

CBCS SCHEME

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15ME662

Sixth Semester B.E. Degree Examination, Jan./Feb. 2023 Industrial Safety

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Define Industrial Safety in context with OHS. What are the issues and topics it covers pertaining to industry? (08 Marks)
b. Explain types of Ladders and Scaffoldings. (08 Marks)

OR

- 2 a. Explain material safety data sheet contents. (08 Marks)
b. List and briefly discuss the eight steps for Safer Lockout / Tagout programs. (08 Marks)

Module-2

- 3 a. Explain the fire alarm systems and fire detection systems. (08 Marks)
b. List the main objectives of fire safety. (08 Marks)

OR

- 4 a. Explain different types of fire extinguishers with an example of each. (08 Marks)
b. List out steps carried out after occurrence of the fire with neat sketch. (04 Marks)
c. Briefly discuss the fire triangle. (04 Marks)

Module-3

- 5 a. Explain safety acts carried out while working with machine tools like (i) Lathe (ii) Drill press (iii) Power saws (iv) Band saws (08 Marks)
b. Explain different Personal Protective Equipments (PPEs) and safety guards used during mechanical work. (08 Marks)

OR

- 6 a. Explain the safety precautions to be taken during welding and forging. (08 Marks)
b. What procedure is to be followed while disposing an empty hydrocarbon container? (08 Marks)

Module-4

- 7 a. Define Electrical Safety. List the basic factors to be considered to ensure electrical safety in industries. (08 Marks)
b. What kind of injuries result from electrical current? Discuss briefly the preventive measures related to electrical hazards. (08 Marks)

OR

- 8 a. Define electric shock and give the comparison between an AC current shock and DC current shock. (04 Marks)
b. Explain safety precautions taken against electric shock in residential buildings and shops. (06 Marks)
c. Explain safety precautions taken against electric shock in electric plant. (06 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42-8 = 50, will be treated as malpractice.

Module-5

- 9 a. What is chemical safety? List and explain various chemical hazards. (08 Marks)
b. Discuss what are guidelines to be followed when working with chemicals? (08 Marks)

OR

- 10 a. Explain risk assessment followed during chemical safety and give checklist for LPG installation. (08 Marks)
b. Explain the methods in implement for labeling of chemicals. (08 Marks)
