

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (Ind. Engg. & Mgt.) (Spl. in TQM) (Sem.-6)**  
**INDUSTRIAL SAFETY, HEALTH & ENVIRONMENT**

Subject Code : IEM-605

Paper ID : [71001]

Time : 3 Hrs.

Max. Marks : 40

**INSTRUCTIONS TO CANDIDATES :**

1. Attempt All EIGHT questions from SECTION-A carrying TWO marks each.
2. Attempt any SIX questions out of EIGHT from SECTION-B carrying FOUR marks each.

**SECTION-A**

**1. Answer briefly :**

- a) How does safety lapses cost organizations lots of money? How can organizations implement safety regulations to mitigate these losses?
- b) Define hazard. What are various types of hazards posed to workers at workplace?
- c) Define fire hazards. Explain the principles of fire safety at Industrial unit.
- d) How does environmental pollution cause pulmonary diseases amongst employees? What measures employees can take to mitigate these threats?
- e) Write short note on national policy on sustainable development for environmental management.
- f) Explain the categories and causes of water pollution affecting an industrial unit. How organizations can take effective measures to control water pollution?
- g) What are greenhouse gases? How these gases released and enter into our stratosphere? How these greenhouse gases affect our environment in general and lives in particular?
- h) Write short note on disaster management.

## SECTION - B

2. Explain the synergy between quality and safety, health and environment.
3. How do organizations conduct fault tree analysis at workplace? Explain giving an example.
4. How organizations can adopt measures to protect industrial units against electrical fire threats?
5. How do chemical agents and physical agents pose serious health hazards to workers?
6. What steps organizations can take to ensure good lighting at workplace to avoid poor illumination and glare issues?
7. How organizations can ensure compliance of water and air pollution acts and other environmental laws?
8. Discuss the incentives given by the Indian government towards effective rain water harvesting.
9. Write short note on OSHAS 18001 policy, structure and features.