

# School of Computing Science and Engineering

B.Tech CSE  
ETE - Jun 2023

Time : 3 Hours

Marks : 50

## Sem VIII - MCAN1280 - Computer Graphics

*Your answer should be specific to the question asked*

*Draw neat labeled diagrams wherever necessary*

1. Illustrate the use of Bezier curve. K4 CO2 (2)
2. Summarize the concept of Aspect ratio and Resolution in computer graphics K2 CO1 (2)
3. Illustrate the use of Perspective projection K4 CO2 (2)
4. Load the role of curve and text clipping in Computer Graphics K3 CO2 (2)
5. Define 2D reflection transformation with example K1 CO1 (2)
6. Illustrate and show 3D Translation and scaling Transformation matrix with example. K4 CO2 (5)
7. Load and show the concept of Window to Viewport Conversion in computer Graphics. K3 CO2 (5)
8. Solve and transform the triangle with points (1, 1), (0, 0) and (1, 0). Apply shear parameter 2 on X axis and 2 on Y axis and find out the new coordinates of the object K6 CO3 (6)
9. Illustrate and use bresenham's circle generation algorithm to draw circle first quadrant points assume that radius of circle is 10cm and center at origin K4 CO2 (8)
10. Comment and elaborate five different types of 2D Transformations and show their Homogeneous Matrix Representations K5 CO3 (8)
11. Assess and write down all the steps in Cohen Sutherland line Clipping Algorithm by taking one example also. K5 CO3 (8)