Maharaja Agrasen Institute of Technology (MAIT)

(Affiliated to Guru Gobind Singh Indraprastha University, Approved by AICTE, New Delhi)

Department of Computer Science and Engineering

List of experiments of Computer Graphics and Multimedia Lab (ETCS 257)

B.Tech. (CSE), Semester- III

S. No.	List of Experiment(s)	Lab No.
1.(a)	Study and prepare list of graphic functions	Lab 1
1.(b)	Write a C program to make a hut and car using built-in graphics function.	Lab 2
2.	Write a C program to draw a line using DDA algorithm.	Lab 3
3.	Write a C program to draw a line using Bresenham's algorithm.	Lab 4
4.	Write a C program to draw a circle using mid-point algorithm.	Lab 5
5.	Implementation of Circle drawing algorithms: Bresenham's Algorithm.	Lab 6
6.	Write C Programs for the implementation of 2D and 3D transformations.	Lab 7
7.	Write a C program to demonstrate Cohen-Sutherland line clipping algorithm.	Lab 8
8.	Write a C program to draw a 4 point Bezier curve.	Lab 9
9.	Using Flash/Maya perform different operations (rotation, scaling move etc.) on objects.	Lab 10
10.	Create a Bouncing Ball using Key frame animation and Path animation.	Lab 11

<u>Special Note:</u> Viva will be conducted after each experiment and quiz after every two experiments.

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<u>List of advanced experiments of Computer Graphics and Multimedia Lab</u> (ETCS 257)

B.Tech. (CSE), Semester- III

S. No.	List of advanced Experiment(s)	Lab No.
1.	Write a program to rotate a circle (alternatively inside and outside) around the circumference of another circle (animation).	Lab 1
2.	Write a program to draw a car using inbuild graphics function and translate it from bottom left corner to right bottom corner of screen (animation).	Lab 2
3.	Write a program to draw balloons using in-built graphics function and translate it from bottom to top of screen (animation).	Lab 3
4.	 Write a program to draw a cube using inbuild library function and perform 3D transformations a) Translations in x, y, z directions b) Rotation by angle 45⁰ about z axis, rotation by 60⁰ about y-axis in succession. c) Scaling in x-direction by a factor of 2, scaling in y-direction by a factor of 3. 	Lab 4
5.	Write a program to show animation of a ball moving in a helical path. (animation)	Lab 5
6.	Write a program to show animation of solar system. (animation)	Lab 6
7.	Create a Rainbow using graphics in C Program	Lab 7
8.	Create a Digital clock using graphics in C Program. (animation)	Lab 8
9.	Design a C Program for Tic Tac Toe Game. (game)	Lab 9