

K16U 1850

Reg. No. :

V Semester B.Sc. Degree (CBCSS – 2014 Admn. Regular) Examination, November 2016 CORE COURSE IN COMPUTER SCIENCE (Elective) 5B12CSC (E02) : Computer Graphics

If an image has height of 2 inches and an aspect ratio of 1.5, what is it's width ?

Max. Marks: 40

19 Explain DDA line drawing algorithm with example

Time: 3 Hours

SECTION - A

One word answer :

(8×0.5=4)

1. The number of pixels stored in the frame buffer of a graphics system is known as

2. The resolution offered by SVGA is _

3. On a monochromatic monitor, the frame buffer is known as ____

4. If the resolution of a printer is 1200 dpi, the number of dots per square inch is

5. Give an example for non-emissive displays.

6. Pixel stands for ____

7. A circle, if scaled only in one direction becomes a _

8. A transformation that slants the shape of an object is called _____

SECTION-B

Write short notes on any seven of the following questions :

9. Define shading.

10. Define persistence.

11. What is pixel?

P.T.O.

 $(7 \times 2 = 14)$

K16U 1850

 $(2 \times 5 = 10)$

Define persistence

- 12. Define Translation.
- 13. Define Clipping.
- 14. What is projection ?
- 15. Explain any two applications of LCD's. Of a double max 3
- 16. Define Zooming. aphilippi Direction of a cost and
- 17. Differentiate between impact and non-impact printers.
- 18. If an image has height of 2 inches and an aspect ratio of 1.5, what is it's width ?

SECTION – C (Short Essay/Programs)

V Semester B.Sc. Degree (CBCSS - 2014

Answer any four of the following questions : (4×3=12)

- 19. Explain DDA line drawing algorithm with example.
- 20. Write short notes on clipping operations.
- 21. Explain the advantages and disadvantages of DVST over refresh CRT.
- 22. Explain the advantages and disadvantages of random scan displays.
- 23. Using Bresenham's algorithm draw a circle whose center is (0, 0) and radius is 8 units.
- 24. Explain Flat Panel Displays.

8. A transformation that slants the shape of an object

Answer any two questions :

- 25. Explain in detail the Cohen-Sutherland line clipping algorithm with an example.
- 26. With suitable examples, explain all 3D transformations.
- 27. Explain the working of shadow mask CRT.
- 28. Explain various input devices.