

Roll No.....

Total Pages: 3
1915

BCA/M-17
COMPUTER GRAPHICS
Paper: BCA-363

Time: Three Hours

Maximum Marks: 80

Note: Attempt five questions including No. 1 which is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) Differentiate between active and passive computer graphics.
(b) Write and explain any five applications of computer graphics.
(c) Explain, how the decision parameter for Bresenham's line drawing algorithm is determined?
(d) Discuss the disadvantages of polar coordinate method to draw the circle.
(e) Discuss the importance of homogeneous coordinates.
(f) What do you mean by inverse transformation?
(g) Write a short note on viewport.
(h) Write the matrix for 3D transformation.

Unit-I

2. Explain with diagram the working of LCD monitors.
3. Discuss various general purpose graphics software.

Unit-II

4. Discuss the algorithm used to draw circle using polar coordinates.
5. Write a program for polygon fill algorithm.

Unit-III

6. Discuss the matrix representation for transformation operations.
7. Explain the working of any three positioning devices.

Unit-IV

8. Explain mid-point line clipping algorithm.
9. Write a program for 3D rotation and scaling operations.