

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI(NEW) – EXAMINATION – SUMMER 2019****Subject Code:2162509****Date:16/05/2019****Subject Name:Plant Maintenance and Safety Engineering****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) Explain the concept of plant facility and write its objective.	03
	(b) Explain the general procedure of location decision.	04
	(c) Explain rural and urban location pattern in India.	07
Q.2	(a) Write factors which influence the location decision.	03
	(b) Write a short note on type of production.	04
	(c) Explain the concept of computerized layout program and explain CRAFT with suitable example.	07
OR		
Q.3	(c) Explain CORELAP and ALDEP with suitable example.	07
	(a) Write a need and objective of industrial act.	03
	(b) Describe the procedure used in plant layout.	04
	(c) Explain different types of flow patterns.	07
OR		
Q.3	(a) Enumerate the need and advantages of material flow patterns.	03
	(b) List out the factors for consideration flow pattern design.	04
	(c) Explain the industrial robot for material handling.	07
Q.4	(a) Classify material handling equipment.	03
	(b) Explain the principles of material handling.	04
	(c) Explain the material handling equipment for horizontal movement of material.	07
OR		
Q.4	(a) Explain the concept of unite load.	03
	(b) Explain different material handling problem with suitable example.	04
	(c) Explain the concept of optimum allocation of material handling equipment.	07
Q.5	(a) Differentiate preventive and predictive maintenance.	03
	(b) Describe the concept of TPM.	04
	(c) Explain the factory Act – 1948.	07
OR		
Q.5	(a) Explain the purpose and feature of plant maintenance.	03
	(b) Write a procedure for TPM implementation.	04
	(c) Explain the payment of wages act - 1936.	07
