

**G 6063**

M.E. DEGREE EXAMINATION, MAY/ JUNE 2007.

Elective

CAD/CAM

CC 1728 — INDUSTRIAL SAFETY MANAGEMENT

(Regulation 2005)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List the preferable members to be appointed to safety committee.
2. Define Job Safety Analysis.
3. List the hazards associated with hot forging.
4. What is meant by PPE? What is the need for it?
5. Draw and explain fire triangle.
6. What is meant by risk assessment?
7. Define HAZOP.
8. What is the first aid for burn injuries of 2<sup>nd</sup> degree?
9. What is OSHAS?
10. What are the rights of workers as per Factories Act?

PART B — (5 × 16 = 80 marks)

11. (a) How do you plan to do a safety audit for a job-shop type manufacturing unit? Explain in detail.

Or

- (b) Explain with suitable examples the role of man, machine and environment in maintaining safety in industries.

12. (a) Discuss in detail the hazards associated with (i) Heat Treatment Shop and (ii) Welding and Cutting Process.

Or

- (b) Discuss with suitable sketches the safety precautions to be provided in machine shops and power presses.
13. (a) Elaborate in detail the role of safety design in plant layout and material handling.

Or

- (b) Write briefly on:
- (i) Road safety
  - (ii) Onsite and Offsite emergency.
14. (a) (i) Accidents are caused — Justify with suitable example.
- (ii) Narrate with suitable examples USA and USC.

Or

- (b) Bring out the importance of:
- (i) Training employees for safety
  - (ii) Accident reporting and investigation.
15. (a) Write short notes on:
- (i) Industrial hygiene
  - (ii) Occupational diseases.

Or

- (b) (i) Consolidate the welfare facilities to be provided by the industry to its workers as per safety legislations.
- (ii) Discuss how environmental protection act came into operation in our country.