COMPUTER GRAPHICS – II:

UNIT - I :

3D Transformations

3-D object representation : Polygon surfaces, quadric surfaces, spline representation, Hermite curve, Bezier curve and B-Spline curves, Bezier and B-Spline surfaces. Basic illumination models, polygon rendering methods.

UNIT - II :

3-D Geometric transformations : Translation, rotation, scaling, reflection and shear transformations, composite transformations.

3-D viewing : Viewing pipeline, viewing coordinates, view volume and general projection transforms and clipping

UNIT - III :

Visible surface detection methods : Classification, back-face detection, depth-buffer, scan-line, depth sorting, BSP-tree methods, area sub-division and octree methods

UNIT - IV :

Computer animation : Design of animation sequence, general computer animation functions, raster animation, computer animation languages, key frame systems, motion specifications.