



K17U 1667

Reg. No. :

Name :

V Semester B.Sc. Degree (CBCSS – Reg./Sup./Imp.)
Examination, November 2017
(2014 Admn. Onwards)
Core Course in Computer Science (Elective)
5B12CSC (E02) : COMPUTER GRAPHICS

Time : 3 Hours

Max. Marks : 40

SECTION – A

One word answer :

(8×0.5=4)

1. In graphical system, the array of pixels in the picture is stored in _____.
2. The standard aspect ratio for PC is _____.
3. Lower persistence phosphorus needs _____ refresh rate.
4. Which type of display is used in digital watches ?
5. Refreshing is not needed in DVST because of the presence of _____.
6. GIF stands for _____.
7. The transformation that produces a parallel mirror image of an object is called _____.
8. Reflection of a point about x-axis, followed by a counter-clockwise rotation of 90°, is equivalent to reflection about the line ?

SECTION – B

Write short notes on **any seven** of the following questions :

(7×2=14)

9. Explain the terms bitmap and pixmap.
10. Define aspect ratio.
11. What is DDA ?

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12. Distinguish between window and view port.
13. Define Shear.
14. What is the purpose of presentation graphics ?
15. What are the types of transformations ?
16. What is meant by antialiasing ?
17. Is refreshing necessary ? Explain.
18. What is the difference between impact and non-impact printers ?

SECTION – C

(Short Essay/Programs)

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

19. Explain about Bresenham's circle generating algorithm.
20. Write short notes on Bezier curve and spline.
21. Explain the advantages and disadvantages of raster scan displays.
22. Describe various applications of Computer Graphics.
23. Define projection and mention its importance.
24. Explain scaling about a reference point with suitable example.

SECTION – D

Answer **any two** questions : (2×5=10)

25. With suitable examples, explain all 2D transformations.
26. Explain in detail the Cohen-Sutherland polygon clipping algorithm with an example.
27. Perform a 45° rotation in the anticlockwise direction of the triangle A(0, 0), B(1, 1), C(5, 2) about a) the origin and b) the point (-1, -1).
28. Explain about various hard copy devices.