VEER NARMAD SOUTH GUJARAT UNIVERSITY
M. Sc. (Part – I) (Tech)

Industrial Mathematics with Computer Applications
w.e.f. July – August 2004

IMCA – 101 Real Analysis

L	P	T	Total
4	0	0	4

- Sequences and series of real and natural numbers.
- Riemann Integration
- Convergence of Improper Integrals
- Various tests for convergence
- Sequences and series of functions of real variables
- Monotonicity
- Introduction to Measure Theory
- Outer and Inner Measure
- Measurable functions
- L^p Space, Minkowski, Holder Inequality
- Convergence and completeness.

References:

1. R. Goldberg: Real Analysis
2. S. C. Malik: Mathematical Analysis
3. W. Rudin: Principles of Mathematical Analysis, McGraw Hill International.
4. T. M. Apostol: Mathematical Analysis, Narosa Publishing House.
5. H. L. Royden: Real Analysis, Macmillan Pub. Co. Inc. New York.
6. A. Friedman, Foundations of Modern Analysis, Holt, Rinehart and Winston, Inc. NY.
7. Serge Lang: Analysis I and II, Addison-Wesley Pub. Company Inc.
8. G. De. Bara: Measure Theory and Integration, Wiley Eastern Limited.