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

GUJARAT TECHNOLOGICAL UNIVERSITY

ME Semester –I Examination Feb. - 2012

Subject code: 712804N **Date: 15/02/2012**
Subject Name: Rapid prototype and Tooling
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)**	Explain product Development cycle.	**07**
	(b)	Explain Reverse engineering and give its applications.	**07**
Q.2	**(a)**	What are various types of CAPP models?	**07**
	(b)	Classify various Rapid prototyping techniques. Explain one of them.	**07**
		OR	
	(b)	Explain FEA and write step by step procedure for problem solving.	**07**
Q.3	**(a)**	Give comparison between NC and CNC machine.	**07**
	(b)	Explain CIM structure.	**07**
		OR	
Q.3	**(a)**	Give benefit of Concurrent engineering and explain it.	**07**
	(b)	Give CAPP features.	**07**
Q.4	**(a)**	What are the advantages and Applications of rp technology?	**07**
	(b)	What is the purpose of CAD/CAM in manufacturing.	**07**
		OR	
Q.4	**(a)**	Explain Virtual prototyping and testing technology.	**07**
	(b)	Give types of Geometric models and solid models.	**07**
Q.5	**(a)**	Give classifications of Robot. And give its applications	**07**
	(b)	Which types of sensors used in robot.	**07**
		OR	
Q.5	**(a)**	Describe the file formats in rapid prototyping.	**07**
	(b)	Give advantages of RPT over other manufacturing process.	**07**

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