SECTION - C (Short essay)

Not to exceed 120 words. Answer any six questions. Each question carries 4 marks.

- 23. Explain 2D composite transformations.
- 24. Write short notes on illumination techniques.
- 25. Explain the advantages and disadvantages of Z-buffer.
- 26. Write short notes on animations.
- 27. Explain shearing with an example.
- 28. Explain the working of liquid crystal display.
- 29. Write short notes on video adapters.
- 30. Explain the concept of warping.
- 31. Write short notes on panning.

 $(6 \times 4 = 24 \text{ Marks})$

SECTION - D (Long essay)

Answer any two questions. Each question carries 15 marks.

- 32. Explain the 3D transformation in detail.
- 33. Explain Bresenham's line drawing algorithm.
- 34. Explain the working of CRT with a diagram.
- 35. Briefly explain Sutherland Hodgman polygon clipping algorithm.

 $(2 \times 15 = 30 \text{ Marks})$

- 8. What do you mean by vertical retrace?
- 9. Which is the color produced by the intersection of primary CMYK color?
- 10. What is zooming?

 $(10 \times 1 = 10 \text{ Marks})$

SECTION - B (Short answer)

Not to exceed one paragraph. Answer any eight questions. Each question carries 2 marks.

- Distinguish between window port and view port.
- 12. What is dragging?
- 13. What are the steps involved to perform scaling in 3D?
- Distinguish between uniform scaling and differential scaling.
- 15. What is gouraud shading?
- 16. What you mean by parallel projection?
- 17. How surface rendering realism can be attained?
- 18. What are output primitives?
- 19. What is CYMK color model?
- 20. What do you mean by hidden surface removal?
- 21. What is reflection?
- 22. What is the z-axis rotation equation of 3d homogeneous coordinate?

 $(8 \times 2 = 16 \text{ Marks})$

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Reg.	No.	:
Name	:	

Fifth Semester B.Sc./B.C.A. Degree Examination, December 2019

Career Related First Degree Programme under CBCSS

Group 2 (b) – Computer Science / Computer Applications

Core Course

CS 1543/CP 1542 : COMPUTER GRAPHICS

(2014 Admission Onwards)

Time: 3 Hours

Max. Marks: 80

SECTION - A (Very Short Answer)

One word to maximum of one sentence. Answer all questions.

- 1. What do you mean by resolution?
- 2. What is clipping?
- 3. What is aliasing effect?
- 4. What do you mean by projection?
- 5. What do you mean by transformation?
- 6. What is a window port?
- 7. What is a refresh buffer?