

July 2009

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) Explain the working principle of Touch Panels of CRT Displays.
(b) Define-
(i) Aspect Ratio (ii) Resolution
(iii) Persistence
2. (a) Explain Bresenham's line generation method with algorithm. Implement it for line and points (20, 5) and (30, 15)
(b) How flood fill algorithm is different from boundary fill algorithm? What parameters do you need to implement these algorithms?
3. (a) Explain basic 2D transformations and obtain all matrices for them.
(b) Describe any two tests to find out whether a point lies inside the polygon or not.
4. (a) What is the need of Homogeneous coordinate systems?
(b) What is the concept behind Cohen-Sutherland line clipping?
5. (a) Explain Window-to-viewport coordinate transformation.
(b) What do you mean by Aliasing? Describe any two antialiasing techniques.
6. (a) Define-
(i) Animation
(ii) JPEG and MPEG Compression Standards
(iii) Morphing.
(b) Write the features of video standard know to you. Also write the steps for integrating your television with computer.
7. Write short notes on any two of the following-
(a) File formats for Text, Sound and Images.
(b) Raster Vs Random Scan Monitors.
(c) Rotation and Scaling in 3D
(d) 3D Modelling.

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