**MGMCOET NOIDA**

**SUBJECT: Computer Graphics SUBJECT CODE: RCS-603**

**Assignment-I**

Q 1) What is Computer Graphics. And also explain the types of computer graphics.

Q 2) what are the operating characteristics of following display technologies:

1. DVST
2. Plasma panel
3. LCDs

Q 3)Distinguish between raster and vector graphics methods. which method do we prefer?

Q 4)Explain the architecture of a raster scan.

Q 5) What is refresh buffer? Identify the contents and organization of the refresh buffer for the case of raster display and vector display.

Q 6)Give a brief description of various input devices used in computer graphics.

Q 7)what are flat panel displays?

Q 8)What is meant by refreshing of the screen? Explain refresh cathode ray tube(CRT).

Q 9)Explain the following terms:

1. Aspect ratio (b) resolution (c) Bitmap (d) pixel (e)color depth

Q 10)Explain shadow mask method and how it is different from beam penetration method ?

Q 11)Explain DDA algorithm. And draw the line having end point from A(20,10) to B(30,18) by using this algorithm.

Q 12)Explain circle generating algorithms. and also discuss their disadvantages.

Q 13) Write down and explain the midpoint circle drawing algorithm. Assume 10 cm as the radius and co-ordinate origin as the centre of the circle.

Q 14)Set up a parallel version of Bresenham’s line algorithm for slope in the range 0<m<1

Q 15) How much time is spent scanning across each row of pixel during screen refresh on a raster with resolution 1280 by 1024 and refresh rate is 60 frame/sec.

Q 16) Is the CRT analog or digital device? Explain.

Q 17) Plot a line from (0,0) to (-8,-4) in third quadrant by using DDA Algorithm.

Q 18) Give the logical organization of video controller and explain its importance in raster scan system.