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QP CODE: 24001290



Reg No	:	
Name	:	

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024

Sixth Semester

B.Sc Computer Science Model III

CORE COURSE - CC6CRT06 - COMPUTER GRAPHICS

2017 Admission Onwards

FE43E4F9

Time: 3 Hours

Max. Marks: 80

Part A

Answer any **ten** questions. Each question carries **2** marks.

- 1. Distinguish between bitmap and pixmap.
- 2. Differentiate Trackball and Spaceball.
- 3. Expand PHIGS.
- 4. Expand DDA.
- 5. Write down the function used for displaying character in PHIGS.
- 6. Write transformation equation for 2D rotation.
- 7. Differentiate interior and exterior clipping.
- 8. What are applications of clipping ?
- 9. What is ray casting method?
- 10. What is octree representation?
- 11. What is generation in between frames in animation?
- 12. Briefly explain morphing.

(10×2=20)

Part B

Answer any **six** questions. Each question carries **5** marks.

- 13. Explain the working of gas-discharge display.
- 14. Explain video controller in detail.



- 15. What do you mean by PHIGS workstation?
- 16. What is the initial decision parameter of Midpoint Circle generating algorithm. Derive it.
- 17. Prove that two consecutive translation is additive.
- 18. Explain on the following in picture construction a. constraints b. Basic positioning methods.
- 19. Write short notes on a)Parallel projection b) Perspective projection.
- 20. Write about sweep representation of 3 dimensional objects.
- 21. Explain keyframe systems.

(6×5=30)

Part C

Answer any **two** questions. Each question carries **15** marks.

- 22. Explain working of CRT.
- 23. Explain Bresenham's line algorithm.
- 24. Write and explain Sutherland Hodgeman polygon clipping algorithm.
- 25. What are the different 3 dimensional object representation methods? Explain any three of them.

(2×15=30)