Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) - EXAMINATION - SUMMER 2016

Subject Code:2162509 Date:17/05/2016

Subject Name: Plant Maintenance and Safety Engg.

Time: 10:30 AM to 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.

			MARKS
Q.1		Short Questions: Explain or define in one or two sentences.	14
C	1	Facility Location	
	2	Product Layout	
	3	Process Layout	
	4	Unit load	
	5	Maintenance	
	6	Material Handling	
	7	Fire Fighting	
	8	Hazard	
	9	Accident	
	10	Breakdown Maintenance	
	11	Preventive Maintenance	
	12	Fixed Position Layout	
	13	Factory (As defined by Indian Factories Act 1948)	
	14	Industrial Dispute (As defined by Industrial Dispute Act 1947)	
Q.2	(a)	Describe the procedure you would follow to determine the facilities plan	07
		for a new library in your campus.	
	(b)	Mention at least seven benefits of using U-shape arrangements in	07
		manufacturing cells.	
		OR	
	(b)	Discuss Total Productive Maintenance in detail	07
Q.3	(a)	For each of the following material handling principles, explain what it	07
		means and give a specific example of how it can be applied.	
		1. Work Principle	
		2. Ergonomic Principle	
	(b)	Describe material handling in following types of layout:	07
		1. Product Layout.	
		2. Process Layout.	
		OR	
Q.3	(a)	Explain CRAFT algorithm with suitable example.	07
	(b)	Explain COELAP with suitable example.	07
Q.4	(a)	Discuss various factors to be considered for locating a new manufacturing facility.	07
	(b)	Compare Rural and Urban areas in connection with selection of site for industry.	07
		OR	
Q.4	(a)	Describe various elements of Preventive Maintenance.	07
	(b)	Describe importance of maintenance.	07
Q.5	(a)	Describe the principles of industrial legislation in brief.	07