**D 120111** **(Pages : 2)** **Name.....**

**Reg. No.....**

**SIXTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION**
**MARCH 2025**

Computer Science

BCS 6B 16 (d)—COMPUTER GRAPHICS

(Admissions Year—2019 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. Differentiate between pixmap and bitmap ?
2. What is vertical retrace ?
3. What do you mean by rotation ?
4. What is reflection ?
5. What is uniform scaling ?
6. Differentiate between window and viewport.
7. Write the conditions to be satisfied for point clipping.
8. What is YIQ color model ?
9. Write the transformation matrix of scaling.
10. What is rigid body transformations ?
11. What are the two different approaches to area filling on raster systems ?
12. What is translation ?

**Turn over**

**Section B (Short Essay Type Questions)**

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

13. Explain Random Scan Displays.

14. Describe general pivot point rotation.

15. Describe about different color models.

16. Explain the different components of CRT.

17. Explain any *three* input devices.

18. Explain Scan-Line Polygon Fill Algorithm.

19. What are the different applications of Computer Graphics ?

**Section C (Essay Type questions)**

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

20. Explain Raster Scan Displays.

21. Explain Sutherland-Gary Hodgman polygon clipping algorithm.