GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V- EXAMINATION - SUMMER 2016

Subject Code: 153402 Subject Name: Computer Aided Design and Analysis Time: 02:30 PM to 05:00 PM Instructions:			Date: 21/05/2016 Total Marks: 70
Q.1	(a) (b)	Explain product development process. Write about various numerical solution techniques.	07 07
Q.2	(a) (b)	What is geometric modeling? Explain its types. Discuss the significance of splines in surface modeling.	07 07
	(b)	OR Write about various geometric entities.	07
Q.3	(a) (b)	Discuss about interactive computer graphics. Write about Boolean operations with sketches.	07 07
Q.3	(a) (b)	OR What is feature? Explain feature based modeling. Discuss about coordinate systems used in CAD.	07 07
Q.4	(a) (b)	What are the benefits of implementing CAD? Explain the steps in finite element method.	07 07
Q.4	(a) (b)	OR Explain top-down and bottom-up assembly methods. Explain the types of elements with sketches.	07 07
Q.5	(a) (b)	Explain preprocessing in detail. What are the factors to be considered in FEA? Explain.	07 07
Q.5	(a) (b)	OR Discuss the types of finite element analysis. What are the advantages and disadvantages of FEA?	07 07
