JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, June/July - 2014
COMPUTER GRAPHICS
(Computer Science and Engineering)

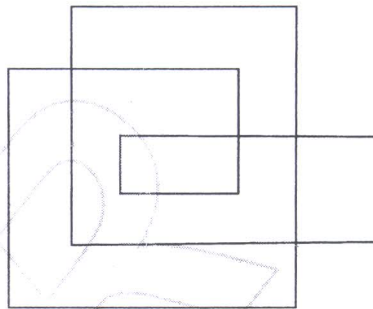**Time: 3 Hours**   **Max. Marks: 75**

Answer any Five Questions
All Questions Carry Equal Marks
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1.   Enumerate and Explain about various input devices used in Computer Graphics with neat block diagrams.

2.a)   Explain about Bresenham's Line Generation Algorithm.
  b)   Find the Interior region for the figure below, by Even–Odd and Winding Number Methods.

3.a)   Obtain the transformation matrix for rotation about an arbitrary point.
  b)   What are Homogeneous Coordinates? Explain.

4.   Explain about Cyrus–beck line clipping algorithm with a suitable example.

5.a)   Distinguish between Bezier and B–spline curves.
  b)   Explain about Gouraud Shading method.

6.a)   Explain about 3D reflection and shear transformations with suitable examples.
  b)   Explain about Parallel Projection Transformations with a neat block diagram.

7.a)   Distinguish between Object–space and Image–space Visible Surface Detection Methods.
  b)   Explain about Painter's algorithm with a neat block diagram.

8.   Explain in detail about Design of Animation Sequence.

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