D 100541 **(Pages : 2)** **Name.....**

Reg. No.....

SIXTH SEMESTER U.G. (CBCSS—UG) DEGREE EXAMINATION MARCH 2024

Computer Science

BCS 6B 16 (D)—COMPUTER GRAPHICS

(2019 Admission onwards)

Time : Two Hours Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer **all** *questions, each correct answer carries a maximum of* 2 *marks. Ceiling* 20 *marks.*

1. Explain the concept behind pixel.
2. What do you mean by frame in graphics ?
3. Briefly explain technology behind Cathode Ray Tube.
4. Briefly explain technology difference between LCD and LED monitor.
5. Explain basic idea behind scan line polygon filling algorithm.
6. What are the steps involved in window to viewport transformation ?
7. What is the importance of homogenous co-ordinates ?
8. What is clipping ?
9. Explain Various applications of computer graphics.
10. Define the basic principles of Reflection Transformation.
11. List out any three-color model.
12. What is GIMP ?

Turn over

Section B (Short Essay Type Questions)

Answer **all** *questions, each correct answer carries a maximum of* 5 *marks.*
Ceiling 30 *marks.*

13. Differentiate between Random and Raster Scan Display.
14. What is the scan line polygon fill algorithm ?
15. Compare and contrast between DDA and Bresenham's line drawing algorithm.
16. What is reflection and shear in computer graphics ?
17. Write short note on Cohen Sutherland line clipping algorithm.
18. Explain the features of GIMP.
19. Write short note on RGB and CMYK color models.

Section C (Essay Type Questions)

Answer any one question, correct answer carries a maximum of 10 *marks.*

20. Describe in detail DDA line drawing algorithm.
21. Describe in detail different clipping cases in Sutherland and Gary Hodgman polygon clipping algorithm.