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

Total No. of Questions : 09

BMCI (2014 & Onwards) (Sem.–3)

COMPUTER GRAPHICS

Subject Code : BSBC-602

M.Code : 72584

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1 Answer briefly :

(a) What do you mean by passive graphics? Explain.

(b) Write the properties of Digitizers.

(c) What is the significance of various color models?

(d) Write the steps for character generation.

(e) List at least 5 area filling algorithms.

(f) Define Shearing.

(g) What is viewing transformation?

(h) List some modern display devices.

(i) What are the properties of workstations?

(j) Give some applications of computer graphics.

SECTION-B

2. What are the factors that affects for achieving real time performance in CRT displays?

3. How do you setup the decision parameter for developing midpoint circle generating algorithm? Illustrate the method.

4. What are the different text clipping techniques? Explain at least 2 such techniques.

5. Prove that 2D rotations are additive.

6. Explain the effects of 3D geometric transformations.

SECTION-C

7. Solve and write the matrix for reflection about line $y = -x$.

8. Discuss the Liang-Barskey line clipping algorithm. Under what conditions is this algorithm better than Cohen-Sutherland algorithm? Explain also.

9. Magnify the triangle with vertices A(0,0), B(1,1) and C(5,2) to twice its size while keeping C(5,2) fixed.

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.