

## FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION, APRIL 2022

B.C.A.

BCA 4C 08—COMPUTER GRAPHICS

(2019 Admission onwards)

Time : Two Hours

Maximum : 60 Marks

**Section A***Answer at least eight questions.**Each question carries 3 marks.**All questions can be attended.**Overall Ceiling 24.*

1. Write short notes on bitmap and pixmap.
2. Explain CAD and Presentation Graphics as applications of computer graphics.
3. Explain Color Look up table.
4. How stair step appearance occurs in computer graphics.
5. How to remove a window border in GIMP ?
6. How will you retrieve the current frame buffer intensity setting for a specified location ?
7. What is polygon filling ?
8. What is Shear ?
9. Distinguish between window and viewport.
10. Explain the basic principles of line clipping algorithm.
11. Explain how to perform Scaling with respect to a selected fixed position.
12. What is scan conversion ?

(8 × 3 = 24 marks)

**Turn over**

**Section B**

*Answer at least **five** questions.*

*Each question carries 5 marks.*

*All questions can be attended.*

*Overall Ceiling 25.*

13. Explain the sequence of transformations in windowing.
14. Distinguish between active and passive matrix LCD displays.
15. Explain the transformation matrix to perform two successive scaling operations.
16. Explain any *five* applications of computer graphics.
17. Explain the procedure to check the position of a point with respect to the clip window
18. How do we merge an image from a file to the current image in gimp ?
19. Explain different types of LED monitors.

(5 × 5 = 25 marks)

**Section C**

*Answer any **one** question.*

*The question carries 11 marks.*

20. Briefly explain the working of LCD displays with the help of block diagrams.
21. Explain in detail the various standards primaries and chromaticity diagram used in color models.

(1 × 11 = 11 marks)