
- e) What hook is used to manage state in a functional component? [1M]
- f) What is Redux used for in a React application? [1M]
- g) What is the difference between int and Integer in Java? [1M]
- h) In MVC, which component is responsible for displaying the data to the user? [1M]
- i) What does the term "foreign key" mean in a relational database? [1M]
- j) How does Spring JDBC handle exceptions? [1M]

PART-B**(50 Marks)**

- 2.a) What is HTTP? Explain any two HTTP request methods used by web servers. [5M]
 - b) What are the different types of CSS? Explain with examples. [5M]
- OR**
- 3.a) List and explain any five commonly used UNIX commands with examples. [5M]
 - b) Explain the difference between git and github. Give one example of each. [5M]

- 4.a) What is jQuery? Write the syntax to select an HTML element and change its text. [5M]
- b) What are event listeners in JavaScript? Write an example to handle a button click event. [5M]

OR

5. Describe how to create a simple dropdown menu using HTML, CSS, and JavaScript or jQuery. [10M]
6. Explain in detail about workflow of react and their component and provides with examples of each. [10M]

OR

- 7.a) Describe how data is sent from a client to a server using *fetch()* in JavaScript. Write a simple example. [6M]
- b) What are props and state in React? Compare them with examples. [4M]

8. Explain the spring MVC architecture in web development. How does it help in separating concerns and improving the maintainability of an application? [10M]

OR

9. Describe the architecture of a RESTful API built with Spring Boot. Explain the role of the Controller, Service, and Repository layers in this architecture [10M]

10. Describe how you would configure Spring JDBC in a Spring Boot application. Explain how JDBC Template works with an example of querying a database. [10M]

OR

11. Explain the process of agile development principles and deploying a application. Describe the steps involved. [10M]
