EnggTree.com

Reg. No. : E N G G T R E E . C O M

Question Paper Code : 40799

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2024.

For More Visit our Website
EnggTree.com

Fifth/Sixth/Seventh Semester

Mechanical Engineering

CME 388 — INDUSTRIAL SAFETY

(Common to Mechanical Engineering (Sandwich))

(Regulations 2021)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List down any six ways of preventing mechanical hazards.
2. What are the personnel characteristics that are associated with Industrial accidents?
3. What are the objectives of maintenance engineering?
4. Brief on the types of tools used for maintenance.
5. Mention the causes of wear.
6. Why is prevention of corrosion important?
7. Present a simple case of fault tracking.
8. What are the general causes of faults in machine tools?
9. Distinguish between periodic and preventive maintenance.
10. What advantages does implementing preventive maintenance offer?

PART B — (5 × 13 = 65 marks)

11. (a) A new medium scale industry set up at the outskirts of an urban environment is foreseen to be prone to frequent electrical hazards. Imagining yourself to be a safety engineer how will you assess the facility and suggest remedial measures to minimize the chances for electrical accidents.

Or

(b) Describe the salient points of factories act 1948 for health and safety.

Downloaded from EnggTree.com

EnggTree.com

12. (a) Explain the responsibilities of the maintenance department of an organization.

Or

(b) Explain how important service life of equipment. Discuss the measures of a service engineer would take to prolong the life of a machine. Also elaborate on the factors that after the service life of an equipment.

13. (a) Explain various types of lubricants and their applications in machineries.

Or

(b) Explain with a case, the types of corrosion and the ways of preventing them.

14. (a) Explain decision tree concept with a simple example mentioning its need and applications.

Or

(b) Explain various types of fault in machine tools and their general causes.

15. (a) (i) Explain the overhauling of electrical motors. (5)

(ii) Detail on the common troubles and remedies of electric motor with sketches wherever necessary. (8)

www.EnggTree.com

Or

(b) Discuss in detail how to program and schedule preventive maintenance of a mechanical equipment of your choice.

PART C — (1 × 15 = 15 marks)

16. (a) Explain various chances of accidents of different nature in a chemical industry and the safety measures it has to take in order to prevent such accidents.

Or

(b) Explain with an example, the concept of repair cycle and its importance.

———————

Downloaded from EnggTree.com