1263/A23 **MAY 2008**

COMPUTER GRAPHICS

Time : Three hours Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. Explain Graphical User interface.

2. Explain pixels and frame buffers.

3. Explain the primitive commands for drawing a line segment.

4. Explain how to delete a segment.

5. Explain the acoustic tablet and Electro Acoustic tables.

6. Describe winding number method for defining polygon's interior points.

7. Obtain rotation 2-D transformation matrix.

8. Explain display procedures briefly.

9. Explain mid point sub division.

10. Explain clipping of polygons.

PART B — (4 × 10 = 40 marks)

Answer any FOUR questions.

11. Write any three Graphics applications.

12. Explain the concept of character generation.

13. Explain

(a) Direct View Storage tubes and

(b) Plasma Panel

14. Explain the polygon interfacing algorithms

(a) to set a flag indicating that polygon should be filled and

(b) to set the polygon interior style

15. Obtain the matrix of transformation for scaling and translation.

16. Explain three dimensional transformations in detail.

PART C — (2 × 15 = 30 marks)

Answer any TWO questions.

17. Describe the Breshnam's Line drawing algorithm.

18. Discuss in detail TEST primitive operations

19. Explain Cohen-Sutherland algorithms for clipping lines.

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