

Code: R7420308

R7

B.Tech IV Year II Semester (R07) Advanced Supplementary Examinations June 2012

INTERACTIVE COMPUTER GRAPHICS

(Mechanical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

- 1 Explain about video-display devices, graphics monitors and work stations.
- 2 State various algorithms for line drawing and explain any two of them with suitable examples.
- 3 Derive the transformation matrices for two dimensional scaling, reflection and shear. And also explain the significance of homogeneous co-ordinates.
- 4 Explain about viewing pipe-line and window to view-port co-ordinate transformations.
- 5 Explain about Hermite curve, Bezier curve and shading algorithms.
- 6 Derive the necessary transformation matrix for rotation about an arbitrary axis in 3-D, and explain it with an example.
- 7 State various visible surface detection methods and explain any two of them.
- 8 Discuss about raster animation and motion specification.
