

GUJARAT TECHNOLOGICAL UNIVERSITY

B.VOC- SEMESTER-IV EXAMINATION – SUMMER 2025

Subject Code:21140302

Date:13-05-2025

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
Q.1 (a) List out tools & techniques for Lean Manufacturing.	05
(b) Define JIT. List out the benefits of JIT.	05
Q.2 (a) State types of waste. Explain Mura and Muri waste	05
(b) Explain House Keeping Technique.	05
OR	
(b) Explain KAIZEN Technique.	05
Q.3 (a) Discuss seven QC tools in detail with suitable diagrams.	05
(b) What are the ISO 9000:2015 principles of Quality Management?	05
OR	
Q.3 (a) What Is Quality Management?	05
(b) Discuss ISO 9000 techniques.	05
Q.4 (a) Discuss ISO 14000 techniques.	05
(b) Write Advantages and Disadvantages of ISO 9000.	05
OR	
Q.4 (a) What are the Ten pillars of WCM?	05
(b) Differentiate between agile and other manufacturing system.	05
Q.5 (a) Write down advantages and disadvantages of agile manufacturing system.	05
(b) What are the objectives of TPM?	05
OR	
Q.5 (a) Write down advantages and disadvantages of Total Productive Maintenance (TPM).	05
(b) Write down keys to agility and flexibility.	05
