Curriculum Plan: B. A. (Prog) Mathematics I (Semester I) Calculus

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Marks Distribution		Theory		75 Marks
		Internal Assessment	Assignments 10 Marks	
			Class- Test 10 Marks	
			Presentation 5 Marks	
Classes Assigned		**Lectures**	5 per week	

Reference	[1]	George B. Thomas, Jr., Ross L. Finney: *Calculus and Analytic Geometry*, Pearson Education (Singapore); 2001.
	[2]	H. Anton, I. Bivens and S. Davis: Calculus, John Wiley and Sons (Asia) Pte. Ltd. 2002.
	[3]	R.G. Bartle and D.R. Sherbert: Introduction to Real Analysis, John Wiley and Sons (Asia) Pte. Ltd. 1982

Section	Week	Topics
Section 1	1st week Nov, 22nd – 27th, 2021	Limit and Continuity
	2nd week Nov, 29th –Dec, 4th, 2021	Types of discontinuities
	3rd week Dec, 6th – 11th, 2021	Differentiability of functions. Successive differentiation
	4th week Dec, 13th - 18th, 2021	Leibnitz's theorem, Partial differentiation
	5th week Dec,20th – 25th, 2021	Euler's theorem on homogeneous functions
Section 3	6th week Dec, 27th –31st, 2021	Tangents and normal.
	7th week Jan, 3rd – 8th, 2022	Curvature, Asymptotes
	8th week Jan, 10th – 15th, 2022	Singular points, Tracing of curves
	9th week Jan, 17th – 22nd, 2022	Rolle.s theorem, Mean Value Theorems,
	10th week Jan, 24th - 29th, 2022	Taylor's Theorem with Lagrange's & Cauchy's forms of remainder.
	11th week Feb, 1st - 5th, 2022	Taylor's series, Maclaurin's series of sin x, cos x, ex, log(l+x), (l+x)m,
	12th week Feb, 7th – 12th, 2022	Applications of Mean Value theorems to Monotonic functions and inequalities.
	13th week Feb, 14th - 19th, 2022	Problems on Mean Value Theorems
	14th week Feb, 21st - 26th, 2022	Maxima & Minima.
	15th week March, 1st – 5th, 2022	Indeterminate forms.