Unit II

4. What steps are required to plot a line whose slope is between 45° and 90° using Bresenham's method ? **16**

5. Write steps to scan-convert a sector (1/4 part of circle) using the trigonometric method. **16**

Unit III

6. (a) Differentiate between Windows and Viewport with suitable example. **6**

 (b) Explain the mid-point subdivision line clipping method. **10**

7. Explain Cohn-Sutherland and Sutherland-Hodgeman Algorithms in detail. **16**

Unit IV

8. (a) Differentiate between 2D and 3D graphics in detail with suitable examples. **8**

 (b) Explain the BSP tree in detail. **8**

9. What do you understand by projection ? Explain its types with suitable diagrams. **16**

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COMPUTER GRAPHICS
Paper : CSDE-21

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. **1** is compulsory.

1. Write short notes on the following : **16**
 (i) Interlacing
 (ii) Plasma Panel Display
 (iii) Lookup Table
 (iv) Tweening
 (v) Line Clipping

Unit I

2. Discuss the relative advantage of interactive and passive graphics. What are the applications of computer graphics ? **16**

3. What are Color CRTs ? How are colors focused in colored CRT ? Is the refreshing being necessary in CRT ? Explain. **16**