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

MAR ATHANASIUS COLLEGE OF ENGINEERING (AUTONOMOUS),
KOTHAMANGALAM - 686666
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

B.TECH SECOND SERIES EXAMINATION, OCTOBER 2026 (S7 CSE, CSE(DS) & AI&ML)

MCN401 INDUSTRIAL SAFETY ENGINEERING

Max. Marks: 40 Duration: 1.5 Hours

PART A

Answer all questions. Each question carries 3 marks.

1. What are the safety precautions to be taken before entering a confined space. (CO3)
2. Explain any important four safety practices in excavation work. (CO3)
3. Explain the different safety issues in gas welding operations. (CO4)
4. Explain the importance of material handling. (CO4)

PART B

Answer all questions. Each question carries 14 marks.

5. (a) Distinguish ladders and scaffolds along with their safety features. (CO3) (7 marks)
   (b) You are appointed as a safety manager for a demolition work of a l0-storey building in a congested residential area. What are the safety measures that you need to ensure for the completion of the work? (CO3) (7 marks)
6. (a) With suitable sketches explain the operation of any two types of safety guards suitable for industrial applications. (CO4) (8 marks)
   (b) Explain the potential hazards associated with grinding operations. (CO4) (6 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.