

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VI (NEW) EXAMINATION – WINTER 2020

Subject Code:2162509

Date:27/01/2021

Subject Name:Plant Maintenance and Safety Engg.

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
Q.1	(a) Define following terms: - Facility Location, Product Layout and Process layout.	03
	(b) Explain the general type of production.	04
	(c) Describe the procedure you would follow to determine the facilities plan for a new library in your campus.	07
Q.2	(a) Explain the concept of plant facility and write its objective.	03
	(b) Describe the general procedure for decision making.	04
	(c) Compare Rural and Urban areas in connection with selection of site for industry.	07
Q.3	(a) List out and define different types of layout.	03
	(b) List out different techniques used in workstation and plant layout.	04
	(c) Discuss various factors to be considered for locating a new manufacturing facility.	07
Q.4	(a) Differentiate preventive and predictive maintenance.	03
	(b) Explain the role of maintenance management.	04
	(c) Explain the Purpose, types and requirements of Depreciation method.	07
Q.5	(a) Write a short note on wage payment.	03
	(b) Explain the concept and criteria for computerized facility layout programs.	04
	(c) Explain the ALDEP Algorithm and Flow chart.	07
Q.6	(a) Write a need and objective of industrial act.	03
	(b) Define following terms: - 1. Factory (As defined by Indian Factories Act 1948), 2. Industrial Dispute (As defined by Industrial Dispute Act 1947), 3. Hazard, 4. Accident.	04
	(c) Write a short note on the Industrial dispute act 1947.	07
Q.7	(a) Explain the purpose and feature of plant maintenance.	03
	(b) Explain the principles of material handling.	04
	(c) Explain the material handling equipment for horizontal movement of material	07
Q.8	(a) Explain concept of TPM.	03
	(b) Explain the function and scope of material handling.	04
	(c) Explain the concept of optimum allocation of material handling equipment.	07