Roll No. .....

Subject Code—6766-Y

M. Sc. (CS)/M.C.A. EXAMINATION

(Third Semester)

(MCA 3 Years)

(For Re-appear Batch Prior to 2009)

MS-13

COMPUTER GRAPHICS

Time : 3 *Hours* *Maximum Marks :* 100

Note : Attempt any *Five* questions. All questions carry equal marks.

1. What do you mean by Computer Graphics ? How does computer graphics system work ? What are the advantages of interactive compute graphics ?

2. List the operating characteristics for the following display technology :

   Raster Refreshes System, Plasma Panel, LED and LCD.

3. Explain Bresenham's algorithm for line drawing. What Raster location will be chosen when scan converting line from pixel (1, 1) to pixel (8, 5) using above algorithm.

4. Write 2-D Cohen-Sutherland algorithm for line segment clipping and hence find points of intersection in case of clipping candidate. Compare efficiency of clipping obtained using Mid-Point subdivision and Sutherland Cohen method.

5. What is Hidden surface problem ? How is the depth of a polygon determined by the Painter's algorithm ?

6. Explain hardware, software and application area of multimedia in detail.

7. Explain the different interactive graphical techniques.

8. Write short notes on the following :

(a) Window to viewport transformation

(b) GKS primitive

(c) GKS viewport command

(d) Touch panels.