

35093

M.Sc. DEGREE EXAMINATION, OCTOBER 2015.

THIRD SEMESTER

Computer Science

Paper III : COMPUTER GRAPHICS

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Differentiate Frame buffer and display file.
2. What is Antialiasing?
3. What is rendering?
4. Polygon surface
5. What is a Window?
6. Aspect Ratio.
7. What are the main advantages of Bresenham's line algorithm?
8. Define type face.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Describe the working of graphic input and output devices and their classification according to their logical functioning.

Or

10. Explain how the Bresenham's circle generating algorithm works for drawing a circle with radius 8 units and center (2, 3).

11. Rotate the triangle with vertices (7, 2) (3, 2) and (3, 9) with 90 degrees.
- (a) With respect to origin.
 - (b) With respect to a fixed point (3, 9).

Or

12. Describe the Sutherland-Hodgeman algorithm for polygon clipping.
13. (a) Differentiate between interactive and passive graphics.
(b) Explain the interactive picture construction techniques.

Or

14. Discuss about quadric surfaces.
15. Explain the polygon rendering methods.

Or

16. Explain 3D clipping.

