NEW

2017

BCA

6th Semester Examination

COMPUTER GRAPHICS & MULTIMEDIA LAB

PAPER—3294 (SET-1)

(PRACTICAL)

Full Marks : 100

Time : 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer any *one* question : 1×40

1. Write a program to draw a hexagon using Generalized Bresenham's line drawing algorithm.

2. Write a program to draw three concentric circle using midpoint circle generation algorithm.

3. Write a program to show all the standards of 2D reflection.

4. Write a program to display the first initial of your name using any standard line drawing algorithm.

5. Write a program to draw an ellipse using mid-point generation algorithm.

6. Write a program to rotate a line by an angle of 60 degree with respect to the center position of the line.

7. Write a program to show all standards of shear transformation.

8. Write a program to perform the following sequential transformation on a polygon.

   (i) Reflect the polygon w.r.t. the straight line $y = x$.

   (ii) Then scaled the polygon with the scaling factor $Sx = 2$ and $Sy = 3$.

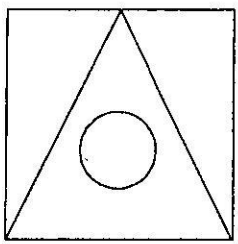
9. Write a program to perform the following sequential transformation on a square

   (i) Rotate the square by an angle of 90° w.r.t. origin.

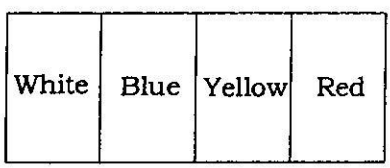
   (ii) Then Reflect the rotated square w.r.t. X-axis.

10. Write a program to show that two paralled lines remains parallel after transformation.

11. Write a program to draw the following figure



12. Write a program to fill the following figure using appropriate color using any standard filling algorithm.



13. Write a program to implement cohen-suther land line clipping algorithm.

13. Write a program to draw five intersecting circle using any standard circle generation algorithm.

[VIVA : 20 Marks]

[Practical Note Book : 10 Marks]

[*Internal Assessment : 30 Marks*]

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