

(FOR THE CANDIDATES ADMITTED

23UDA619

DURING THE ACADEMIC YEAR 2023

ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS: MAY 2026

B.Sc.CS with DA

MAXIMUM MARKS: 75

SEMESTER VI

TIME: 3 HOURS

PART - III

23UDA619 – FULL STACK DEVELOPMENT

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. The purpose of the Front-end framework in Full stack development is ____.
a) to provide the client-side interface b) to manage database
c) to reduce the server load d) to send http requests
2. Which of the following format is supported by MongoDB?
a) BSON b) XML c) SQL d) All of the mentioned
3. What is the main purpose of JSX in React?
a) Database Query Language b) JavaScript Function
c) CSS Styling d) HTML-like syntax
4. Who created Node.js?
a) Brendan Eich b) Tim Berners-Lee c) Ryan Dahl d) James Gosling
5. Which of the following is a wide-column store?
a) Riak b) Cassandra c) Redis d) MongoDB

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. What is the Django stack?
7. What is nvm?
8. What are React class components?
9. What is middleware in Express?
10. What is a collection in MongoDB?

SECTION – B

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Explain the need for Full Stack Development in modern web applications.

(OR)

- b) Describe the MEAN and MERN stack frameworks and their components.

(CONTD 2)

12. a) Write a short note on React and its key features.
(OR)
b) Explain the role of Node.js.
13. a) Explain React class components with suitable example.
(OR)
b) Explain Async State Initialization and its importance in React applications.
14. a) Write a short note on Node Package Manager.
(OR)
b) Explain REST API and describe resource-based HTTP methods.
15. a) What are Documents and Collections in MongoDB?
(OR)
b) Write a short note on the MongoDB Query Language.

SECTION – C**(5 X 8 = 40 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K4 (Or) K5)**

16. a) Discuss the Front-End environment tools used in Full Stack Development.
(OR)
b) Explain the Client–Server architecture structure with a neat diagram.
17. a) Explain the components of the MERN stack.
(OR)
b) Explain the concept of Server-less “Hello World” application in MERN with suitable example.
18. a) Explain in detail the Composing Components.
(OR)
b) Discuss event handling in React with suitable examples.
19. a) Explain how to create a web server using Node.js and serve static resources.
(OR)
b) Explain Request Object, Response Object and Middleware in Express.js.
20. a) Explain MongoDB and its basic features.
(OR)
b) Explain CRUD operations in MongoDB with examples.

Ethical paper