## MANGALORE INSTITUTE OF TECHNOLOGY AND ENGINEERING DEPARTMENT OF MATHEMATICS

## CALCULUS AND LINEAR ALGEBRA CO-PO MAPPING: 2018 SCHEME

Mapping of COs to PO's with PSOs															
		Pos										PSO's			
	Course Outcomes	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C101.1	Apply the knowledge of calculus to solve problems related to polar curves and its applications in determining the bentness of a curve.	3	2	-	-	-	-	-	-	-	-	-	-		
C101.2	Learn the notion of partial differentiation to calculate rates of change of multivariate functions and solve problems related to composite functions and Jacobians.	3	2	-	_	-	-	-	_	-	-	-	-		
C101.3	Apply the concept of change of order of integration and variables to evaluate multiple integrals and their usage in computing the area and volumes.	3	2	-	-	-	-	-	-	-	-	-	-		
C101.4	Solve first order linear/nonlinear differential equation analytically using standard methods.	3	2	-	-	-	-	-	-	-	-	-	-		
C101.5	Make use of matrix theory for solving system of linear equations and compute Eigen values and Eigen vectors required for matrix Diagonalization process.	3	2	-	-	-	-	-	-	-	-	-	-		

## ADVANCED CALCULUS AND NUMERICAL TECHNIQUES CO-PO MAPPING : $2018 {\rm SCHEME}$

Mapping of COs to PO's with PSOs															
		POs									PSO's				
	Course Outcomes	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C109.1	Illustrate the applications of multivariate calculus to understand the solenoidal and irrotational vectors and also exhibit the inter dependence of line, surface and volume integrals.	3	2	-	-	-	-	-	-	-	-	-	-		
C109.2	Demonstrate various physical models through higher order differential equations and solve such linear ordinary differential equations.	3	2	_	-	_	_	_	_	_	-	-	-		
C109.3	Construct a variety of partial differential equations and solution by exact methods/method of separation of variables.	3	2	-	-	_	_	_	_	_	-	-	-		
C109.4	Explain the applications of infinite series and obtain series solution of ordinary differential equations.	3	2	_	_	_	_	_	_	_	-	-	-		
C109.5	Apply the knowledge of numerical methods in the modeling of various physical and engineering phenomena.	3	2	-	_	_	_	_	_	_	-	-	-		