Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(Computer Science) (2019 & Onwards) (Sem.–3)
INTERACTIVE COMPUTER GRAPHICS
Subject Code : MSC-302
M.Code : 72104

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 has to attempt any ONE question from each SECTION.
2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.

SECTION-A

Q1 Define Computer Graphics. What are its types? Explain the role of different interactive control devices with their relative merits and demerits.

Q2 Write notes on the following :

(a) Function of display processor

(b) Working of CRT

SECTION-B

Q3 Write and explain the working of simple DDA line drawing algorithm.

Q4 What are different line clipping algorithms? Write and explain the working of Cohen Sutherland algorithm.

SECTION-C

Q5 What is 3D transformation? Explain rotation, translation and reflection in context to 3D graphics.

Q6 Explain the following :

(a) Working of oblique projection

(b) Perspective projection

SECTION-D

Q7   Write and explain the working of z-buffer algorithm.

Q8   Discuss the need and working of depth sorting algorithm.

SECTION-E

Q9   (a)   Differentiate LED and LCD.

      (b)   What is use of digitizer?

      (c)   What are merits of incremental method?

      (d)   What is diametric projection?

      (e)   Define arc and sector.

      (f)   What is illumination model?

      (g)   Define shearing.

      (h)   What is Phong shading?

      (i)   What is use of rendering?

      (j)   List various applications of computer graphics.

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.