



# 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

## CONTINUOUS ASSESSMENT TEST - I

Program : B.E/B.Tech - CSE/IT

Max. Marks : 30

Course : COMPUTER GRAPHICS AND MUYIMEDIA SYSTEMS

Time : 1 Hour

Course code : SCS1302

Sem : V

Batch : 2018-2022

Date : 22.09.2020

Part-A	Answer ALL the questions	(5×2=10)
Q.No	Questions	CO (L)
1.	Is refreshing mandatory in CRT and DVST? Justify the answer.	1(2)
2.	Translate the line with endpoints (3,1) and (5,4) given, $t_x=3$ , $t_y=3$ .	2(5)
3.	Find the xincrement and yincrement using DDA algorithm given $(x_a, y_a)=(11,15)$ and $(x_b, y_b)=(17,18)$ .	1(1)
4.	Narrate the use of Shadow Mask in CRT.	1(3)
5.	Rotate the point P(3,5) with angle, $\Theta = 90$ degree.	2(4)

Part-B	Answer ALL the questions	(2×10=20)
Q.No	Questions	CO (L)
6.	Construct a Line using Bresenham's Line drawing algorithm with $(x_a, y_a)=(11,15)$ and $(x_b, y_b)=(17,18)$ . (Algorithm required, no need derivation)	1(4)
(OR)		
7.	Construct a Circle using Midpoint Circle drawing algorithm with $(x_c, y_c)=(0,0)$ and $r=6$ . (Algorithm required, no need derivation)	1(4)
8.	a. Given a triangle ABC, with A (2,2), B (4,6) and C (6,2). Find the reflected position of triangle i.e., with respect to the y-axis. b. Shear with respect to Y axis, given A(0,0), B(0,4), C(3,4), D(3,0) with $S_y=2$ .	2(5)
(OR)		
9.	Clip the following line using Cohen Sutherland Line Clipping algorithm. Write the algorithm. $(x_{wmin}, y_{wmin})=(130,130)$ and $(x_{wmax}, y_{wmax})=(350,400)$ . Line L1 with A(200,250) and B(400,150).	2(5)