

QP CODE: 18103308



Reg No : .....

Name : .....

**B.Sc. DEGREE (CBCS) EXAMINATION, NOVEMBER 2018**

**Third Semester**

**CORE COURSE - CS3CRT07 - COMPUTER GRAPHICS**

(Common to B.Sc Information Technology Model III, Bachelor of Computer Application)

2017 Admission Onwards

14858CD2

**Maximum Marks: 80**

**Time: 3 Hours**

**Part A**

Answer any **ten** questions.

Each question carries **2** marks.

1. What is the role of computer graphics in entertainment?
2. Define refresh buffer/Frame buffer?
3. What is the difference between emissive and non emissive displays?
4. What is the importance of decision parameter in Bresenham's Line Drawing Algorithm?
5. What are the two categories of Typefaces?
6. Explain translation ?
7. What is grid ?
8. What is clipping ? What are its different types ?
9. Why Perspective Projection appear more realistic?
10. What is Boundary Representations?
11. Define raster animation?
12. Write notes on Parameterized systems?

(10×2=20)

**Part B**

Answer any **six** questions.

Each question carries **5** marks.

13. Explain the working of the following a)Data Glove b)Digitizer c)Touch Panel d)Light Pen
14. Briefly explain DDA Algorithm, what is the disadvantage of this algorithm.
15. Use Midpoint Circle Algorithm and generate the circle , whose radius is given as  $r=10$





16. Give the matrix representation for the basic transformations
17. Explain window to view port transformation?
18. Explain Sweep representation with the help of figures.
19. Compare CSG and Ray-casting Methods.
20. Explain morphing.
21. Explain about different motion specifications

(6×5=30)

### Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Explain the working of Cathode Ray Tube with suitable diagram.
23. Explain Sutherland-Hodgeman polygon clipping with example
24. Explain Octress in detail.
25. Explain various steps involved in the design of animation sequence

(2×15=30)

