Sea	ıt No.:	GUJARAT TECHNOLOGICAL UNIVERSITY		
	ME – SEMESTER IV (OLD) – • EXAMINATION – SUMMER 2016			
Subject Code: 740801 Date:04/0			5/2016	
	Subject Name: Rapid Prototyping and Tooling			
Time:10:30 am to 01:00 pm Total Mark			s: 70	
	tructio	ons:		
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	Describe the product development cycle.	07	
Z v-	(b)	Explain the influence of innovation process on economy.	07	
Q.2	` '	State the features of CNC Machine Tool.	07	
	(b)	Enlist the technologies available for prototyping and testing in virtual world. Explain any two of them.	07	
		OR		
	(b)	Enlist the technologies available for physical prototyping and rapid manufacturing. Explain any two of them.	07	
Q.3	(a)	Write the short note on wire-frame models.	07	
	(b)	Write the difference between feature-based models and spatial decomposition models.	07	
		OR		
Q.3		Explain the requirements of a solid modeling scheme.	07	
	(b)	What do you mean by reverse engineering? Explain any one type of method for acquiring point data.	07	
Q.4	(a)	Write the applications of reverse engineering?	07	
	(b)	Write the difference between virtual reality and augmented reality. OR	07	
Q.4	(a)	Enlist the available tools for computer-aided engineering.	07	

(b) What are the methods generally use to generate the mesh during the analysis by

What do you mean by "Design for X"? Explain the Design for quality in brief.

Discuss the important issues in rapid prototyping processes.

Write the short note on selective laser sintering.

(b) State the benefits of product data management system.

FEM? Explain any one of them.

Q.5

Q.5

(a)

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