5219/A23 **MAY 2011**

COMPUTER GRAPHICS

Time : Three hours Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. What is a line segment? Explain.
2. What is character generation? Explain.
3. Write short notes polygon representation.
4. Explain Random Scan System.
5. What are line attributes? Explain
6. Explain polygon Flood fill algorithm.
7. Write short notes on scaling transformation.
8. What is inverse transformation? Explain.
9. Explain the concept of line Clipping.
10. Explain window transformation in detail.

PART B — (4 × 10 = 40 marks)

Answer any FOUR questions.

11. Explain DDA algorithm in details?
12. Write an algorithm for changing pixel values of the frame buffer along a line segment.
13. Explain different display file algorithms.
14. Write short note on polygon filling concepts.
15. Explain display procedure in detail.
16. Obtain the view port transformation matrix.

PART C — (2 × 15 = 30 marks)

Answer any TWO questions.

17. Explain Breshnam's line algorithm.
18. Explain polygon interface algorithms.
19. Explain Cohen — Sutherland algorithm for clipping lines.

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