MCA QP - 56
1-5

G 1450 (Pages : 2) Reg. No.....18.1317.....

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M.C.A. (AFFILIATED COLLEGES) DEGREE EXAMINATION, MAY 2011

Third Semester

COMPUTER GRAPHICS

(New Scheme—2007 admission onwards)

Time : Three Hours Maximum : 75 Marks

Part A

Answer any **ten** *questions.*
All questions carry equal marks.

1. List different I/O devices used in graphics workstation.
2. What are line attributes ?
3. Give different antialiasing techniques.
4. Perform 90° rotation of a straight line defined by the co-ordinates A (2, 2) and B (4, 4), about the origin.
5. What is Roster scan display ? Explain.
6. Give the diagrammatic steps involved in transforming world co-ordinate window to viewport.
7. Justify the need for projection. Mention different types of projection.
8. Write a note on Text clipping.
9. What ar Bezier Curves ?
10. Discuss on specular reflections.
11. List few Dithering techniques.
12. Write about backface detection techniques.

(10 × 3 = 30 marks)

Part B

Answer **all** *questions.*
All questions carry equal marks.

13. (a) Explain how the ocmputer graphics applications are classified. List few applications.

(9 marks)

Or

(b) Explain the general polygon scan conversion algorithm which handles both conver and non converse calls.

14. (a) Explain Conhen Sultherland line clipping algorithm.

Or

(b) Prove that successive 2 D translations are additive.

15. (a) Obtain the matrix representation of a point about an arbitrary axis in 3 Dimension.

Or

(b) Explain general projections techniques with example.

16. (a) With an example discuss midpoint circle generation algorithm.

Or

(b) Write the DDA algorithm and tree the same with varying stopes.

17. (a) Discuss any two polygon radering techniques.

Or

(b) With an illustration discuss vectex table edge table and polygon surface table used to represent a polygon.

(5 × 9 = 45 marks)