

QP CODE: 23104183



Reg No	:	
Name	:	

# B.Sc / BCA DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE **EXAMINATIONS, JANUARY 2023**

## **Third Semester**

### Core Course - CS3CRT07 - COMPUTER GRAPHICS

Common to Bachelor of Computer Applications & B.Sc Information Technology Model III 2017 Admission Onwards

1D2B4E71

Time: 3 Hours Max. Marks: 80

core

#### Part A

Answer any ten questions. Each question carries 2 marks.

- 1. Write notes on CAD.
- 2. What do you mean by persistence?
- 3. What is the use of Image Scanner?
- How the discrete coordinate values of line are calculated between two points? 4.
- 5. What is Outline font, how is it represented?
- 6. What is shear?
- 7. Illustrate the need of homogeneous coordinates?
- 8. What is dragging?
- Discuss about Three Dimensional and Stereoscopic views. 9.
- 10. What are octrees?
- 11. Explain about various computer animation functions.
- 12. Write notes on Key frame systems.

 $(10 \times 2 = 20)$ 

## Part B

Answer any six questions.

Each question carries 5 marks.



Page 1/2 **Turn Over** 



- 13. Explain the working of Raster scan and Random Scan Systems.
- 14. Construct a line using Bresenham's Line Drawing Algorithm, whose points are given as (20,10) and (30,18).
- 15. Use Midpoint Circle Algorithm and generate the circle, whose radius is given as r=10.
- 16. Explain window to view port tansformation.
- Write short note on text clipping.
- 18. Explain Polygon Tables in details with suitable figure.
- 19. Briefly explain CSG with the help of figures.
- 20. Explain about Key frame systems.
- 21. Explain about different motion specifications.

 $(6 \times 5 = 30)$ 

#### Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Explain in detail the various flat panel displays.
- 23. Describe Cohen Sutherland line clipping algorithm with examples.
- 24. Explain Sweep representation and CSG in detail with proper figures.
- 25. Discuss in detail the steps involved in the design of animation sequence.

 $(2 \times 15 = 30)$ 

