

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.VOC - SEMESTER- IV EXAMINATION – SUMMER 2024****Subject Code: 21140302****Date:17-05-2024****Subject Name: Agile and Lean Manufacturing Systems****Time:10:30 AM TO 12:30 PM****Total Marks:50****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
<b>Q.1</b> (a) Explain in brief ISO: 9000 with its Advantages Disadvantages and Its Applications.	<b>05</b>
(b) Explain in brief ISO: 14000 with Concept, Scope, Implementation Requirements & Advantages Disadvantages.	<b>05</b>
<b>Q.2</b> (a) Write a note on Kaizen system.	<b>05</b>
(b) Differentiate between agile and lean manufacturing system.	<b>05</b>
<b>OR</b>	
(b) Explain in detail lean manufacturing system with advantages and disadvantages.	<b>05</b>
<b>Q.3</b> (a) Define JIT. List out the benefits of JIT.	<b>05</b>
(b) Compare lean manufacturing with mass production.	<b>05</b>
<b>OR</b>	
<b>Q.3</b> (a) Explain tools & techniques for Lean Manufacturing.	<b>05</b>
(b) List out the advantages of LM over mass production.	<b>05</b>
<b>Q.4</b> (a) State basic benefits of: 5S, Kanban, Kaizen,	<b>05</b>
(b) Write a brief note on standardized work.	<b>05</b>
<b>OR</b>	
<b>Q.4</b> (a) Explain in brief Poka-Yoke with its Advantages Disadvantages and Its Applications.	<b>05</b>
(b) Write a short note on Quality Circle.	<b>05</b>
<b>Q.5</b> (a) Write a short note on World class manufacturing.	<b>05</b>
(b) Write down advantages and disadvantages of agile manufacturing system.	<b>05</b>
<b>OR</b>	
<b>Q.5</b> (a) Write down advantages and disadvantages of Total Productive Maintenance (TPM).	<b>05</b>
(b) Explain why do we need agile manufacturing system.	<b>05</b>

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