

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV (NEW) EXAMINATION – WINTER 2017****Subject Code: 2141908****Date: 29/11/2017****Subject Name: Manufacturing Processes -II****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.

		Marks
Q.1	(a) Define : Ingot Collapsibility Honing	03
	(b) Differentiate between Hot working & Cold Working	04
	(c) Define Manufacturing Process and Enlist Various Manufacturing Processes	07
Q.2	(a) What is the importance of recrystallization temperature for mechanical working processes?	03
	(b) Explain in brief any four types of sands used in casting process.	04
	(c) What is pattern? List different types of patterns and explain any two in detail.	07
	OR	
	(c) Describe the Oxy-Acetylene flame types with figure.	07
Q.3	(a) Explain : Significance of Core print Fullering Calendaring	03
	(b) What is the meaning of Gate in the mold of casting? Give the classification of it with figure.	04
	(c) Draw the various glass structure explain properties and application of glass manufacturing.	07
	OR	
Q.3	(a) What is Piercing, Notching and Nibbling in Metal shaping process?	03
	(b) Enlist various ceramic structures and explain any one in detail.	04
	(c) Explain Injection Molding Process with neat sketch.	07
Q.4	(a) Why do we use welding symbols? Explain Basic symbol with figure.	03
	(b) Describe types of welding joints and explain any two in brief.	04
	(c) Explain elastic and plastic deformation process in detail with neat sketch in metal shaping/forming processes.	07
	OR	
Q.4	(a) Explain Blow holes, Misrun & Warpage in terms of castings.	03
	(b) What is Composite material? Also classify briefly.	04
	(c) Write a short note on forging defects.	07
Q.5	(a) Explain Polyethylene, Polypropylene and Polyvinyl Chloride in brief.	03
	(b) State advantages and limitations of explosive welding.	04

(c) Discuss with neat sketch TIG welding. **07**

OR

Q.5 (a) Explain in brief about Shovel, Strike-off bar & Trowel in molding of sand with figure. **03**

(b) Explain Strain Hardening in forming process. **04**

(c) Explain Precision Investment Casting with Figure. **07**
