

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

Paper ID : [A3169]

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.
3. Use of non-programmable scientific calculator is allowed.

SECTION-A

- Q1) Why Computer Graphics is required? Explain its different applications.
- Q2) Discuss the various output devices in detail with its internal working.

SECTION-B

- Q3) State and explain Circle Drawing Bresenham's Algorithm using suitable example.
- Q4) Discuss the Cohn-Sutherland Clipping Algorithm.

SECTION-C

- Q5) Discuss the Parallel Projections with its types.
- Q6) Elaborate the 3D Geometric Transformations.

SECTION-D

- Q7) Explain scan line Z buffer algorithm.
- Q8) What do you mean by Shading? Explain Gouraud & Phong Shading in detail.

SECTION-E

Q9) Answer briefly :

- a) Discuss Geometric translation.
- b) Explain the need of Display Processors.
- c) What is Polygon Clipping?
- d) What do you mean by Back face Removal?
- e) Explain Perspective projections.
- f) What do you mean by Hidden surfaces?
- g) Discuss Window viewport.
- h) State and explain Integer DDA.
- i) Express the steps used for 2D Reflection.
- j) What are Interactive Control devices?

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