

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

PAPER ID : 2167

Roll No.

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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 algorithm.
 - (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.