
COMPUTER GRAPHICS

Time : Three hours

Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. What is a parallel line? Explain.
2. Write short notes on pixels and frame buffer.
3. Explain the functions of any two display devices.
4. Write short notes on normalized device coordinates.
5. What is concave polygon? Explain.
6. How to enter an absolute polygon into the display file? Explain.
7. Explain the rotation transformation matrix.
8. Explain display procedure in detail.
9. Explain midpoint subdivision algorithm.
10. Explain the concept of multiple windowing.

PART B — (4 × 10 = 40 marks)

Answer any FOUR questions.

11. Briefly explain about Random scan system.
12. Explain the concept of character generation.
13. Explain polygon interfacing algorithm.
14. Explain the inside test performed in polygon.
15. Write short notes on various 3D transformation.
16. Write short notes on line clipping.

PART C — (2 × 15 = 30 marks)

Answer any TWO questions.

17. Briefly explain the vector generation algorithm for generating straight lines.
18. Discuss in detail the polygon insertion algorithm.
19. Explain Cohen - Sutherland algorithm for clipping lines.