

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE – SEMESTER- V EXAMINATION-SUMMER 2023****Subject Code: 3152512****Date: 27/06/2023****Subject Name: Industrial Engineering****Time: 02:30 PM TO 05:00 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.

	<b>MARKS</b>
<b>Q.1</b> (a) Enlist the importance of quality control.	<b>03</b>
(b) What are the important points are covered in the Industrial engineering subject?	<b>04</b>
(c) Define Productivity. Explain how to improve productivity through work study.	<b>07</b>
<b>Q.2</b> (a) Write a full form of “CRAFT” with reference to industrial engineering.	<b>03</b>
(b) Explain the string diagram with neat sketch.	<b>04</b>
(c) Write a short note on Location selection.	<b>07</b>
<b>OR</b>	
(c) Write a short note on Plant location.	<b>07</b>
<b>Q.3</b> (a) Enlist the different symbols used in man and machine chart with neat sketch.	<b>03</b>
(b) Explain the difference between work study and work measurement.	<b>04</b>
(c) Explain the productivity improvement tools	<b>07</b>
<b>OR</b>	
<b>Q.3</b> (a) Enlist the different symbols used in Operation Process chart with neat sketch.	<b>03</b>
(b) Briefly explain Micro motion study.	<b>04</b>
(c) Write a full form of PMTS. Explain the importance of work measurement in Industrial Engineering.	<b>07</b>
<b>Q.4</b> (a) Explain Job Evaluation.	<b>03</b>
(b) Explain the need of Industrial Legislation	<b>04</b>
(c) Briefly explain the Industrial dispute act 1947.	<b>07</b>
<b>OR</b>	
<b>Q.4</b> (a) Explain Merit rating.	<b>03</b>
(b) Explain government different incentives for entrepreneurs.	<b>04</b>
(c) Briefly explain the Indian trade unions act 1926.	<b>07</b>
<b>Q.5</b> (a) Write a full form of “CORELAP” with reference to industrial engineering.	<b>03</b>
(b) Explain waste management with reference to industrial engineering.	<b>04</b>
(c) Write a short note on ISO 9000.	<b>07</b>
<b>OR</b>	
<b>Q.5</b> (a) Enlist different Statistical Quality Control tools.	<b>03</b>
(b) Explain different factors affecting layouts.	<b>04</b>
(c) Write a short note on ISO 14000.	<b>07</b>

\*\*\*\*\*