

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE- SEMESTER–VIII (NEW) EXAMINATION – WINTER 2020**

**Subject Code:2182504****Date:30/01/2021****Subject Name:Facilities Planning****Time:02:00 PM TO 04:00 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
<b>Q.1</b>	(a) Define the terms: 1. Plant 2. Depreciation 3. Unit Load	<b>03</b>
	(b) What are the actions required to reduce work in process in automobile manufacturing industry?	<b>04</b>
	(c) Determine the various factors to be considered in selecting the location for the Engineering College.	<b>07</b>
<b>Q.2</b>	(a) Construct and explain which layout is suitable for a Hospital.	<b>03</b>
	(b) What should you keep in mind while maintaining a facility plan?	<b>04</b>
	(c) Explain the steps for layout design using SLP.	<b>07</b>
<b>Q.3</b>	(a) List out various factors that are responsible for replacement of equipment. Explain any two.	<b>03</b>
	(b) Determine merits and demerits of Product Layout.	<b>04</b>
	(c) What do you mean by manufacturing? Write a short note on Just-in-time manufacturing.	<b>07</b>
<b>Q.4</b>	(a) Describe accident. What are the duties of Plant supervisor?	<b>03</b>
	(b) Briefly explain Indian Factory Act, 1947.	<b>04</b>
	(c) Compare Fixed Automation System with Flexible Automation System.	<b>07</b>
<b>Q.5</b>	(a) Briefly explain Minimum Wages Act, 1948	<b>03</b>
	(b) State various methods of calculating depreciation. Explain any one in brief.	<b>04</b>
	(c) Differentiate between depreciation and obsolescence.	<b>07</b>
<b>Q.6</b>	(a) Describe preparation of a facility plan.	<b>03</b>
	(b) Differentiate between Risk and Uncertainty.	<b>04</b>
	(c) Compare the straight line method and diminishing balance method with the help of a graph.	<b>07</b>
<b>Q.7</b>	(a) What are the various causes of accidents?	<b>03</b>
	(b) Describe any four material handling equipment used in a	<b>04</b>

- shopping mall.
- (c) Classify material handling devices. Draw and explain working of a crane. **07**
- Q.8** (a) What do you understand from the economic life of equipment? Explain with an example. **03**
- (b) Explain material handling in cellular layout. **04**
- (c) Draw any two types of conveyors and state its specific uses. **07**

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