

**B.Tech. MECHANICAL ENGINEERING
(COMPUTER INTEGRATED
MANUFACTURING)**

Term-End Examination

December, 2017

00232

BME-030 : SAFETY ENGINEERING

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **five** questions.

1. (a) What is Occupational Safety ? Describe the reasons for risks to the safety and health of workers in the workplace. 10
- (b) What do you mean by Incident Rates ? Write a formula for I.R. calculation. 4
2. (a) Define the term Hazard. How is a hazard analyzed ? 10
- (b) What is an Accident ? 4
3. (a) What is meant by EMS ? Why is an EMS necessary for an industry ? 10
- (b) Describe The Factories Act, 1948. 4

4. (a) What is Acid Rain ? Which pollutants cause acid rains ? 7
- (b) What are Waterborne Diseases ? Explain the causes. 7
5. (a) Describe different types of wastes. What are the different sources of wastes ? 10
- (b) What is an incinerator ? 4
6. (a) Distinguish between pyrolysis and starved air incineration. 7
- (b) What are Landfill Outputs ? Describe how they are managed. 7
7. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) ERT
- (b) Disaster
- (c) Ganga Action Plan
- (d) Fire Triangle
- (e) Chemical and Heat Burns
- (f) CWTF
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