

LAB ASSIGNMENT

On

BCA 453

COMPUTER GRAPHICS LAB



**COLLEGE OF COMPUTING SCIENCES AND INFORMATION
TECHNOLOGY**

TMU, MORADABAD

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Lab Assignment No.-1

S.NO	PROGRAM NAME	PAGE NO.	DATE	SIGN	REMARK
1	Display the Doctor (Medical) Symbol using library functions.				
2	Display the concentric circles and animate it using library functions.				
3	Display the Indian flag using library functions.				
4	Display the pendulum and animate it using library functions.				
5	Display the grid using library functions.				
6	Display the circumcircle of a triangle using library functions.				
7	Display the incircle of a triangle using library functions.				
8	Display the Hut using library functions.				
9	Display the fan using library functions				
10	Display an axe using library functions.				
11	Display the table (object) using library functions.				
12	Display the weighing balance and animate it using library functions.				
13	Display the kite using library functions.				
14	Display a circle inside square using library functions.				
15	Display a square inside the circle using library functions.				
16	Display a regular hexagon using library functions				
17	Display the Olympic rings using library function				
18	Display your name in Hindi script using library function.				

Lab Assignment No.-2

S.NO	PROGRAM NAME	PAGE NO.	DATE	SIGN	REMARK
1	Display a line using DDA method.				
2	Display a line using Bresenham's method.				
3	Display a circle using mid-point method.				
4	Display a circle using Bresenham's method.				
5	Display concentric circle using user defined functions.				
6	Display a Hut using user defined functions.				
7	Display different faces (emoji's set) using user defined functions.				
8	Display the table (object) using user defined functions.				
9	Implement flood fill algorithm on a circle.				
10	Implement boundary fill algorithm on a polygon.				
11	Implement flood fill algorithm on a polygon.				
12	Implement boundary fill algorithm on a circle.				

Lab Assignment No.-3

S.NO	PROGRAM NAME	PAGE NO.	DATE	SIGN	REMARK
1	Divide your Computer screen into four quadrants then display objects in the quadrants according to the Coordinate System.				
2	Move a circle far from origin.				
3	Move a circle towards the origin.				
4	Rotate a triangle about origin in Anti-Clock wise direction.				
5	Rotate a triangle about origin in clockwise direction.				
6	Scale a triangle along X axis, Y axis and XY direction.				
7	Reflect a triangle about X axis and Y axis.				
8	Reflect a triangle about origin.				
9	Reflect a triangle about a line.				
10	Shear a rectangle in X-direction.				
11	Shear a rectangle in Y-direction.				
12	Shear a rectangle in XY-direction.				
13	Display the four circles on the four corners of the screen. Then move these circles towards the origin till collide.				
14	Implement animations on a road roller.				

Lab Assignment No.-4

S.NO	PROGRAM NAME	PAGE NO.	DATE	SIGN	REMARK
1	Write a Program to implement Point Clipping.				
2	Write a Program to check whether the input point is located interior, exterior or on the circumference of a circle centered at origin.				
3	Write a Program to implement Cohen Sutherland Line Clipping Algorithm.				
4	Write a Program to implement Cyrus-Beck Line Clipping Algorithm.				
5	Write a Program to implement Sutherland Hodgeman Polygon Clipping Algorithm.				