May - June 2010

Total No. of Questions—6] [Total No. of Printed Pages—4+2

[3762]-208

S.E. (Computer Engineering) (II Sem.) EXAMINATION, 2010

COMPUTER GRAPHICS

(2008 COURSE)

Time : Three Hours **Maximum Marks : 100**

N.B. :— (*i*) Answer any *three* questions from each Section.

(*ii*) Neat diagrams must be drawn wherever necessary.

(*iii*) Figures to the right indicate full marks.

(*iv*) Assume suitable data, if necessary.

SECTION I

1. (A) Explain with the help of illustration how Bresenham's line drawing algorithm can be used for circle generation. [8]

Or

Explain DDA line drawing algorithm in detail. Can line segment represented by points P1(5, 8) and P2(9, 5) be drawn using DDA algorithm ? Explain. [8]

P.T.O.

(B) With the help of block diagram explain raster scan displays. [8]

Or

Draw a block diagram of computer graphics workstation and explain functioning of scanner or touch screen or digitizer. [8]

2. (A) Explain with example Cohen-Sutherland out-code algorithm. [8]

Or

Explain scan line algorithm. Compare it with boundary fill algorithm for polygon filling. [8]

(B) (1) Name with example, different types of polygons. [4]

(2) Give at least *two* methods to prove that given point is inside the polygon. [4]

Or

Explain with example seed fill and edge fill algorithm. [8]