

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
ME Semester –III Examination Dec. - 2011

Subject code: 731804

Date: 08/12/2011

Subject Name: Industrial Hygiene and Safety

Time: 10.30 am – 01.00 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) Define industrial safety. How safety management can help in increasing the productivity? **07**

(b) How heat stress can be monitored in a hot industry. Give four names of industries where heat stress is prevail. **07**

Q.2 (a) Explain the importance of Industrial ventilation in an industry with few examples. **07**

(b) How dust and toxic gases can be monitored in an industry? **07**

OR

(b) Write short note on any two: **07**
(i) Asbestosis
(ii) Industrial hygiene survey
(iii) Biological monitoring

Q.3 (a) How vibration can be monitored in an industry? Give the health effects of vibration hazards. **07**

(b) Give the health hazards in a thermal power station. How it can be controlled? **07**

OR

Q.3 (a) Explain the following terms: **07**
(i) Hertz
(ii) CET
(iii) Lux

(b) Give the health hazards in a fertilizer industry. What can be safety measures required to control them? **07**

Q.4 (a) Write short notes on (Any two): **07**
(i) 18002 for Safety & Health
(ii) Isolation
Wetting process

(b) Describe the health effects of radiations. **07**

OR

- Q.4 (a)** Write short notes on (Any two): **07**
(i) Byssinosis
(ii) Personal Protective Equipments (PPE)
(iii) Biomedical waste management.
- (b)** Give importance of Factories Act in industry with regard to safety and health. **07**
- Q.5 (a)** Enlist and explain safety aspects to be covered in bulk storage installation for ammonia. **07**
- (b)** Write short notes on (Any two): **07**
(i) Statutory inspections on pressure vessels
(ii) Safety in Chemical laboratories.
(iii) MAH categorization for chemical industries
- OR**
- Q.5 (a)** Explain the following : **07**
(i) Transport Emergency (TREM) card.
(ii) Safety precautions in transportation of hazardous chemicals
- (b)** Describe the Hazard Identification & Risk Assessment Techniques. **07**
