Code: R7420308

**R7**

B.Tech IV Year II Semester (R07) Supplementary Examinations, March/April 2013

**INTERACTIVE COMPUTER GRAPHICS**

(Mechanical Engineering)

Time: 3 hours Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

*****

1 Explain the raster-scan systems and input devices.

2 Write the scan-line polygon fill algorithm and explain its working with a suitable example.

3 Derive the transformation matrix for two dimensional rotations about an arbitrary point. And also explain about shear transformation.

4 Explain about viewing pipe-line and Cyrus-beck line clipping algorithm with an example.

5 Explain about basic illumination models and B-spline surface.

6 Derive the necessary transformation matrix for rotation, translation, scaling and shearing transformations in 3-D. Explain them with suitable examples.

7 Explain about back-face detection and depth-buffer methods.

8 Discuss about general computer animation functions.

*****