

GUJARAT TECHNOLOGICAL UNIVERSITY**B.E. SEMESTER -VI • EXAMINATION – Summer 2015****Subject Code:160504****Date:14/05/2015****Subject Name: Pollution Control & Safety Management****Time:10.30AM-01.00PM****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) List various natural cycles in environment and explain any one in detail. **07**
 (b) Explain various effects of air pollutants on vegetables and human being in brief. **07**
- Q.2** (a) List the techniques for hazard identification? Explain HAZOP method in detail. **07**
 (b) Explain in brief Fault Tree Analysis for Risk Prediction. **07**
- OR**
- (b) Explain working principle and industrial application of Pressure Safety Valve and Rupture disc. **07**
- Q.3** (a) Explain source model of flow of liquids through pipes. **07**
 (b) Explain difference between fire and explosion in brief with various points involve in protection of fire. **07**
- OR**
- Q.3** (a) Explain various types of Plume and Puff models of dispersion. **07**
 (b) List out various types of explosion and explain in brief. **07**
- Q.4** (a) What is Fire Triangle? How does it help in curbing accident due to fire in chemical industry? Discuss with emphasis on various methods of Inerting. **07**
 (b) Write a short note on Solid waste management. **07**
- OR**
- Q.4** (a) Explain about various Personal Protective Equipments in brief. **07**
 (b) Give a brief account of Hazardous waste management. **07**
- Q.5** (a) Explain the Industrial Dispute Act and Workmen Compensation Act in detail. **07**
 (b) Write a short note on: Advanced wastewater treatment methods. **07**
- OR**
- Q.5** (a) Explain Environmental Audit in detail. **07**
 (b) Write down the Methodology for Pollution Prevention. **07**
