Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER-IV• EXAMINATION- SUMMER • 2014

Sul	bject	Code: 740801 Date: 04-06-2014	
Tir	-	Name: Rapid Prototyping and Tooling 5:00 To 17:30 Total Marks: 70	
11130	1.	Attempt all questions. Make suitable assumptions wherever necessary.	
Q.1	(a)	Explain the interactive model of innovation with block diagram.	07
	(b)	Describe the features that should be including in design strategy of new product.	07
Q.2	(a)	Discuss the hurdles which are inhibiting the creativity of most of the individuals.	07
	(b)	What are the three pillars of rapid product development? Describe any of them.	07
		OR	
	(b)	Write the short note: Design for X.	07
Q.3	(a)	Explain the different types of surface models.	07
	(b)	Discuss the problems associated with non-contact type measuring method.	07
		OR	
Q.3	(a)	Compare virtual reality with augmented reality.	07
	(b)	Enlist the tools available for computer-aided engineering.	07
Q.4	(a)	Write the different way of generation of NC programs and explain any one of them in brief.	07
	(b)	What are the techniques use to program robots on-line. Describe any one.	07
		OR	
Q.4	(a)	Explain how the generative CAPP defers from variant CAPP?	07
	(b)	Enlist the benefits of rapid prototyping.	07
Q.5	(a)	Explain the working principle of solid ground curing (SGC) process.	07
	(b)	Write the short note on selective laser sintering (SLS) with neat sketch.	07
		OR	
Q.5	(a)	Classify the rapid tooling processes and explain any one of them.	07
	(b)	What do you mean by product data management (PDM)? Writes its benefits.	07
