
Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section- A

Q.N.1 Answer the following questions: (1*10=10 marks)

- (1) Define flat panel display.
- (2) Define computer graphics.
- (3) Define anti aliasing.
- (4) Name any one circle generating algorithm.
- (5) Define Nicholl-Lee-Nicholl algorithm.
- (6) Define text clipping.
- (7) Define 3-D shearing operation.
- (8) Define CIE chromaticity.
- (9) Name any one multimedia presentation tool.
- (10) Define MPEG, MP3.

Q.N.2 Answer the following questions: (2*5=10 marks)

- (1) Explain working of video display card.
- (2) Explain inside-outside test for polygon filling.
- (3) Explain various text clipping methods.
- (4) What is chromaticity diagram?
- (5) Define following image file format (i) GIF (ii) TIFF (iii) BMP

Section B

Q.N.3 Answer the following questions: (12*5=60 marks)

- (1) Explain working of refresh cathode ray tube with diagram. Also explain how it is different from color CRT monitors.

OR

Explain raster scan display and random scan display. Also differentiate between raster scan displays and random scan displays.

- (2) Write Bresenham's line drawing algorithm. Apply this algorithm on line segment having end points (20, 10) and (30, 18).

OR

Explain boundary fill algorithm. Differentiate between boundary fill and flood fill algorithm.

- (3) Explain Cohen Sutherland line clipping algorithm with suitable example.

OR

Explain following 2 dimensional transformation with respective matrix values-

- (a) Translation (b) Rotation (c) Reflection (d) Scaling (e) Shearing
- (4) Explain RGB color model, YIQ color model, CMY color model, HSV color model with suitable diagram and examples.

OR

Explain (i) Parallel projection (ii) Perspective projection (iii) Orthogonal projection.

- (5) What are different frameworks for multimedia systems? Write a note on multimedia servers and databases.

OR

Explain different types of animation techniques. Also explain aliasing, anti aliasing and morphing.