

B. Tech Degree V Semester (Supplementary) Examination June 2011

CS 504 COMPUTER GRAPHICS *(2006 Scheme)*

Time: 3 Hours

Maximum Marks: 100

PART A (Answer **all** questions)

(8 x 5 = 40)

- I. (a) What are Random-scan and Raster-scan systems?
- (b) Explain the logical classification of input devices.
- (c) What do you mean by a composite transformation. Give an example.
- (d) What is meant by window to view port transformation?
- (e) Explain what you mean by OCTREES.
- (f) Explain any 3D projection with a figure.
- (g) What is diffuse reflection and ambient light?
- (h) What do you mean by Animation Techniques?

PART B

(4 x 15 = 60)

- II. Explain any one Line-Drawing algorithm. Illustrate with the help of two sample and points.

OR

- III. Explain the midpoint circle algorithm.
- IV. Explain the Basic Two dimensional transformations with examples. Give their transformation matrices.

OR

- V. Explain the Cohen-Sutherland line clipping algorithm.
- VI. Explain how polygon surfaces are used to represent a 3D object.

OR

- VII. Explain the basic three dimensional transformations.
- VIII. Explain any one visible surface detection algorithm.

OR

- IX. Explain any one Illumination Model.