

***B. Tech Degree VI Semester (Supplementary) Examination
November 2006***

**CS 603 COMPUTER GRAPHICS
(2002 Admissions onwards)**

Time : 3 Hours

Maximum Marks : 100

(All questions carry ***EQUAL*** marks)

- I. (a) Explain the operation of different video display devices.
(b) Write down the Bresenham's Line drawing algorithm.
OR
- II. (a) Explain the midpoint circle drawing algorithm.
(b) Write notes on (i) Bundled attributes (ii) Antialiasing techniques.
- III. (a) Brief about Composite Transformation.
(b) Explain the Sutherland-Hodgeman polygon clipping algorithm.
OR
- IV. (a) Explain the Cohen-Sutherland line clipping algorithm.
(b) Write notes on window to view port coordinate transform.
- V. (a) Write notes on (i) Quadric surfaces (ii) Blobby objects.
(b) Explain about Fractal Geometry methods.
OR
- VI. (a) Explain spline representation.
(b) Explain the way of determining self similar fractals.
- VII. (a) Differentiate object space method and image space method.
(b) Explain the area subdivision method for hidden surface removal.
OR
- VIII. (a) Explain the Octree method for visible surface detection.
(b) Write the algorithm and explain the Depth Buffer method.
- IX. (a) Explain the different polygon rendering method.
(b) Explain about HSV color model and give the procedure for converting HSV to RGB.
OR
- X. (a) Explain the different dithering techniques.
(b) Write notes on :
(i) Animation
(ii) Morphing
(iii) Virtual Reality
(iv) VRML.

