Code No: 155AM

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, February - 2022
COMPUTER GRAPHICS
(Common to CSE, IT)

Time: 3 hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
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1.a) Discuss about midpoint circle algorithm with an example.
b) Distinguish between raster scan and random scan systems. [5+10]

2.a) Derive the decision parameter used in Bresenham's line drawing algorithm.
b) Write a short note on boundary fill algorithm. [8+7]

3.a) Discuss about Sutherland –Hodgeman polygon clipping algorithm with an example.
b) Explain about 2D viewing pipeline. [9+6]

4.a) Explain 2- dimensional scaling and shear transformations with an example.
b) Distinguish between window and view port. [10+5]

5. Briefly explain about the following:
a) Bezier curve
b) B-Spline curve. [7+8]

6.a) Explain about Hermite curve.
b) Write a short note on Polygon surfaces. [8+7]

7.a) Briefly explain the characteristics of perspective projections.
b) Derive the transformation matrix for rotation about y-axis in 3D. [7+8]

8. Discuss about the general purpose languages used for animation. [15]

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