(6 pages) Reg. No.:		There are	- types of translation in		
Code No.: 10334 E Sub. Cod	de : AMCS 63	(a) Five	(b) Three		
B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023		(c) Four (d) Two Bitmap is a collection of — that describes			
Sixth Semester Computer Science — Core COMPUTER GRAPHICS AND VISUA		an image. (a) Pixels (c) Bits	(b) Algorithms (d) Colors		
(For those who joined in July 2020)	5	Which of the following of a graphics system?	is a primary output device		
Time : Three hours Maxim $PART A - (10 \times 1 = 10 \text{ mark})$	num : 75 marks ks)	(a) Printer(c) Video Monitor	(b) Mouse (d) Keyboard		
Answer ALL questions. Choose the correct answer:		6. Which of the following is defined as the process of elimination of parts of a scene outside a window or a viewpoint.			
 Each screen point is referred to as a (a) Pivot (b) Pixel (c) Dot (d) Inden 		(a) Cutting(c) Clipping	(b) Rotating (d) Editing		
2. Color CRTs in graphics systems as monitors.	re designed as	7. is the process of changing or modifying the size of objects.			
(a) RGB (b) CMY (c) HLS (d) None		(a) Scaling (c) Rotation	(b) Shearing(d) Translation		
		Pag	e 2 Code No. : 10334 E		

8.	The fastes	t method	for	calculating	pixel	position	is
----	------------	----------	-----	-------------	-------	----------	----

- (a) DDA Line algorithm
- (b) Mid-point Algorithm
- (c) Parallel Line Algorithm
- (d) None

(a) 9

(b) 8

(c) 7

(d) 6

- (a) Better
- (b) Worst
- (c) Smaller
- (d) None

PART B —
$$(5 \times 5 = 25 \text{ marks})$$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain flat panel displays with neat diagrams.

Or

(b) Explain DDA line drawing algorithm.

Page 3 Code No.: 10334 E

12. (a) Discuss the different text attributes.

Or

- (b) Explain matrix representation and homogenous coordinates for graphical representation.
- 13. (a) Describe the viewing pipeline with neat diagram.

Or

- (b) Explain how will you transform window-to-viewpoint coordinate.
- 14. (a) Discuss 3-D coordinate-Axes rotation with example.

Or

- (b) How reflections and sheers are useful in three-dimensional graphical application? Explain.
- 15. (a) Explain Depth-Buffer method to defect visible surfaces.

Or

(b) Describe RGB color model in detail.

Page 4 Code No.: 10334 E

[P.T.O.]



PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the classifications for graphics software.

Or

- (b) Describe input devices for graphical applications in detail.
- 17. (a) Explain the basic two dimensional geometric transformations in detail.

Or

- (b) Explain line attributes of output primitives.
- 18. (a) Describe Cohen-Sutherland Line Clipping algorithm in detail.

Or

- (b) Explain Clipping operations in detail.
- 19. (a) Discuss the logical classification of input devices.

Or

(b) Explain three dimensional display methods in detail.

Page 5 Code No.: 10334 E

20. (a) Describe projection in detail.

Or

(b) Explain HSV color model in detail.

Page 6 Code No.: 10334 E