R09

Code: 9A05503

B.Tech III Year I Semester (R09) Supplementary Examinations June 2016

COMPUTER GRAPHICS

(Common to CSE and ECC)

Time: 3 hours Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 Write a short notes on:
 - (a) Cathode Ray Tube.
 - (b) Vector scans display.
 - (c) Raster scans display.
- 2 (a) Explain midpoint circle generation algorithm taking a simple example.
 - (b) Given a radius r =7, demonstrate the midpoint circle algorithm by determining positions along the circle octant in the first quadrant from x=0 to x=y by taking the initial decision parameter.
- What is perspective projection? Derive the transformation matrix for perspective projection.
- 4 (a) How quantify interaction task involves in numerical values? Justify your answer.
 - (b) Explain the six regions of mouse movements in 3D along the principal axes.
- 5 (a) Compare and contrast Bezier and Hermite curves.
 - (b) Write a brief note on parametric bicubic surfaces.
- 6 Write notes on:
 - (a) Three dimensional transformations:
 - (b) Sweep representations.
- What is CIE chromaticity diagram in computer graphics? Explain its usage with example.
- 8 (a) How is a transparent surface modeled? What is Snell's law?
 - (b) Explain in detail about texture mapping.
