SUBJECT NO-ME60428, SUBJECT NAME- VIBRATION OF STRUCTURES

LTP- 3-1-0,CRD- 4

SYLLABUS :-

Introduction; Boundary value and eigenvalue problems; Self-adjoint and non-self-adjoint systems; Vibration of rods, shafts and strings; Bending vibration of bars; Two-dimensional problems; Variational Characterization of the eigenvalues; The response problem; discretization of continuous systems; Rayleigh-Ritz method, Assumed modes method, Method of weighted residuals; System response by approximate methods; Vibration of a system with time-dependent boundary conditions; Transform method solution of continuous systems; The finite element method; Substructure synthesis