Seat No.:		Enrolment No	Enrolment No	
		GUJARAT TECHNOLOGICAL UNIVERSITY		
		BE - SEMESTER-VI • EXAMINATION - WINTER • 2014		
Subject Code: 160504 Date: 05-1			4	
·	Subject Name: Pollution Control and Safety Management			
Time: 02:30 pm - 05:00 pm Total Marks: Instructions:			70	
Instru				
		Attempt all questions. Take suitable assumptions wherever necessary.		
		igures to the right indicate full marks.		
	0. I	igui es to the right indicate run marks.		
0.1	(a)	Describe the information listed in MSDS and explain its utility in plant		
Q.1	(a)	Describe the information listed in MSDS and explain its utility in plant	07	
	(b)	safety and environment protection? (i) Write a note on detonation and deflagration.	04	
	(0)	(ii) Write a note on sprinkler systems.	03	
Q.2	(2)	What are the modes of entry of toxic chemicals into human body and	03	
Q.2	(a)	Ways of preventing each of them?	07	
	(b)	What is fire triangle and explosion? Describe properly and separately?	07	
	(0)	OR	07	
	(b)	Give different methods used for accident and loss measurement?		
	(0)	Explain each in short.	07	
Q.3	(a)	Give the different personal protective equipments used in chemical	07	
Q.J	(a)	industries? And give the uses of each.	07	
	(b)	Give and explain the different ingredients of safety program to enhance	07	
	(0)	the safety in the process industries?	07	
		OR	07	
Q.3	(a)	Explain the working principle and industrial application of pressure safety	V	
Q. .5	(4)	valve and rupture disc with suitable diagram.	, 07	
	(b)	Explain in brief fault tree and event tree analysis for risk assessment.	07	
Q.4	(a)	Discuss various equipments used to separate the particulate matters from		
	()	the effluent gases to avoid air pollution.	07	
	(b)	Discuss the safety considerations to be taken while designing storage		
	(-)	tank for explosive and volatile material.	07	
		OR		
Q.4	(a)	Discuss disposal of solid waste from chemical process industries.	07	
	(b)	Write notes on following:		
	` '	(i) Main features of water pollution control law	04	
		(ii) Main features of factory act	03	
Q.5	(a)	Give and explain the different sources and causes of environmental		
		pollution? Explain its effects on human health?	07	
	(b)	Explain in brief environment audit and energy audit.	07	
		OR		
Q.5	(a)	Discuss carbon cycle in nature with neat diagram and give its effect on		
		environment.	07	
	(b)	What is Environment Impact Assessment (EIA)? Give and explain the		

factors to be considered while doing EIA?

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