Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER –VI • EXAMINATION – SUMMER 2013

Subject Code: 360705   **Date: 11 /05 /2013**
Subject Name: Computer Graphics & Multimedia
Time: 10:30 AM TO 01:00 PM   **Total Marks: 70**
Instructions:
   1. **Attempt any five questions.**
   2. **Make suitable assumptions wherever necessary.**
   3. **Figures to the right indicate full marks.**
   4. **Each question carry equal marks (14 marks)**

Q.1	(a)	What is Computer Graphics? Explain applications of computer graphics.	**07**
	(b)	Define the following terms:	**07**
		(1) Resolution (2) Pixel (3) Window (4) Viewport (5)Reflection	
		(6) Shearing (7)Composite Transformation	
Q.2	(a)	Write and Explain DDA line drawing algorithm.	**07**
	(b)	Explain 2D viewing transformation pipeline.	**07**
		OR	
	(b)	Explain Boundary fill algorithm.	**07**
Q.3	(a)	Explain parallel and perspective projection.	**07**
	(b)	Explain parallel line drawing algorithm.	**07**
		OR	
Q.3	(a)	Explain Bresenham's line drawing algorithm.	**07**
	(b)	Explain Mid-point circle algorithm.	**07**
Q.4	(a)	Explain Sutherland Hodgeman polygon clipping algorithm.	**07**
	(b)	What is Data compression? Explain Run Length Data compression Method.	**07**
		OR	
Q. 4	(a)	Explain Cohen Sutherland line clipping algorithm.	**07**
	(b)	Explain various storage media.	**07**
Q.5	(a)	Explain MPEG standard.	**07**
	(b)	Explain animation languages.	**07**
		OR	
Q.5	(a)	Explain data characteristics.	**07**
	(b)	Explain 2D rotation with example.	**07**

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