

UNIT TEST-I
Computer Graphics (210244)
Semester-III (Computer Engineering)

Time:1 Hour

Maximum Marks:30

Instruction to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4
- 2) Neat Diagram must be drawn whenever necessary

- Q. 1 a) Draw a line from (0,0) to (4,6) using DDA line drawing algorithm. [5]
b) Differentiate between raster scan and random scan [5]
c) Write and explain Bresenham's Circle Drawing Algorithm. [5]

OR

- Q. 2 a) Plot a Circle using Bresenham's circle algorithm for $r=3$ and center at (0,0) [5]
b) Define the terms: Scan Conversion, Pixel, Resolution, Aspect Ratio, Frame Buffer [5]
c) Write a short note on shadow mask method. [5]

- Q. 3 a) What is polygon filling? Explain in detail scan fill algorithm. [5]
b) Explain odd-even test with example. [5]
c) Differentiate between flood fill and boundary fill algorithm. [5]

OR

- Q. 4 a) Write short on window to view port transformation. [5]
b) Explain the boundary fill algorithm with pseudo code. Also mention its limitations. [5]
c) Write and explain with an example cohen - sutherland line clipping algorithm. [5]

----- BEST OF LUCK -----