

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2022****Subject Code:3161907****Date:06/06/2022****Subject Name:Basics of Industrial 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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Which are the different analytical tools of Plant Layouts.	03
	(b) List the different factors affecting plant layouts. Explain any Three factors.	04
	(c) Name various types of plant layouts. Explain any two with neat sketch.	07
Q.2	(a) Write the steps for process planning.	03
	(b) What are the major functions of dispatching process?	04
	(c) Name the various methods of sales forecasting. Describe any two of them.	07
OR		
	(c) Explain the terms Loading, scheduling, dispatching, and expediting.	07
Q.3	(a) Which are the various tools and techniques to improve productivity?	03
	(b) What is job evaluation? Discuss any one method of job evaluation.	04
	(c) Explain string diagram. What are its advantages?	07
OR		
Q.3	(a) Differentiate: Minimum Wage, Fair Wage and Living Wage.	03
	(b) What is method study? List the objectives of method study.	04
	(c) How time study is carried out? Explain equipments used for carrying out time study.	07
Q.4	(a) Explain the purpose of a Quality Circle.	03
	(b) What is quality assurance? Distinguish between Quality Control (QC) and Quality Assurance (QA).	04
	(c) Describe the processes of Single and Double sampling plans.	07
OR		
Q.4	(a) List the different types of Inspection to confirm the quality of the product.	03
	(b) Define (i) Mean (ii) Range (iii) Standard Deviation and (iv) Variance	04
	(c) What is an OC curve? Write the step by step procedure for construction of an OC curve.	07
Q.5	(a) Define Entrepreneur and Entrepreneurship.	03
	(b) Discuss the provisions of 'Working hours' as per Factories Act, 1948.	04
	(c) Write short note on 'Identification and Control of Waste'.	07

OR

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| Q.5 | (a) List the obstacles in the way of Entrepreneur's development. | 03 |
| | (b) Briefly state sources of industrial finance. | 04 |
| | (c) Explain the workmen's compensation Act 1923 (with latest amendments) | 07 |
