

**B.Tech. – VIEP – MECHANICAL ENGINEERING
(BTMEVI)**

Term-End Examination

December, 2018

00043

BIMEE-014 : SAFETY ENGINEERING

Time : 3 hours

Maximum Marks : 70

Note : Answer any five questions. All questions carry equal marks.

1. (a) What is the role of first aid in dealing with emergency situations/conditions ? Describe the contents of a first aid kit. What are the different elements of emergency planning ? 7
- (b) Explain the role of pneumatics and hydraulics in industries which have potential for fire hazard. 7
2. (a) Explain the safety precautions taken during transportation of chemicals by commercial vehicles. 7
- (b) Discuss the safety factors that must be considered during operation and maintenance of plants and equipments. 7

3. (a) Describe the pollutants of water and how they enter into the water. 7
- (b) What is recycling ? What are the preparations to be made for recycling a waste ? 7
4. (a) What is safety training and why is it necessary ? Discuss any two safety training methods. 7
- (b) Explain in detail, environment and health monitoring in industries. 7
5. (a) Describe industrial waste. Also explain the different methods of waste treatment. 7
- (b) What are the essential components of hazard control programme ? Explain in detail. 7
6. (a) What are the safety recommendations and precautions for working in a radiation prone environment ? Describe . 7
- (b) What are the roles of a factory inspector in the day-to-day working of industries ? Write any seven roles. 7

7. Write short notes on any *four* of the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) Lighting for Safety in Industry
 - (b) Trade Unions and Safety
 - (c) Legal Aspects of Industrial Safety
 - (d) Eye Protection and Respiratory Equipments
 - (e) Bhopal Gas Tragedy
 - (f) Disaster Management
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