D–4034

Sub. Code
41223

DISTANCE EDUCATION

P.G.D.C.A. EXAMINATION, MAY 2024.

Second Semester

COMPUTER GRAPHICS

(CBCS 2018 – 19 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

1. What are the video display devices?

2. State the application areas of computer graphics.

3. What is transformation?

4. Define window.

5. Comment on Bezier curve.

6. How RGB is converted to CMY?

7. Write the matrix for 3'D rotation.

8. What is view distance?

9. Define frame.

10. What is pseudo animation?

PART B — ($5 \times 5 = 25$ marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain about raster scan systems.

Or

(b) Discuss in detail about the boundary fill algorithm.

12. (a) Write a short note on clipping operations.

Or

(b) Explain in detail about 2'D viewing.

13. (a) Elaborate note on B-Spline curve.

Or

(b) Explain the various types of illuminations.

14. (a) What are the types of projection? Explain.

Or

(b) Write about 3'D scaling.

15. (a) What are animation language? Explain.

Or

(b) Explain hidden surface removal in computer graphics.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Write down and explain the midpoint circle drawing algorithm. Assume 10 cm as the radius and co-ordinate as the center of the circle.

17. Explain the following composite transformations.

(a) Translations

(b) Rotation.

18. Explain the following :

    (a) Polygon surface

    (b) Quadratic surface.

19. Explain all 3'D transformation with suitable example.

20. Describe the design of animation sequence with suitable example.