Time: Three hours Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer any TEN questions

- 1. What is refresh CRT?
- 2. Define the terms 'geometric' and 'modeling' transformations.
- 3. What are the factors to improve quality of pictures on display device?
- 4. List the different types of Line caps?
- 5. What is Grayscale?
- 6. Write a note on Shearing.
- 7. Define the term-Clipping.
- 8. Write a note on a window and viewport.
- 9. What is dragging and fixing technique?.
- 10. What is request mode?
- 11. Mention the term-storyboard.
- 12. Define the term chromaticity.

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

Answer any FIVE questions

- 13. Write a short note on the function of Digitizers.
- 14. Explain the DDA line drawing algorithm.
- 15. Discuss the basic operations of 2D with their matrix representation.
- 16. Illustrate and explain the Sutherland-Hodgeman polygon algorithm.
- 17. Write a detailed note on Logical classification of input devices.
- 18. Discuss on any two 3D display methods.
- 19. Explain different design steps of animation sequences.

PART C —
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions

- 20. Explain the categories of Flat-Panel displays.
- 21. Describe the Line and character attributes with example.
- 22. Write the Liang-Barsky line clipping algorithm and its features.

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- 23. Elaborate on the different Input modes with example.
- $24. \quad \text{Explain the Depth-buffer and Scan-line methods}.$

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