



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai

Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &

Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT)

COIMBATORE-641 035, TAMIL NADU



DEPARTMENT OF COMPUTER APPLICATIONS

16 Marks Question Bank

COURSE: FULL STACK DEVELOPMENT

CLASS: I MCA

UNIT : II

SERVER-SIDE PROGRAMMING WITH NODE JS

1. Explain the role of a web server in web development. How does it manage client requests and server responses? Provide a real-world example.
2. Compare and contrast web servers with application servers. How does each handle the different tasks in web application architecture?
3. Describe the core features of Node.js and how it differs from traditional JavaScript execution in the browser. Provide a use case for server-side JavaScript.
4. Explain how the Node.js event-driven, non-blocking I/O model works and discuss its advantages in handling concurrent client requests.
5. Develop a Node.js server that serves static files and handles HTTP requests.
6. Create a RESTful API with Node.js and a Database.
7. Analyze the role of NPM in a Node js project. How does it help in managing dependencies, and what are the advantages of using pm over manually including libraries?
8. How the http module in Node.js is used to create a basic web server. Provide a simple code example.
9. How can you serve static files (CSS, images, JavaScript) in an Express application? Discuss the importance of static files in web development.
10. Explain how to use Express's static middleware to serve static files from multiple directories, and how you can secure sensitive files from being served.
11. Describe the async/await syntax in JavaScript. How does it improve code readability compared to traditional callbacks or promise chains?
12. Provide an example of how async/await can be used in a Node.js application to handle multiple asynchronous tasks, such as reading a file and fetching data from an API.
13. Create a full example where you build an Express server that uses async/await to fetch data from an external API and serve it as JSON to the client.