

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code: 4023134

M.E. / M.Tech. DEGREE EXAMINATIONS, NOV/ DEC 2024

Third Semester

CAD/CAM

P23CCE54 – INDUSTRIAL SAFETY MANAGEMENT

(Regulation 2023)

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions

PART – A

(10 x 2 = 20 Marks)

1. Define safety audit and its importance in industrial safety management.
2. List two performance measurements used to evaluate safety in industries.
3. What are the common safety risks associated with hot metal operations?
4. Why is safety in welding and cutting critical in industrial safety?
5. List the key elements of industrial fire prevention.
6. What role does layout design play in ensuring safety in industries?
7. What is HAZOP and how does it contribute to accident prevention?
8. Why is personal protective equipment (PPE) crucial in accident prevention?
9. List two welfare facilities commonly provided in industrial settings.
10. Mention two key provisions of the Indian Boiler Act.

PART – B

(5 x 16 = 80 Marks)

11. (a) Discuss the importance of employee participation in safety programs and how it improves productivity? (16)

(OR)

- (b) Analyze modern safety concepts and explain how safety audits can help prevent accidents in industrial settings? (16)

12. (a) Discuss the operational safety challenges in a machine shop and suggest methods to reduce risks in welding, cutting, and grinding operations. (16)

(OR)

- (b) Evaluate the safety protocols involved in electroplating and metal bending operations and suggest ways to mitigate associated risks. (16)

13. (a) Discuss the process of emergency planning in industries and the role of security and risk assessments in managing industrial hazards. (16)

(OR)

- (b) Analyze how material handling and the use of electricity can impact safety in an industrial setting. Provide examples to illustrate your points. (16)

14. (a) Discuss the importance of accident investigation and reporting in preventing future accidents, and explain how first aid and fire-fighting devices are used in emergencies. (16)

(OR)

- (b) Analyze the human side of safety, focusing on training and development of employees for accident prevention. (16)

15. (a) Discuss the significance of safety and health standards in industries and how occupational diseases can be prevented. (16)

(OR)

- (b) Evaluate the role of industrial welfare facilities in ensuring worker safety and compliance with safety laws. (16)

-----xxx-----