| 22U416 | (Pages: 2) | Name: |
|--------|------------|---------|
| | | Reg.No: |

FOURTH SEMESTER B.C.A. DEGREE EXAMINATION, APRIL 2024

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U BCA4 C08 - COMPUTER GRAPHICS

(Computer Application - Complementary Course) (2019 Admission onwards)

Time: 2.00 Hours Maximum: 60 Marks

Credit: 3

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

- 1. Define Basic Graphics System.
- 2. List any two advantages of random scan display.
- 3. List any two advantages and disadvantages of flat panel display.
- 4. List the components of Refresh CRT.
- 5. Explain any two differences between LCD and LED.
- 6. Point out steps when $\Delta x=1$ in DDA algorithm.
- 7. List two approaches of polygon filling.
- 8. Define Rotation.
- 9. Write the Column-major equation for Homogenous co-ordinates of Translation.
- 10. Define Light.
- 11. Define YIQ model.
- 12. Explain any two features of Gimp.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

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

- 13. Explain pixel.
- 14. Explain raster scan display.
- 15. Explain Beam-Penetration method.
- 16. Briefly explain window to viewport transformation.

- 17. Explain Line Clipping algorithm.
- 18. Describe Polygon Clipping algorithm.
- 19. Explain selection tools in GIMP.

(Ceiling: 30 Marks)

Part C (Essay questions)

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

- 20. Explain in detail with example Bresenham's algorithm.
- 21. Explain Homogenous co-ordinates in detail.

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