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[5352]-576

S.E. (Information Technology) (Sem. II)

EXAMINATION, 2018

COMPUTER GRAPHICS

(2015 PATTERN)

Time : Two Hours

Maximum Marks : 50

N.B. :— (i) Neat diagrams must be drawn wherever necessary.

(ii) Figures to the right indicate full marks.

(iii) Assume suitable data, if necessary.

1. (a) What are the steps of Bresenham's circle drawing algorithm ?
Explain with example. [6]

(b) What is the concept of display file and display file interpreter. [6]

Or

2. (a) Discuss any *two* polygon filling methods. [6]

(b) Interpret Digital Differential Analyser (DDA) algorithm to find which pixels are turned on for the line segment between (2, 3) and (8, 6). [6]

3. (a) Explain Cohen-Sutherland line clipping algorithm with diagram. [6]

(b) Explain reflection about XY, YZ and XZ plane. [6]

P.T.O.

Or

4. (a) Explain different types of parallel and perspective projections. [6]
(b) Explain window and viewport in detail with example. [6]
5. (a) Write a short note on animation sequence. [7]
(b) Write a note on OpenGL. [6]

Or

6. (a) Explain block diagram of i860. [7]
(b) What is shading ? Explain different types. [6]
7. (a) Write a note on fractal lines and surfaces. [7]
(b) What is interpolation ? Explain any interpolation algorithm. [6]

Or

8. (a) Explain Bezier curve generation using midpoint subdivision. [7]
(b) Explain techniques of smoothing curves using B Splines. [6]