

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(IT) (2016 Onwards) (Sem.-3)

COMPUTER GRAPHICS

Subject Code : MSIT-301

M.Code : 74066

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students have to attempt any ONE question from each SECTION.
2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.

SECTION-A

1. Discuss the role of light pen, digitizers and data glove in computer graphics.
2. Differentiate the following :
 - (a) Random and raster scanning
 - (b) CRT and DVST

SECTION-B

3. Write and explain Bresenham's line drawing algorithm.
4. Discuss the significance of area filling and flood filling techniques in computer graphics. Give example to support your answer.

SECTION-C

5. Define transformation. Explain translation, reflection and scaling in two dimensional coordinate system.
6. What is need of Cohen Sutherland algorithm? Write and explain the working of Cohen Sutherland algorithm.

SECTION-D

7. Explain the following :
 - (a) Halftoning and dithering technique
 - (b) Surface rendering methods
8. Write and explain the working of painter's algorithms.

SECTION-E

9. Write briefly :
 - (a) Define computer graphics.
 - (b) List various applications of computer graphics.
 - (c) Define circle and ellipse.
 - (d) What is character generation?
 - (e) Define clipping.
 - (f) What are Cartesian coordinates?
 - (g) Define shearing.
 - (h) Define projection.
 - (i) What is diffuse reflection?
 - (j) Define morphing.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.