

July 2010

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? Write any four different applications of Computer Graphics.
(b) Explain, how color monitor works.
2. (a) Describe Bresenham's Line Drawing algorithm.
(b) Derive the transformation that rotates an object by angle θ about the origin. Write the matrix representation for the rotation.
3. (a) What is Homogeneous Coordinates System? What is the use of homogeneous coordinate system in computer graphics?
(b) Write scan line polygon filling algorithm.
4. (a) Write matrix representation of the reflection about X and Y axis.
(b) Write Cohen Sutherland line clipping algorithm.
5. (a) What is Data Compression? Describe any one image compression technique in detail.
(b) Describe various video file formats.
6. (a) Mention the various characteristics of Multimedia.
(b) Write the basic principles of animation in detail.
7. (a) Mention various input devices used in Computer Graphics? Describe any one in detail.
(b) What is MP3? Why is it popular than any other audio file format?
8. Write short notes on any two of the following :
 - (a) Anti-aliasing
 - (b) Color models
 - (c) Raster scan system
 - (d) Morphing
 - (e) Window-viewport transformation.

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