

Computer Graphics

UNIT - I

Application of computer graphics: graphics devices - LED, LCD, CDA, FPD (04), drawing geometry, Line drawing Algorithms: DDA and Bresenham, Functions implementation (03), Cathode Ray Tube implementation (03).

Lectures: 10

UNIT - II

2D transformation: Translation, Rotation, Scaling, Reflection, Shearing (02), Circle Drawing: Bresenham and Mid-point subdivision function implementation (02), Clipping: End Point Codes, Cohen Sutherland, Mid-point Subdivision Algorithm (04), Mapping, dragging, echoing, Polygon Filling, character generation (04).

Lectures: 12

UNIT - III

3D graphics transformation: translation, rotation, scaling, reflection, shearing (02), Projection: parallel, Perspective projection (05), Hidden surface removal algorithm methods, back face removal algorithm, Z Buffer Algorithm, floating horizon technique (05).

Lectures: 12

UNIT - IV

Tweening: interpolation, morphing technique (03), GKS: primitive, workstation (03), multimedia application: animation principles, animation tools (05).

Lectures: 11