B.C.A. (Part-III) Semester–V Examination
COMPUTER GRAPHICS
Paper – 5 ST4

Time : Three Hours]   [Maximum Marks : 60

Note :— (1)   All questions are compulsory.

(2)   All questions carry equal marks.

(3)   Assume suitable data wherever necessary.

1. (a)   Explain components of Computer Graphics.   6

(b)   What is Computer Graphics ? Explain characteristics of Computer Graphics.   6

OR

2. (a)   Explain applications of Computer Graphics.   6

(b)   What are graphics packages used in Computer Graphics ? Explain.   6

3. (a)   What is geometrical transformation ? Explain with their types.   6

(b)   Explain Homogeneous Coordinate System. How does scaling transformation work ?   6

OR

4. (a)   Explain with example Window-To-View port transformation.   6

(b)   Explain principle and working of CRT Display.   6

5. (a)   Write and explain Bresenham's line drawing algorithm.   6

(b)   Explain Cohen-Sutherland line clipping algorithm.   6

OR

6. (a)   Write and explain circle drawing algorithm.   6

(b)   Explain with example, Bezier Curve algorithm.   6

7. (a)   What is Animation ? Explain animation and its types.   6

(b)   What is Tweening ? How to perform tweening in Micromedia Flash ?   6

OR

8. (a)   Explain hardware and software tools used in animation.   6

(b)   What is Morphing ? Explain Morphing and its types.   6

9. (a)   Write a program in C to draw an ellipse.   6

(b)   Explain the following :   6

(i)   Graphics Driver

(ii)   Graphics Mode

OR

10. (a)   Explain 2D and 3D transformation using C Graphics.   6

(b)   Write a program for 2D shear transformation.   6