F–7166

Sub. Code
7BCE6C2

B.Sc. DEGREE EXAMINATION, APRIL 2022.

Sixth Semester

Computer Science

COMPUTER GRAPHICS

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is frame buffer?

2. Define antialiasing.

3. What is polygon filling? Name two algorithms for polygon filling.

4. What does display file contain?

5. What happens after rotation about an arbitrary point?

6. What is segment table?

7. Define clipping.

8. What is view port?

9. What is meant by event handling?

10. Name four input devices and state their role in computer graphics applications.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe character generation.

Or

(b) Explain vector generation.

12. (a) Describe display file structure and interpreter.

Or

(b) Explain line style primitives.

13. (a) Describe the functions for creating, closing, deleting and renaming segments.

Or

(b) Explain inverse transformation.

14. (a) Describe viewing transformation.

Or

(b) Explain the procedure for polygon clipping.

15. (a) Explain locator.

Or

(b) Describe echoing.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain Bresenham's Line drawing algorithm.

17. Describe polygon filling algorithm and inside-outside tests.

18. Explain the transformations with necessary mathematical equations.

19. Explain Cohen Sutherland algorithm.

20. Describe the interaction modes for input devices.
