Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

DIPLOMA ENGINEERING – SEMESTER –VI • EXAMINATION – SUMMER 2013					
Subject Code: 360705 Subject Name: Computer Graphics & Multimedia Time: 10:30 AM TO 01:00 PM Instructions:  1. Attempt any five questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.		Date: 11 /05 /2013  Total Marks: 70			
	4. E	ach question carry equal marks (14 marks)			
Q.1	(a) (b)	What is Computer Graphics? Explain applications of computer graphics.  Define the following terms:  (1) Resolution (2) Pixel (3) Window (4) Viewport (5)Reflection (6) Shearing (7)Composite Transformation		07 07	
Q.2	(a) (b)	Write and Explain DDA line drawing algorithm. Explain 2D viewing transformation pipeline. OR		07 07	
	(b)	Explain Boundary fill algorithm.		07	
Q.3	(a) (b)	Explain parallel and perspective projection. Explain parallel line drawing algorithm. OR			
Q.3	(a) (b)	Explain Bresenham's line drawing algorithm. Explain Mid-point circle algorithm.		07 07	
Q.4	(a) (b)	Explain Sutherland Hodgeman polygon clipping algorithm. What is Data compression? Explain Run Length Data compression Method. OR			
Q. 4	(a) (b)	Explain Cohen Sutherland line clipping algorithm. Explain various storage media.			
Q.5	(a) (b)	Explain MPEG standard. Explain animation languages.		07 07	
Q.5	(a) (b)	OR Explain data characteristics. Explain 2D rotation with example.		07 07	