Seat No.:	Enrolment No.
Seat 110	Zin onnem 1101

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

ME – SEMESTER II (OLD) – • EXAMINATION – SUMMER 2016				
Subject Code: 1720905 Date:19/05/			16	
	•	Name: Computer Aided Design		
	•	2:30 am to 01:00 pm Total Marks:	<b>70</b>	
Inst	ructior			
		Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a)	Differentiate between Conventional Machine Design and Computer Aided Design	07	
	<b>(b)</b>	What is scan conversion? Explain Bresenham algorithm for scan conversion of a circle.	07	
Q.2	(a)	Discuss the different techniques used for generating the picture on the CRT screen.	07	
	<b>(b)</b>	Discuss analytical and synthetic curves.	07	
	<b>(L.)</b>	OR  Evaluir difference between D'enion evans and D. Caline evans	07	
	<b>(b)</b>	Explain difference between B'ezier curve and B- Spline curve.	07	
Q.3	(a) (b)	Explain C-Rep and B – Rep in detail Discuss (1) B'ezier surfaces (2) B- spline surfaces (3) Lofted surfaces.  OR	07 07	
Q.3	(a) (b)	Explain the concept of Feature based modelling Explain various commonly used primitives for solid modeling and explain the Boolean operations.	07 07	
Q.4	(a) (b)	Explain IGES, STEP and GKS Explain parametric and non-parametric, Explict and Implict representation of curves and its importance in CAD.	07 07	
Q.4	(a)	<b>OR</b> What is the meaning of homogeneous co-ordinates and why it is necessary?	07	
Ų. <del>1</del>	(a)	Explain the advantages of using the same.	07	
	<b>(b)</b>	What is the function of a Graphic Standard? Explain any two of the Graphic Standards with their structure.	07	
Q.5	(a) (b)	Explain the concept of Data structure and Database management in CAD. Discuss animation and simulation.	07 07	
Q.5	(a) (b)	OR Explain the Functions of a Graphic Package in Detail Explain (1) Rotation (2) Mirror and (3) Shear in two dimensional geometric transformation.	07 07	

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