Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E SEM-V Examination-Nov/Dec.-2011

Subject code: 151503 **Date: 29/11/2011**

Subject Name: Facility Layout & Material Handling Systems

Time: 02.30 pm-05.00 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)**	Explain various types of layout problems with suitable example.	**07**
	(b)	Define Plant layout. Discuss process layout with suitable example.	**07**
Q.2	**(a)**	List out various principles of plant layout. Explain any three in detail.	**07**
	(b)	Discuss the factors to be considered while selection of location and territory.	**07**
		OR	
	(b)	How man, machine, material and movement factors affect the layout? Explain.	**07**
Q.3	**(a)**	What do you meant by flow pattern? Explain flow pattern for assembly and production line with suitable sketch.	**07**
	(b)	Write note: Symptoms of Excellent layout.	**07**
		OR	
Q.3	**(a)**	What are the common pit-falls in selection of sites and what care will you take to avoid them?	**07**
	(b)	Write note: work station layout.	**07**
Q.4	**(a)**	Discuss how material handling and plant layout are correlated ?	**07**
	(b)	Write note: Layout and productivity.	**07**
		OR	
Q.4	**(a)**	Suggest suitable site for any car manufacturing industry in India with justifications.	**07**
	(b)	Explain" zero handling is the best handling"	**07**
Q.5	**(a)**	Define material handling. Explain various principles of MH system.	**07**
	(b)	Write note: Belt conveyors. v/s roller conveyors.	**07**
		OR	
Q.5	**(a)**	Give (in chart) material handling equipments used in various industries. Explain fork lift tuck with its applications.	**07**
	(b)	Explain, how will you start material handling equipment selection process in M/S PNG(p) Ltd., MORBI (manufacturer of vitrified tiles) ?	**07**

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