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Question Paper Code:U9903

B.E./B.Tech. DEGREE EXAMINATION, NOV 2024

Professional Elective

Mechanical Engineering

21MEV903- INDUSTRIAL SAFETY

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Classify the classes of fire. CO1 U
2. Explain in detail about Electrical exposure. CO1 U
3. Difference between preventive and corrective maintenance CO3 Ana
4. Explain the Maintenance Cost CO1 U
5. List the micro- level action followed in abrasive wear modes. CO3 Ana
6. Describe one method for reducing wear in mechanical systems. CO1 U
7. Explain the fault tracing. CO1 U
8. Describe the first step in the sequence of fault-finding activities. CO1 U
9. Identify two potential consequences of neglecting preventive maintenance on industrial machinery. CO1 U
10. Explain how periodic and preventive maintenance strategies can lead to energy savings in a manufacturing facility. CO3 Ana

PART – B (5 x 16= 80Marks)

11. (a) Explain the two types of electrical hazards in workplaces and outline specific preventive steps for each. CO1 U (16)
Or
(b) Explain in detail about the safety precautions to be followed in pressure vessel. CO1 U (16)

12. (a) Classify the maintenance tools and applications of tools used for maintenance CO2 App (16)
- Or
- (b) What are the different Types of Maintenance? CO2 App (16)
13. (a) Discuss the potential effects of these wear types on the performance and service life of machinery. CO1 U (16)
- Or
- (b) Identify and describe two specific types of corrosion, providing an example of where each might commonly occur in an industrial setting. CO1 U (16)
14. (a) Construct the decision tree for fault tracing in pump CO2 App (16)
- Or
- (b) Construct the decision tree for fault tracing in air compressor. CO2 App (16)
15. (a) Explain about the concept of repair cycle CO1 U (16)
- Or
- (b) Discuss about the overhauling of electric motor and common troubles involved in it with remedies. CO1 U (16)