

24253

B.Tech. 5th Semester Information Technology-VI
Examination December-2013

COMPUTER GRAPHICS

Paper-CSE-303-F

Time allowed : 3 hours

[Maximum marks : 100]

Note : Question no. 1 is compulsory. Attempt one question from each section. All questions carry equal marks.

1. (a) What are points and lines? Explain in detail.
(b) Write short note on viewports and reflection.
(c) What is projection ?
(d) What is image ? 20

Section-A

2. (a) What is computer graphics ? Discuss the applications of computer graphics. 10
(b) Write and explain Bresenham's line drawing algorithm ? 10
3. (a) Write and explain mid point circle drawing algorithm. 10
(b) Write and explain Circle drawing algorithm using polar coordinates. 10

Section-B

4. (a) Write and explain 4-bit code algorithm for clipping line. 10
- (b) Write and explain Sutherland-Cohen algorithm. 10
5. (a) Explain two dimension transformation discuss about transformation, translation, scaling and rotation. 10
- (b) Explain Reflection and composite Transformation. 10

Section-C

6. (a) What is projection and type of projections ? 10
- (b) Explain the coordinate system. 10
7. (a) Write and explain scan line algorithm ? 10
- (b) Write and explain area sub-division algorithm ? 10

Section-D

8. Discuss about parametric representation of surface also explain the interpolation method. 20
9. (a) What is shadow and transparency ? 10
- (b) Differentiate between image processing and computer graphics ? Explain the components of an image processing system in detail. 10