

WORK PLAN (Jan-May 2017)

Course Name: B.A. (Prog.)

Semester: IV

Paper Code:

Paper Name: Analysis

Faculty: Ms. Sarita Anand

WEEK	DATES	TOPICS TO BE COVERED
1	2-7 Jan	Order completeness of Real numbers.
2	9-14 Jan	Open and Closed sets.
3	16-21 Jan	Limit point of sets, Bolzano Weierstrass Theorem.
4	23-28 Jan	Sequences, Convergent sequences.
5	30 Jan-4 Feb	Monotonically increasing and decreasing sequences.
6	06-11 Feb	Cauchy sequences, Sub-sequences.
7	13-18 Feb	Limit superior and limit inferior of a sequence.
8	20-25 Feb	Infinite series and their convergences, Positive term series
9	27 Feb-4 Mar	Comparison tests, Cauchy's nth root test
10	6-11 Mar	D. Alembert's ratio test, Raabe's test,
11	13-19 Mar	Mid – Sem Break
12	20-25 Mar	Alternating series, Leibnitz's test, absolute and conditional convergence
13	27 Mar-1 Apr	Properties of Continuous functions,
14	3-8 Apr	Uniform continuity
15	10-15 Apr	Riemann integral, integrability of continuous and monotonic functions
16	17-26 Apr	Revision

Readings/Reference Texts:

1. R.G. Bartle and D.R. Sherbert, Introduction to Real Analysis, John Wiley and Sons (Asia) Pvt. Ltd., 2000.
2. Richard Courant & Fritz John, Introduction to Calculus and Analysis I, Springer-Verlag, 1999.
3. S. K. Berbarian, Real Analysis, Springer - Verlag, 2000