PC-1911/M

L-22/2050
COMPUTER GRAPHICS-221
(Semester–IV)

Time : Two Hours]   [Maximum Marks : 70

Note : Attempt any *four* questions. All questions carry equal marks.

I.   Define Computer Graphics. Explain various applications of computer graphics

II.   Write Breshenham's line drawing algorithm. Explain the algorithm with suitable example.

III.   What is an view port? Explain various steps to Performa window to view port transformation.

IV.   Define composite transformation. Write composite transformation to perform rotation of a point P(x, y) with reference to a fixed point F(h, k) in 2D.

V.   What is Perspective Projection in 3D? Explain various types of perspective projections in detail.

VI.   Explain Z-buffer algorithm in detail.

VII.   Explain Cohen Sutherland 3-D line clipping algorithm in detail.

VIII. Explain Specular Reflection and Diffuse Reflection models in detail.

IX. Answer the following questions in brief:

   (a) Write note on Flat panel display.

   (b) Explain limitations of DDA line algorithm.

   (c) Explain Flood fill algorithm.

   (d) Explain direct method for circle drawing algorithm.

   (e) Explain the concept of Vanishing Point in projection.

   (f) Explain Axonometric orthographic parallel projection.

   (g) What is the use of Dithering?

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