23U416

(Pages: 2)

Name :

Reg. No :

FOURTH SEMESTER B.C.A. DEGREE EXAMINATION, APRIL 2025

(CBCSS-UG)

(Regular/Supplementary/Improvement)

CC19U BCA4 C08 - COMPUTER GRAPHICS

(Computer Application - Complementary Course)

(2019 Admission onwards)

Time: 2 Hours

Maximum: 60 Marks Credit: 3

Part A (Short answer questions) Answer *all* questions. Each question carries 2 marks.

- 1. Define pix map in raster scan.
- 2. Define refresh rate.
- 3. List types of flat panel display.
- 4. Define Control grid.
- 5. Compare LCD and LED.
- 6. List steps when $\Delta x=1$ in DDA algorithm.
- 7. List 2 approaches of polygon filling.
- 8. Write the Row-major equation for Rotation.
- 9. Write the Row-major equation for Homogenous co-ordinates of Rotation.
- 10. Define Brightness.
- 11. Define RGB color model.
- 12. Define GIMP.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer *all* questions. Each question carries 5 marks.

- 13. Explain CAD, Computer art, Presentation Graphics.
- 14. Explain pixel.
- 15. Explain Shadow mask method.
- 16. Explain with each steps window to viewport transformation.
- 17. Briefly explain Line Clipping algorithm.

- 18. Describe Polygon Clipping algorithm.
- 19. Explain working of transform tool in GIMP.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any *one* question. The question carries 10 marks.

- 20. Using Bresenham's algorithm, draw a circle with centre (20, 20) and radius 8. Explain in detail with necessary steps?
- 21. Write row major, column major Homogenous co-ordinates.

(1 × 10 = 10 Marks)
