

May-2005

Bachelor of Computer Application (BCA) Examination

VI Semester

Computer Graphics and Multimedia

Time 3 Hours]

[Max. Marks 50

Note : Attempt any five questions. All questions carry equal marks.

1. (a) What is Computer Graphics? Also explain its applications.
(b) Explain the different techniques to achieve color system.
2. (a) Calculate the co-ordinates of first twelve points of circle ($x = 100$, $y = 200$) and radius = 100.
(b) What is aliasing effect? Explain the different antialiasing techniques.
3. (a) Determine mirror reflection of triangle with different vertices A (4, 1), B (5, 2) and C (4, 3) with respect to the line $y = x + 2$.
(b) What is the need of homogenous co-ordinate system? Explain.
4. (a) Define Window and view port. Also write down the steps used in Cohen-Sutherland line clipping algorithm.
(b) What is segment? Explain the different operations on segment.
5. (a) What is animaton? Explain the principle of animation.
(b) Explain the different image file formats.
6. (a) Explain JPEG video compression techniques.
(b) How light-pen and plotters work? Explain.
7. (a) Differentiate between the following :
(i) Raster Scan System and Random Scan System.
(ii) Beam Penetration and Shadow Mask Method. (iii) Morphing.
8. Explain the following terms :
(a) Frame Buffer (b) Resolution (c) Interlacing
(d) 2-D Rotation (e) Window to Viewport Transformation.

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