Seat No.:	Enrolment No.
Seat No	Emoment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-V • EXAMINATION – SUMMER • 2015

Subject Code: 151901 Date: 02/05/2015

**Subject Name: Manufactring Process II** 

Time:02.30pm-05.00pm Total Marks: 70

**Instructions:** 

1. Attempt all questions.

- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

	Q. 1	(a)	Draw neat sketch of an injection moulding with reciprocating screw and explain its working.	07
		(b)	Compare casting process with fabrication process for selection of manufacturing process.	-07
	Q. 2	(a) (b)	Explain briefly the procedure to be followed for making a sand mould.  Why it is necessary for all engineers to be familiar with manufacturing processes? Enlist	07 07
			basic manufacturing processes.  OR	
		(b)	What metals are generally used for making patterns? Explain the reasons for their selection.	07
	Q. 3	(a)	What is re-crystallization temperature? State its importance in metal working.	07
		(b)	Distinguish between Direct and Indirect extrusion along with one application of each.  OR	07
	Q. 3	(a) (b)	Explain with neat sketch roll pass design for manufacturing round bar by rolling process. List the factors influencing rolling process. Explain the effect of roller diameter and metal friction on rolling process.	07
	Q. 4	(a)	Write a short note on blow moulding process with neat sketches and its applications	07
		(b)	Explain with neat sketch wire drawing process. What type of lubricant is used in it? Why?  OR	07
	Q.4	(a)	Why super finishing is required in certain product? Explain with sketch working lapping process.	07
		(b)	Define the following processes with neat sketches (i) Blanking (ii) Piercing (iii) Notching (iv) Embossing and perforating as cold working forming processes.	
75	Q. 5	(a)	Explain with neat sketch shell-moulding process with neat sketch along with its advantages and limitations.	07
		(b)	"Coating on the arc welding electrodes serves a number of purposes." Justify the statement by giving reasons.	07
			OR	
	Q.5	(a)	Explain with neat sketch Atomic Hydrogen welding process with neat sketch along with its advantages and limitations.	07
		(b)	Draw neat sketch of spot welding machine and explain the steps involved in spot welding.	07
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