2008 PUNJAB ENGINEERING COLLEGE
B.E COMPUTER SCIENCE ENGINEERING
COMPUTER GRAPHICS

TIME: 3 HOUR
MARK: 70

Answer All Question

SECTION-A (10×1=10Marks)

1. What is an LCD Monitor?

2. The smallest screen element is called as_____

3. The refresh storage used to store intensity information for each pixel is referred as_____

4. What is the purpose of the display file?

5. Write the equations of 2D translation.

6. Sequences of transformation can be combined into one transformation by the ------------------process.

7. How are segment files organized?

8. A process which divides each element of the picture into its visible and invisible portions is called as _____

9. What is meant by homogeneous coordinates?

10. What is a viewport?

SECTION-B (5X6=30 Marks)

11. (a) Write in detail about pixels and Frame buffer.
            (OR)
(b) Write a note on any two display devices.

12. (a) write the procedures for entering absolute and relative values of a polygon in a display file.
            (OR)
(b) Explain the normalized device co-ordinates and illustrate their use.

13. (a) Write a short note on 'scaling' with respect ot 2D transformation.
            (OR)
(b) Write about rotation transformation in 3D.

14. (a) Explain the need of a segment table.
            (OR)
(b) Write the procedure for deleting a segement.

15. (a) Write short notes on windowing.
            (OR)
(b) What is Clipping? Explain the Cohen-Sutherland Algorithm for clipping a line segment.

SECTION-C (3x10=30 Marks)
Answer any THREE Questions:

16. Explain the Bresenham's Algorithm for line generation.

17. Explain how Polygon's are represented.

18. What is composite transformation technique? How rotation with respect to an arbitrary point is carried out using composite transformation?

19. Write procedures for saving and showing a segment.

20. Illustrate the Sutherland Hodgman Polygon clipping Algorithm. Logged