B.C.A. III Semester Examination, March 2011
COMPUTER GRAPHICS

Time : 3 Hours   Max. Marks : 80

Instructions : *1) Answer **all** questions in Part – **A**, **6** questions in Part – **B** and **3** out of 5 questions in Part – **C**.*
*2) Part – **A** : Questions from **1** to **8** carry **one** mark and **9** to **14** carry 2 marks **each**.*
*3) Part – **B** : **Each** question carries **5** marks.*
*4) Part – **C** : **Each** question carries **10** marks.*

PART – A

1. What is simulation ?

2. Define non-interactive computer graphics.

3. What are tablets ?

4. Name one device that allows a 3 dimensional input to be given to the computer.

5. Write the syntax for initgraph ( ).

6. What is a pixel ?

7. Mention any two qualities of good line drawing.

8. Expand DDA.

9. Mention an algorithm that draws the next point based on the previous paut's location.

10. What is transformation ?

11. If a point (X, Y) is rotated anticlockwise through an angle about the origin, what are its new coordinates ?

12. Define clipping.

13. With usual notations, state the equations that transform the window coordinates to screen coordinates.

14. Define dragging.

PART – B

1. Write a note on animation.

2. With a neat diagram explain Laser Scan Display.

3. With the syntax explain any 5 graphic functions.

4. Explain Bresenham's algorithm.

5. With an example explain scaling.

6. Explain Rubber band technique.

7. Discuss the need for 3-dimensional imaging.

8. Explain Parallel Projections.

PART – C

1. Explain how are pictures actually stored and displayed.

2. With a neat diagram explain Shadow-Mask CRT.

3. With the syntax explain any six 'C' graphics functions.

4. Explain Point Plotting Techniques.

5. Explain priority algorithms.

—————————