

Roll No.....

Printed Pages: 2

8802

BT-8/M12

INTERACTIVE COMPUTER GRAPHICS

Paper-CSE 404

Time allowed : 3 hours

[Maximum marks :100

Note : Attempt five questions picking at least one question from each section

Section-I

- 1. (i) Explain the major components of the LCD. 10
- (ii) Explain the direct view storage tube with suitable diagram. 10
- 2 (i) Write a technical note on very high resolution devices. 10
- (ii) Explain various colour display techniques. 10

Section-II

- 3. Show that reflection about the line $y = -x$ is equivalent to a reflection relative to y - axis followed by counter clockwise rotation of 90° . 20
- 4. (i) Draw the flow chart of Sutherland Hodgman algorithm. 10
- (ii) Explain the pointing and positioning devices.10

Section-III

- 5. Explain perspective projections and its types in detail. 20

(2)

6. Write short notes on the following.

- (i) Z- buffer method .
- (ii) Scan line method.
- (iii) Printer's algorithm. 20

Section-IV

- 7. (i) Prove that two 2D rotations about the origin , commute i.e. $R_1R_2 = R_2R_1$. 10
- (ii) Prove that two 2D scaling transformations are commute about the origin ie. $S_1S_2 = S_2S_1$ 10
- 8. (i) How DDA differ from Bresenham's line drawing algorithm ? 10
- (ii) Write down the circle drawing algorithm known to you . 10

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