

Code: 9A05503

R9

B.Tech III Year I Semester (R09) Supplementary Examinations, May 2013

COMPUTER GRAPHICS

(Common to ECC and CSE)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Describe the architecture of a raster scan display with a clear block diagram.
(b) Compare and contrast features of plasma panels and LCD devices.
- 2 (a) What is aliasing? Explain different methods of minimizing its effect.
(b) Explain the DDA algorithm for ellipse generation.
- 3 (a) Find the window-to-view port transformation that maps a window whose left corner is at (1, 1) and upper right corner is at (5, 5) on to a view port that has lower left corner at (0, 0) and upper right corner at (1/2, 1/2).
(b) What are the stages involved in 2-dimensional viewing transformation pipeline?
- 4 (a) What is a locator? Explain in detail about locator devices.
(b) Write in brief about keyboard devices.
- 5 What is a spline curve? Explain the role of blending function to plot a spline curve.
- 6 (a) Explain the role of Boolean operators in solid modeling.
(b) What are the applications of solid modeling system?
- 7 What is meant by clustered-dot ordered dither in computer graphics? Explain it in detail.
- 8 (a) Compute the illumination of specular model for following:
 $n = j$, $L = -i + 2j - k$, $S = i + 3/2 j + 1/2 k$
(b) Write notes on polygon mesh shading.
