



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE
www.sathyabama.ac.in

Program : B.E (Computer Science) Max. Marks : 15
Course : Computer Graphics and Multimedia Applications
Course code : SCSA1503

Assignment – 1

Fill in the blanks (MCQs): (5*1 = 5 marks)

- The image quality seems good when the number of pixels are
a. Higher b. Lesser c. Both Higher and Lesser
- Bresenham's line drawing algorithm employs floating point and rounding off operations.
(True/ False)
- Pixel definition is stored in a memory location called.....
- is used to choose the next correct pixel in Bresenham's line drawing algorithm.
- What is the formula used for initial decision parameter in midpoint circle generation algorithm?
a. $P_0 = 1-r$ b. $P_0 = P+2x+1$ c. $P_0 = P+2x - 2y+1$ d. $P_0 = 2dy-dx$

Short Answers: (5*1 = 5 marks)

- What is Refresh CRT?
- List out the merits and demerits of DVST.
- Compare and Contrast Raster Scan and Random Scan.
- State few attributes of Graphics Primitives
- Discuss the drawbacks associated with the midpoint Circle Drawing algorithm.

Long Answer: (1*5 = 5 marks)

Narrate the Bresenham's line drawing algorithm and generate the points between the starting coordinates (9,18) and ending coordinates (14,22) using the same algorithm.