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Total No. of Pages: 02

Total No. of Questions: 08

M.Tech. (CSE) (Sem. – 3)

INDUSTRIAL SAFETY

Subject Code: MTOE302-18

M Code: 76513

Date of Examination : 24-12-2022

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWELVE marks.

1. a) What is industrial safety? How it is associated with risk?
b) What are important provisions of Indian Factories Act with regard to safety? Explain briefly.
2. a) What is fire triangle? Explain the different classes of fire with symbols and extinguishers used for them. Draw any four symbols for possible fire hazards you have seen.
b) Describe the colour codes used in industries to promote safety at manufacturing areas.
3. a) Define various performance measuring parameters/indices used for the analysis of effectiveness of maintenance function.
b) What are seven basic parameters which form the basis of Condition Monitoring Techniques in maintenance of industrial equipment? Write briefly on each Technique.
4. a) What is meant by industrial maintenance? Differentiate between Emergency maintenance and Breakdown maintenance.
b) Define wear. What are the different types of wear? What's the difference between types of Wear?
5. a) What are the functions of lubrication? Explain the side feed lubrication method giving its advantages and limitations giving a neat sketch.
b) Define corrosion. Explain the principle and factors affecting the corrosion. Discuss the methods for preventing corrosion in equipment and machinery.

6. a) What is preventive maintenance? State objective and principles of preventive maintenance. Also, enlist the advantages of sound maintenance systems.
b) Explain the sequence of activities involved in fault finding. Explain fault diagnosis method based on decision tree for internal combustion engine.
7. a) How equipment life cycle is useful for deciding maintenance activities? Explain in detail.
b) Describe the steps for periodic and preventive maintenance of air compressor.
8. a) Explain the common troubles and remedies for an electric motor. Discuss the steps involved in overhauling of electric motors.
b) Write a short note on any one of the following:
 - i) Screw down grease cup lubrication method
 - ii) Repair cycle concept and its importance
 - iii) Procedure for periodic and preventive maintenance of DG sets

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.