

E 3023



Reg. No	••
Name	

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, APRIL 2022

Fifth Semester

Core Course—COMPUTER GRAPHICS

[For B.Sc. I.T.]

(2013—2016 Admissions)

Time: Three Hours

Maximum Marks: 80

Part A (Short Answer Questions)

Answer all questions. 1 mark each.

- 1. Expand CRT
- 2. What is a Pel?
- 3. What is a graphic controller?
- 4. What is the principle of a touch panel?
- 5. What is a Mouse?
- 6. What are user co-ordinates?
- 7. What is translation in computer graphics?
- 8. What is Shear?
- 9. What is a quadric surface?
- 10. What is a perspective projection?

 $(10 \times 1 = 10)$

Part B (Brief Answer Questions)

Answer any **eight** questions. 2 marks each.

- 11. What is a raster scan system?
- 12. What is a vector display?
- 13. What is the difference between a track ball and space ball?
- 14. What is a light pen?

Turn over





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- 15. What are device co-ordinates?
- 16. What is scaling in computer graphics?
- 17. What is area clipping?
- 18. What is a polygon mesh?
- 19. What is a depth queuing?
- 20. What is diffuse reflection?
- 21. What is flat shading?
- 22. What is a view port?

 $(8 \times 2 = 16)$

Part C (Descriptive/Short Essay Type Questions)

Answer any **six** questions.

4 marks each.

- 23. Explain random scan displays in detail.
- 24. Explain plasma panel displays in detail.
- 25. Explain transformation matrix in detail.
- 26. Explain logical classification of devices.
- 27. Explain polygon clipping with an algorithm.
- 28. Explain windowing in detail.
- 29. Explain curved surfaces in detail.
- 30. Explain composite transformations in detail.
- 31. Explain surface shading in detail.

 $(6\times 4=24)$

Part D (Long Essays)

Answer any **two** questions. 15 marks each.

- 32. Explain in detail the construction, design and working of a CRT.
- 33. Explain in detail line clipping and various algorithms for the line clipping.
- 34. Explain in detail 3D transformations.
- 35. Explain in detail interactive graphical techniques.

 $(2 \times 15 = 30)$

