Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 08

M.Tech. (CSE Engg.)OE (2018 Batch) (Sem.–3)

INDUSTRIAL SAFETY

Subject Code : MTOE-302-18

M.Code : 76513

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) Define Industrial Accident. Explain the causes, types and results of industrial accidents.

   b) Describe the types and causes of mechanical hazards present in any industrial unit. Also describe the procedure adopted by industries to control the mechanical hazards.

2. a) What steps can be adopted by industries to prevent fire at manufacturing areas?

   b) How do organizations plan for installation of various types of fire fighting equipment at manufacturing areas?

3. a) Define maintenance. Discuss the aim and contributions of maintenance engineering in an Industry.

   b) Describe the salient features, advantages, limitations and applications of various types of maintenance practices policies adopted by industrial units.

4. a) How do organizations plan service life of equipment to obtain balance between operational efficiency and safety?

   b) Define wear. Explain various techniques for reducing the wear in mechanical systems.

5. a) Explain following types of lubrication applications mechanisms used in manufacturing systems giving their advantages and limitations, with the help of neat sketches.

   (i) Splash lubrication mechanism (ii) Wick feed lubrication mechanism

   b) Describe the different types of corrosion observed in mechanical systems. Discuss the methods for preventing corrosion in equipment and machinery.

6. a) What do you understand by decision tree? Explain fault diagnosis method based on decision tree for Boilers.

   b) Describe types of faults in machine tools and their general causes.

7. a) Discuss the need for periodic inspection, cleaning, and repairing plans in manufacturing industries.

   b) Describe the troubles and remedies witnessed in mechanical components. Also discuss the procedure for overhauling of mechanical components.

8. a) Describe the steps involved in periodic and preventive maintenance of air compressors.

   b) Describe the program and schedule of preventive maintenance of electrical equipment.

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