

R09

Code: 9A05503

III B. Tech I Semester (R09) Supplementary Examinations, May 2012

COMPUTER GRAPHICS

(Common to ECC & CSE)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Discuss about the optical scanning mechanism followed in image scanners.
(b) Differentiate between sampling and event driven processing.
- 2 (a) Explain Simple DDA algorithm for generating a line.
(b) Draw a line for the points (3, 4) and (7, 8) using DDA line drawing algorithm.
- 3 Given any arbitrary matrix in 3*3 homogeneous coordinates derive the corresponding inverse transformation matrix.
- 4 Write in detail about composite interaction tasks.
- 5 (a) Derive 3D plane surface equation.
(b) Write notes on different representations of a polygon mesh.
- 6 What are regularized Boolean set operations? How they are different from normal Boolean set operations? Explain in detail their significance.
- 7 (a) Write short notes on halftone patterns.
(b) Describe RGB color model.
- 8 (a) Explain how a camera model can be improved.
(b) Write a brief note on recursive ray tracing.
