## Curriculum Plan: B. Sc. (Hons) II Year

Ms. Anshu Chotani Department of Mathematics			Marks Distribution	Theory -75 Internal Assessment-25		
110008			Classes	Lectures	2 per week	
Mobile: +91-9810668790 <b>E- mail</b> : <u>achotani@yahoo.com</u>			Assigned	Tutorials 1 per week		
Reference	[1]	K.A. Ross, Elementary Analysis: The Theory of Calculus, Undergraduate Texts in Mathematics, Springer (SIE), Indian reprint, 2004.				
	[2]	R.G. Bartle D.R. Sherbert, Introduction	dition), John Wiley and Sons (Asia) Pvt. Ltd., Singapore, 2002.			
	[3]	Charles G. Denlinger, Elements of Real Analysis, Jones and Bartlett (Student Edition), 2011.				
Section	Week	Topics				Practical
1	Beginning day /1 <sup>st</sup> week January 1-8, 2022	Riemann integration; inequalities of upper and lower sums				Unit I
	<b>2<sup>nd</sup> week,</b> January 10-15, 2022	Riemann sum and definition of Riemann integral through Riemann sums				
	<b>3</b> <sup>rd</sup> week, January 17-22, 2022	Riemann conditions of integrability				
	<b>4</b> <sup>th</sup> <b>week,</b> January 24-29, 2022	Equivalence of two definitions, Riemann integrability of monotone and continuous functions.				
	5 <sup>th</sup> week, January 31- February 5, 2022	Properties of the Riemann integral				
	<b>6<sup>th</sup> week,</b> February 7-12, 2022	definition and integrability of piecewise continuous and monotone functions				Unit I
	<b>7</b> <sup>th</sup> <b>week,</b> February 14-19, 2022	Intermediate Value theorem for Integrals				
	8 <sup>th</sup> week, February 21- 26,2022	Fundamental theorems of Calculus.				Unit I
	9 <sup>th</sup> week, February 28- March 5, 2022	Improper integrals				-
2	10 <sup>th</sup> week, March 7-12, 2022	Improper integrals				Unit II
	11 <sup>th</sup> week, March 21- 26, 2022	Convergence of Beta functions				
	<b>12<sup>th</sup> week,</b> March 28- April 2, 2022	Convergence of Beta functions and similar problem				
3	13 <sup>th</sup> week, April 4-9, 2022	Convergence of Gamma functions.				Unit II
_	14 <sup>th</sup> week, April 11-16, 2022 Convergence of Gamma functions and similar problems				1	
	15 <sup>th</sup> week Revision				7	
	April 18- 22, 2022					