

Register Number:

M.E DEGREE EXAMINATIONS: JANUARY 2011

First Semester

INDUSTRIAL ENGINEERING

IEE504: Industrial Safety Management

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions: -

PART A (10 x 2 =20 Marks)

1. Mention the qualifications of safety officer.
2. How the safety performance of the supervisor is measured?
3. Why operational safety is a must in an industry?
4. List out the safety equipments used in welding shop.
5. What are the different methods for hazard identification?
6. What is the difference between hazard and risk?
7. What do you mean by multiple causation factors in an accident?
8. Define “ABC” in first aid.
9. Name the various safety organizations.
10. Describe the notified diseases.

PART B (5 x 16 = 80 Marks)

11. (a) (i) Explain the safety policies and constitution of safety committee in an industry. (8)
(ii) Describe an ideal safety organization with functional responsibilities for large industry. (8)
(OR)
(b) (i) Explain a safety management with brief note on each of the safety terms. (8)
(ii) Describe the parameters required for safety audit. (8)
12. (a) (i) What type of training and safety precautions are required for personnel working in boiler industry? Discuss briefly. (10)
(ii) Write short notes on dangerous machines. (6)
(OR)
(b) (i) State the safety common sense while working in machine shop. (8)
(ii) Operational safety can be improved by automation – Explain with example. (8)

13. (a) Discuss in detail the safety measures incorporated in Chemical Process Industries in storage of gases.

(OR)

(b) Discuss the safety factors to be considered while designing plant layout and material handling devices.

14. (a) Explain the following:

(i) Fire prevention and fire protection. (8)

(ii) Accident prevention programmes'. (8)

(OR)

(b) (i) Explain the guide words used in HAZOP study with meaning and discuss. (10)

(ii) Explain the various personal protective equipments. (6)

15. (a) (i) Enumerate the various health protection programme for maintaining a healthy work environment. (8)

(ii) Write about the government and semi-government agencies engaged in industrial hygiene work. (8)

(OR)

(b) Discuss in detail about the role of electricity act and explosive act in the safety measures.
