

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**M. E. - SEMESTER – I • EXAMINATION – WINTER • 2014**

**Subject code: 2711807****Date: 12-01-2015****Subject Name: Industrial Hygiene and Safety****Time: 02:30 pm - 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Describe the concept and objectives of Industrial Hygiene **07**  
 (b) Describe the application/use of Local Exhaust Ventilation System (LEV) in an industry. **07**
- Q.2** (a) Write short note on **07**  
 (i) Sound Level Meter (ii) Detector Tubes (iii) Volatile Organic Compounds Meter (iv) Atomic Absorption Spectrophotometer  
 (b) Describe Work Environment Monitoring **07**  
 OR  
 (b) Describe Biological Monitoring. **07**
- Q.3** (a) Describe Significance of TLV. **07**  
 (b) Write a short note on Personal Protective Equipments. **07**  
 OR
- Q.3** (a) Describe the industrial Safety Concept in detail. **07**  
 (b) Describe the health effects of cotton Dust/fiber. How it can be controlled? **07**
- Q.4** (a) Describe the Hazard Identification and Risk Assessment Techniques **07**  
 (b) Write Short Notes (Any Two) **07**  
 (i) Bio Medical wastes (ii) Ergonomics (iii) Administrative control  
 OR
- Q.4** (a) Explain following terms in brief **07**  
 (i) ACGIH (ii) STEL (iii) GDS (iv) HAZOP (v) HAZAN (vi) OHSAS  
 (b) Write a short note on : **07**  
 (i) Silicosis (ii) ILO code of practice on safety
- Q.5** (a) Write a short note on : **07**  
 (i) Industrial hygiene and safety (ii) Fault tree Analysis (iii) safety audit  
 (b) Explain the following terms: **07**  
 (i) Decibel A frequency (ii) MSDS (iii) DOW index (iv) Applicability of MSIHCR  
 OR
- Q.5** (a) Write a short note on : **07**  
 (i) Heat stress (ii) Importance of factory act with respect to occupational health  
 (b) Write a short note on: **07**  
 (i) On site emergency response plan (ii) Total loss control

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