Code No: 57049

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, February/March -2016
COMPUTER GRAPHICS
### (Computer Science and Engineering)

Time: 3 Hours   Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks
- - -

1.a) Explain about the DVST with neat sketch.
 b) Distinguish between Raster–scan and Random–scan Systems.   [7+8]

2.a) Explain about Bresenham's midpoint Circle Generation Algorithm.
 b) Find the Interior region for the figure below, by Even–Odd and Winding Number Methods.   [7+8]
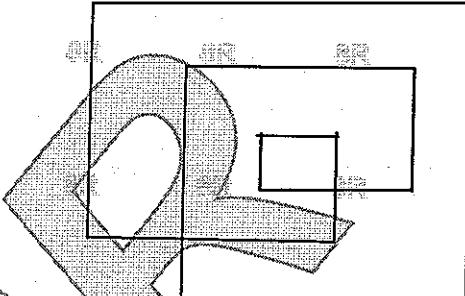
3.a) Obtain the transformation matrix for image transformations.
 b) Distinguish among world, normal and screen coordinates with suitable examples.[7+8]

4.   Explain about Cohen–Sutherland line clipping algorithm with a suitable example.   [15]
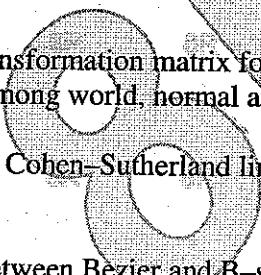
5.a) Distinguish between Bezier and B–spline surfaces.
 b) Explain about flat shading model.   [8+7]

6.   Obtain the transformation matrix for rotation about an arbitrary axis.   [15]

7.a) Explain about the classification of Visible Surface Detection Methods.
 b) Explain about depth–buffer method with a neat block diagram.   [8+7]

8.a) Explain about Raster animation.
 b) Explain about Computer animation Languages.   [7+8]

--ooOoo--