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PG/IVS/MCA-406/16(Pr.)

MCA 4th Semester Examination, 2016

COMPUTER GRAPHICS LAB

(Practical)

PAPER—MCA - 406

Full Marks : 50

Time : 3 hours

Answer any one on lottery basis

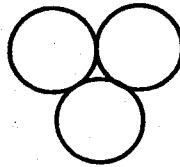
The questions are of equal value

- 1. Write a program to implement DDA and Bresenham's line drawing algorithm.**
- 2. Write a program to draw a hexagon using Bresenham's line drawing algorithm.**
- 3. Write a program to draw an ellipse using an ellipse drawing algorithm.**

(Turn Over)

(2)

4. Write a program to draw a circle using a circle drawing algorithm.
5. Write a program to rotate a triangle about origin.
6. Write a menu driven program to translate, scale and rotate a line about the origin.
7. Write a program to show all standards of shear transformation.
8. Write a program to clip a line segment.
9. Write a program to translate a rectangle.
10. Draw the following figure using any circle drawing algorithm :



(3)

11. Write a program to do the following transformations in sequence :

(i) 90° rotation of a line about origin

(ii) reflection of the line about line $y = 0$.

12. Write a program to implement polygon filling.

13. Write a program to draw a Bazier curve using 4 control points.

14. Write a program to draw the following figure without using any inbuilt function :



15. Write a program to display the first letter of your name using any line drawing algorithm.

PNB : 5 marks

Viva voce : 10 Marks
