20U431	(Pages: 2)	Name:	

Reg No:	
IXC2.INU.	

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2022

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U BCA4 C08 - COMPUTER GRAPHICS

(Computer Science - 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 DVST.
- 2. Define raster scan display.
- 3. Define refresh rate.
- 4. List types of video display devices.
- 5. Define Shadow mask method.
- 6. List steps when d<0 in bresenham's circle algorithm.
- 7. List two approaches of polygon filling.
- 8. Write the general translation equation.
- 9. Write the general equation on reflection on X-axis.
- 10. List properties of light.
- 11. Explain any two features of Gimp.
- 12. List transform tool in GIMP.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

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

- 13. Explain Visualisation, Image Processing.
- 14. Explain types of flat panel display.

- 15. Compare and contrast LCD and LED.
- 16. Briefly explain window to viewport transformation.
- 17. Briefly explain Line Clipping algorithm.
- 18. Briefly explain Sutherland Hodgeman Polygon Clipping algorithm.
- 19. Explain YIQ model.

(Ceiling: 30 Marks)

Part C (Essay questions)

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

- 20. Using DDA algorithm, draw a line from (2, 4) to (6, 18). Explain in detail with necessary steps.
- 21. Write row major, column major, matrix equation of Reflection, Shear.

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