

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

**Term-End Examination**

**December, 2018**

00813

**BME-030 : SAFETY ENGINEERING**

*Time : 3 hours*

*Maximum Marks : 70*

---

*Note : Attempt any seven questions. All questions carry equal marks.*

---

---

1. (a) Discuss the factors affecting the health of a worker in a workplace. 5
- (b) What are the impediments in implementation of safety functions ? Explain. 5
2. (a) How should medical help and first aid be provided in the workplace ? 5
- (b) What is an accident ? What are the common causes of industrial accidents ? 5

3. (a) What do you understand by environmental pollution ? List the different pollutants of air. 5
- (b) Distinguish between industrial and natural environment. What is an artificial environment ? 5
4. (a) Describe the "Plan-Do-Check-Adjust" model of continual improvement of EMS. 5
- (b) What are the various types of pollutants of water ? Discuss the effects of these pollutants on human beings. 5
5. (a) Describe briefly how the Compensation Act, 1923, helps workers who suffer in industrial environment. 5
- (b) Give ways of minimizing hazards using protective equipment. 5
6. (a) Define industrial wastes. Explain the different methods of treatment of industrial wastes. 5
- (b) How are the exhaust gases from incinerator cleaned ? Describe baghouse filter. 5

7. (a) What is recycling ? What preparations are made for recycling waste ? 5
- (b) What are the different ways by which environment is polluted ? Explain briefly. 5
8. (a) Describe the role of First Aid kit in responding to an emergency. 5
- (b) Discuss the safety promotion adopted in a company. How is it developed ? 5
9. (a) What is the critical incident technique ? Discuss briefly. 5
- (b) Explain the method of disposal of hazardous wastes from an industry. 5
10. (a) Discuss the methods adopted in extinguishing fires. 5
- (b) Write a short note on Ganga Action Plan. 5
-