(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2167 Roll No. | | | | | | | | | | |

B.Tech.

(SEM. V) ODD SEMESTER THEORY EXAMINATION

2010-11

COMPUTER GRAPHICS

Time : 2 Hours *Total Marks : 50*

Note : Attempt **all** questions.

1. Answer any **two** parts : **(6×2=12)**

   (a) What are the criteria that should be satisfied by a good line drawing algorithm ? Explain.

   (b) Explain the mid point circle generating alogorithm.

   (c) Write a short note on the following :

      (i) Random scan and Raster scan display

      (ii) Frame buffer and video controller.

2. Answer any **two** parts : **(6×2=12)**

   (a) Describe the Cohen Sutherland line clipping algorithm with suitable example.

   (b) Discuss the following transformations with a relevant example :

      (i) Composite transformation

      (ii) Reflection and shearing.

   (c) Write an algorithm for polygon clipping.

3. Write short notes on any **two** of the following : **(6×2=12)**

(a) 3-D transformation

(b) 3-D projection

(c) 3-D clipping.

4. Answer any **two** parts : **(7×2=14)**

(a) Write an algorithm to draw Bezier curves.

(b) What are the various back face detection algorithms ? Explain any one of them.

(c) Explain the following :

(i) Illumination models

(ii) Text clipping.