Name:.....
Roll No:.....

MAR ATHANASIUS COLLEGE OF ENGINEERING (AUTONOMOUS), KOTHAMANGALAM - 686666

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

B.TECH SECOND SERIES EXAMINATION, OCTOBER 2026 (S5 CSE & DS)

B24CS3T02401 WEB PROGRAMMING

Max. Marks: 40 Duration: 1.5 Hours

PART A

Answer all questions. Each question carries 3 marks.

1. **Write** the PHP syntax used to establish a connection to a MySQL database **(CO3)**
2. **Explain** database bugs with suitable examples. **(CO3)**
3. **Differentiate** between synchronous and asynchronous execution in Node.js. **(CO4)**
4. **Develop** a Node.js program to create and write data into a file **(CO4)**

PART B

Answer all questions. Each question carries 14 marks.

5. A company wants to build a secure online banking application. Compare the responsibilities of client-side scripting and server-side scripting in implementing features such as form validation, user authentication, session management, and database transactions. **Justify** which tasks should be handled on the client side and which should be handled on the server side. **(CO3)**(14 marks)
6. (a) **Explain** the concept of modules in Node.js and discuss different types of modules. **(CO4)**(7 marks)

   (b) **Explain** npm and discuss its role in Node.js application development. **(CO4)**(7 marks)

VISION

To mould competent computing professionals, innovators, and leaders guided by ethical values and committed to technological advancement and sustainable societal development.

MISSION

- Provide quality education through strong theoretical foundations, experiential learning, and exposure to emerging computing technologies.
- Cultivate critical thinking, research aptitude, and innovation through problem-based learning, industry interaction, and research initiatives.
- Foster ethical values, leadership, social responsibility, and an aspiration for lifelong learning through professional practices, teamwork, and mentoring.