



B.E (Full-time) DEGREE END SEMESTER EXAMINATIONS, MAY 2013
INDUSTRIAL ENGINEERING BRANCH
EIGHTH SEMESTER
IE 9022 SAFETY ENGINEERING AND MANAGEMENT

2013
27

Time : 3 hr

Max Mark : 100

Answer ALL questions
Part - A (10 x 2 = 20 Marks)

1. Define safety and hazard
2. What are the preventive measures to consider to protect person from fire in a building?
3. What is MSDS?
4. Write any two toxic materials used in the chemical industry
5. Write any two noise measuring instrument
6. Why safety committee is required in an organisation?
7. What is risk assessment?
8. What is the purpose of job safety analysis?
9. Differentiate between Indian Electricity Act and Indian Electricity Rule
10. What is disaster management?

Part - B (5 x 16 = 80 Marks)

- 11(a) (i) Explain the mechanical and physical hazards in metal lathes (6)
(ii) Discuss the hazards associated with the job of painting and give the precautions for the hazard. (10)
- 12(a) (i) What are the effects of various chemical exposure on the skin. Give the area of application of each chemical in the industry (8)
(ii) Explain the nature of chemical hazards and its control methods (8)

or

- (b) Explain the ionizing and non-ionizing radiation effect on human at work (16)

13.(a) Explain how environment is polluted, its causes and control methods (16)

or

(b) Explain the personal protective equipments with reference to the parts of the body to be protected (16)

14 (a)(i) Discuss the advantages of job safety analysis (8)

(ii) Describe the steps followed in job safety analysis (8)

or

(b) Construct the fault tree of circuit for warning light failure and explain the standard symbols used for the construction of FT (16)

15. (a) Explain the safety regulations followed in the company you have visited for project work and write your suggestions based on the observations. (16)

or

(b) Write short notes on

(i) Indian Boiler Act (8)

(ii) Indian Electricity Act (8)