Name:.....

Roll No:.....

MAR ATHANASIUS COLLEGE OF ENGINEERING KOTHAMANGALAM – 686666

(Govt. Aided Autonomous Institution)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

B. TECH FIRST SERIES EXAMINATION, AUGUST 2026

(S7 ECE A&B): MCN 401: INDUSTRIAL SAFETY ENGINEERING

Max. Marks:40 Duration: 1.5 Hours

PART A

Answer all questions. Each question carries 3 marks.

1. A factory has reported an increase in workplace accidents. Identify the possible cause of these accidents. (CO 1)
2. A company is planning to improve workplace safety. Suggest the main points that should be included in its safety policy. (CO 1)
3. Define the terms severity rate and incident rate. (CO 2)
4. List the hazards associated with eyes and ears in an industrial environment. (CO 2)

PART B

Answer all questions. Each question carries 14 marks.

5. A worker in an industrial plant sustains an injury while operating an unguarded machine. Using Heinrich's Domino Theory, analyze the sequence of events that could have led to the accident. Also, suggest the appropriate preventive measures to avoid the accident. (CO 1)
6. During a safety audit, an industrial facility was found to have poor organization, unclean workstations, and ineffective waste management practices. Explain how the implementation of the five "S" of housekeeping can help address these issues. (CO 2)
