

## COMPUTER GRAPHICS AND ANIMATION – MCS -23

Theory Paper – 100 Marks

Sessional – 50 Marks

Transformation and Projections. Bresenham's line drawing algorithm, Homogenous coordinate system(2D & 3D), transformation matrices for translation, scaling, rotation,, shear rotation about an arbitrary axis(3D), parallel projection, perspective projection, clipping, Sutherland cohen algorithm, cyrusbeck algorithm curves & surfaces, Development of Bresenham's algorithm to draw octant of a circle, Bezier curves, B- spline curves, solid modeling, Hidden surface removal, shading, introduction to multimedia, Non Temporal media, Audio, Video, Graphics animation..

### **Books recommended**

1. Multimedia Systems Design, P.K.Andleigh & K.Thakrar, Prentice Hall PTR,1996(TB1)
2. Multimedia Computing, Communication & Applications, Ralf Steinmetz and Klara Nashtedt. Prentice Hall.1995(TB2)
3. Multimedia Systems, Ed. By John F.K Buford, Addison-Wesley Pub.Co.1994.