KARPAGAM ACADEMY OF HIGHER EDUCATION
(Deemed to be University)
(Established Under Section 3 of UGC Act 1956)
Coimbatore – 641 021.
SYLLABUS

		Semester – I
		L T P C
18MMU111	CALCULUS (PRACTICAL)	0 0 3 2

Course Objectives
To provide the students an exposure to develop a compilation process and comprehension in relevant area of calculus.

Course Outcomes
On successful completion of this course, the student will be able to
- Familiarize with the programming environment.
- Acquire the problem solving skills through computer programming.
- Understand to write diversified solutions using programming language.

List of Practicals (Any 8 programs)

1. Plotting of graphs of function $e^{ax + b}$, log(ax + b), 1/(ax + b), sin(ax + b), cos(ax + b), |ax + b| and to illustrate the effect of a and b on the graph.

2. Plotting the graphs of polynomial of degree 4 and 5, the derivative graph, the second derivative graph and comparing them.

3. Sketching parametric curves (Eg. Trochoid, cycloid, epicycloids, hypocycloid).

4. Obtaining surface of revolution of curves.

5. Tracing of conics in cartesian coordinates/ polar coordinates.

6. Sketching ellipsoid, hyperboloid of one and two sheets, elliptic cone, elliptic, paraboloid, hyperbolic paraboloid using cartesian coordinates.

7. Matrix addition.

8. Matrix multiplication.

9. Inverse of a matrix.

10. Transpose of a matrix.