

## Assignment 3 (Unit 3)

1. Write the rotation matrix about  $x$ ,  $y$  and  $z$  axis in 3D.
2. Define 3D clipping.
3. Explain parallel and perspective projection. Justify the depth cueing projection for 3D display methods.
4. Establish and write Cohen and Sutherland 3D line clipping algorithm.
5. Write Cyrus-Beck 3D line clipping algorithm.



# Computer Graphics

## Assignment 1 (Unit 1)

1. What do you mean by Raster Scan Display?
2. Differentiate between Raster Graphics and Vector graphics.
3. Write the Bresenham's algorithm of line and explain.
4. Explain Midpoint generation algorithm.
5. Write the definition of Aspect Ratio.

## Assignment 2 (Unit 2)

1. What do you mean by window and viewport?
2. What is line clipping and give the name of line clipping algorithm.
3. Explain Cohen Sutherland line clipping algorithm.
4. Apply it for calculating the saved portion of line from  $(2, 7)$  to  $(8, 12)$  in a window ( $x_{min} = y_{min} = 5$  and  $x_{max} = y_{max} = 10$ )
5. Differentiate between Cohen Sutherland and Liang Barsky line clipping algorithm.