Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI • EXAMINATION – SUMMER 2013

Subject Code: 162504 **Date: 30-05-2013**

Subject Name: Allied Manufacturing Processes

Time: 10.30 am - 01.00 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)**	Describe various types of threads with neat sketch and applications.	**07**
	(b)	What is a hob? How it is useful in manufacturing? Which products can be manufactured with it? Describe the process.	**07**
Q.2	**(a)**	Why coating is required on a product? What precautions should be carried out before coating? State only methods of coating.	**07**
	(b)	Explain electro plating with neat sketch, merits, demerits and applications.	**07**
		OR	
	(b)	Explain chrome plating with neat sketch, merits, demerits and applications.	**07**
Q.3	**(a)**	Classify plastics with their relative merits, demerits and applications.	**07**
	(b)	Explain injection molding process with merits, demerits and applications.	**07**
		OR	
Q.3	**(a)**	Describe characteristics of plastic compared to metal. Also state in which way, plastic is better than metal? What are its limitations?	**07**
	(b)	State various methods of plastic manufacturing and explain one with its merits, demerits and applications.	**07**
Q.4	**(a)**	What is gear shaving? Explain it in detail with neat sketch.	**07**
	(b)	What is a tap? Where it is used in manufacturing? Which products can be manufactured? Explain the process.	**07**
		OR	
Q.4	**(a)**	What is a dielectric? Explain the process in which it is used.	**07**
	(b)	Describe a process where a jet of water is used for manufacturing.	**07**
Q.5	**(a)**	Explain a process where a vibrating tool is used for manufacturing..	**07**
	(b)	Describe a process where an electron beam is used for manufacturing.	**07**
		OR	
Q.5	**(a)**	Explain plasma arc machining process in detail.	**07**
	(b)	Explain laser beam machining in detail.	**07**

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