Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER - VI EXAMINATION - WINTER 2015

Date:14/12/ 2015

Subject Code:16504

Su	bject	Name: Pollution Control & Safety Management	
	tructio	Attempt all questions. Make suitable assumptions wherever necessary.	
Q.1	(a) (b)	State the various natural cycles in nature and discuss any one in detail. Mention the different sources and causes of environmental pollution. Explain the effect of pollution and its impact on environment.	07 07
Q.2	(a)	State the different methods used to control the water pollutants and discuss any one in detail.	07
	(b)	'Factories act helps productivity'. Evaluate the statement with reference to various provisions of factories act, 1948. OR	07
	(b)	Explain all sides of fire triangle with examples. Why is its knowledge useful in chemical industries? Discuss the various methods of preventing fire.	07
Q.3	(a) (b)	State the techniques for hazard identification. Explain HAZOP method in detail. State the types of solid wastes and explain the various methods for solid disposal.	07 07
Q.3	(a) (b)	OR Mention the different methods of risk prediction. Explain any one in detail. What are the different components of safety program to enhance the safety in process industries? Also mention steps of safety audit.	07 07
Q.4	(a)	State the various types of 'plume' and 'puff' models of dispersion. Explain how they are useful for prediction of dispersion patterns for toxic/flammable materials released into atmosphere.	07
	(b)	Discuss about the various equipments used to arrest the particulate matters from effluent gas.	07
Q.4	(a) (b)	OR Write a brief note on onsite emergency control and offsite disaster management. Discuss about the various personal protective equipments with their functions.	07 07
Q.5	(a) (b)	Discuss about hazardous waste disposal in detail. Stating the different components of safety program to enhance the safety in process industries, discuss the steps of safety audit. OR	07 07
Q.5	(a) (b)	Write notes on (i) 'industrial dispute acts' and (ii) 'workmen compensation act' State the different types of pressure relief devices? Explain any two with neat sketch.	07 07
