***SUBJECT NO-EE60012, SUBJECT NAME- OPTIMAL CONTROL***

***LTP- 3-1-0,CRD- 4***

**SYLLABUS :-**

**Static optimization, Linear programming, Simplex methods. Dynamic optimization.Calculus of variations, Eulers equation, application to control problems. Pontryagins maximum principle, control with constrains, time optimal control. Optimal tracking control problem, Gain scheduling, Model reference and Self-tuning control problem. Discrete optimal control, Bellmans dynamic programming method. Continuous Kalman Filter, Square root Kalman filter. Non-linear system optimization, Gradient optimization techniques, steepest ascent and decent in parameter plane, Rosenbrocks conjugate gradient method, DavidâFletcher-Power method, etc. Evolutionary methods, Genetic algorithms**