

GUJARAT TECHNOLOGICAL UNIVERSITY

B.VOC- SEMESTER-II EXAMINATION – WINTER 2025

Subject Code:21120301

Date:27-11-2025

Subject Name: Manufacturing Processes

Time:02:30 PM to 04:30 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) What is manufacturing? Explain with examples.	05
(b) Write the selection process for the manufacturing process.	05
Q.2 (a) Describe the centrifugal casting process with a neat sketch?	05
(b) What are the different types of moulding sand?	05
OR	
(b) Write down the different types of furnaces used for casting. Explain the construction and operation of Cupola furnaces with a neat sketch?	05
Q.3 (a) List out the defects in the welding process.	05
(b) Explain Soldering and its types.	05
OR	
Q.3 (a) Differentiate between arc welding and gas welding.	05
(b) Explain brazing and its types.	05
Q.4 (a) Comparison between hot working and cold working.	05
(b) Write down the advantages and limitations of tube extrusion.	05
OR	
Q.4 (a) Explain the defects in rolled parts.	05
(b) What is cold working and explain any three cold working processes.	05
Q.5 (a) Explain squeezing with a neat sketch.	05
(b) Explain the cutting operation in sheet metal operations with a neat sketch.	05
OR	
Q.5 (a) Explain bending operations and types of bending operations.	05
(b) Explain the forming operations in sheet metal operations with a neat sketch.	05
