**MA5702 Analysis-II**

**Rlemann-Stieitjes integral:** Definition and existence of the integral, Properties of the integral. The Riemann- Stieitjes integral of real valued functions of one real variable.

**Functions of bounded variation:** Properties and its importance.

**Sequence and Series of functions:** Uniform convergence, Uniform convergence and continuity, Uniform convergence and integration, Uniform convergence and differentiation. Equicontinuity, Ascoli’s Theorem. Fourier series, pointwise convergence, Fejer's theorem, Weierstrass approximation theorem.

**References:**

1. Andrew Browder, Mathematical Analysis : An Introduction, ISBN 0 – 387 – 94614 – 4

2. W. Rudin, Principles of Mathematical Analysis, Tata McGraw Hill, 1976.