GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII • EXAMINATION - SUMMER • 2015

Subj	ect o	code: 180205 D	ate:05/05/2015
		otal Marks: 70	
Instructions:			
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Explain different types of elements used in finite element analywith applications.	ysis 07
	(b)	11	07
Q.2	(a)	Discuss advantages, limitations & applications of CAD.	07
	(b)	of optimization.	ysis 07
		OR	0=
	(b)	Solve the following by gauss elimination method: 2x + 4y + 3z = 9; $x - 2y + 2z = 5$; $3x + y + 2z = 4$.	07
Q.3	(a)	Write a C-program to design a clutch. Assume suitable notation and material for clutch.	ons 07
	(b)	Prepare a flow chart for line drawing using DDA algorithm. OR	07
Q.3	(a)	1	07
	(b)	Prepare a flow chart for line drawing using Bresenham's algorith	m. 07
Q.4	(a)	• •	
		C(75,125), and D(75,25). Calculate the coordinates of transform rectangle if it is changed by scaling factors $S_x = 0.4$ and $S_y = 0$.	
	(b)		07
Q.4	(a)		ted
	(b)		to 07
Q.5	(a)	Explain Wireframe modeling, Surface modeling, and Somodeling with suitable sketches.	olid 07
	(b)	8	ain 07
		OR	
Q.5	(a)	modeling.	
	(b)	Write a short note on Bezier curves. ***********************************	07