

Printed Pages : 2



ECH-044

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 151758

Roll No.

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B. Tech.

(SEM. VII) (ODD SEM.) THEORY
EXAMINATION, 2014-15

INDUSTRIAL SAFETY AND HAZARD MANAGEMENT

Time : 3 Hours]

[Total Marks : 100

- 1** Attempt any four parts : **5×4=20**
- Discuss the industrial safety aspects related to pressure and temperature.
 - Describe the industrial safety principles to be followed in chemical industries.
 - Explain the role of safety policy and safety management systems in the process industry.
 - State the safety procedure of unstable products.
 - Discuss fault tree analysis.
 - Explain cloud and mist explosion.
- 2** Attempt any two parts : **10×2=20**
- Explain with an industrial example about the role of plant location and layout selection with respect to industrial safety.
 - Discuss the methods for identification of hazards and their assessment.
 - Elaborate the scope of risk assessment in industrial safety.

- 3** Attempt any two parts : **10×2=20**
- a) Discuss the entry routes of toxic substances into human and their effects.
 - b) Write short notes on
 - i) Toxic doses and responses
 - ii) Respirators.
 - c) Describe the role of mechanical ventilation in industrial safety and also explain types of hoods, pipelines and duct systems used in ventilation.
- 4** Attempt any two parts : **10×2=20**
- a) Discuss the importance of pressure relief in process industries with an industrial disaster as an example.
 - b) Explain how to control the leakage of hazardous materials from tanks and pipes.
 - c) Give a brief classification of fire and explain the control measures used for the specific type of fire.
- 5** Attempt any two parts : **10×2=20**
- a) Discuss the handling, transportation and storage of toxic materials and wastes.
 - b) Write about safety in industries and their need for development.
 - c) Explain about disaster planning and management.
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