

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(Computer Science) (2015 & 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.