

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– V (New) EXAMINATION – WINTER 2019****Subject Code: 2151506****Date: 25/11/2019****Subject Name: Design of Facilities Layout****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	(a) Define 'Facilities layout'.	03
	(b) Explain important objectives of plant layout.	04
	(c) Discuss the factors considered for selection of location and territory.	07
Q.2	(a) State the advantages of rural area site location	03
	(b) Discuss how productivity can be improved with the help of proper design of facilities layout.	04
	(c) Discuss quantitative and computer based approaches to facilities layout.	07
	OR	
	(c) Discuss pitfalls in selection of site and the remedies.	07
Q.3	(a) Explain 'Product layout'.	03
	(b) What is meant by Facilities design ?	04
	(c) Which type of plant layout is best suitable for manufacturing of each of the following products : (i) Ceiling Fan (ii) Aircraft (iii) Casting	07
	OR	
Q.3	(a) Explain 'Process layout'.	03
	(b) Explain the objectives of Facilities design.	04
	(c) Discuss the locational reasons for the success of Paper mill business in Morbi.	07
Q.4	(a) Explain 'Fixed position type layout'.	03
	(b) State circumstance in which 'Fixed position layout' is preferred.	04
	(c) Discuss the dynamic nature of the layout of an industrial plant.	07
	OR	
Q.4	(a) State the benefits of 'Product layout'.	03
	(b) Explain the circumstances when revising and improving the layout become necessary.	04
	(c) Write short note on use of 'String diagram' in layout design.	07
Q.5	(a) What is work-station layout?	03
	(b) How would you design the work-station layout?	04
	(c) Write short note on use of 'Travel chart' in plant layout.	07
	OR	
Q.5	(a) State the advantages of urban area site location	03
	(b) Discuss information to be collected to prepare a plant layout.	04
	(c) Discuss safety considerations which must be viewed in a layout.	07
