Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V- EXAMINATION – SUMMER 2016

Subject Code: 151901 **Date: 13/05/2016**

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.**

Q.1	**(a)**	Define the term pattern. List out the materials commonly used for pattern. State advantages of wood as pattern material.	**07**
	(b)	Distinguish hot working process and cold working process with it's merits and demerits.	**07**
Q.2	**(a)**	Describe casting defects stating their causes and remedies.	**07**
	(b)	State the types of furnaces used in foundries. Discuss in brief the working of electric furnace.	**07**
		OR	
	(b)	Define pattern allowances. List various pattern allowances. State purpose of each allowances	**07**
Q.3	**(a)**	What is gating system? What are its functions? State types of gate with its advantages.	**07**
	(b)	Discuss with neat sketch TIG welding process. State its advantages, limitations and applications.	**07**
		OR	
Q.3	**(a)**	Write short note on "Shell Moulding Method".	**07**
	(b)	Distinguish arc welding process and resistance welding process briefly. Explain the resistance welding cycles.	**07**
Q.4	**(a)**	List the factors influencing rolling process. Explain the effect of roller diameter and metal friction on rolling process.	**07**
	(b)	Describe wire and tube drawing process with neat sketch.	**07**
		OR	
Q.4	**(a)**	Explain various flames produced in an Oxy-acetylene gas welding.	**07**
	(b)	Explain why there might be a change in density of a forged product as compared to that of the cast blank.	**07**
Q.5	**(a)**	Describe injection moulding process of plastic with neat sketch.	**07**
	(b)	Explain with sketch and application: Cylindrical and Center less grinding process for finishing operation.	**07**
		OR	
Q.5	**(a)**	Explain (i) Difference between thermoplastic and thermosetting. (ii) Process of polymerization.	**07**
	(b)	Enlist types of super finishing processes. Discuss the selection criteria for appropriate super finishing process.	**07**

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