SUBJECT NO-AE31002, SUBJECT NAME- AEROSPACE STRUCTURAL DYNAMICS

LTP- 3-1-0,CRD- 4

SYLLABUS :-

Prerequisites: AE21004

3 - 1 - 0: 4 CreditsIntroduction, discrete systems, matrix formulation, generalized equations of motion, generalized forces, response of undamped systems, special kinds of damping, gyroscopic systems, continuous systems, variational approach, classical eigenvalue problem, beam, membranes and plates, energy method, finite element method. Books:A C Fung, Introduction to Aeroelasticity, R L Bisplinghoff, H Ashley, Principle of Aeroelasticity, WileyE H Dowell and H C Curtiss, A Modern Course on Aeroelasticity, Kluwer Academic PublishersL Meirovitch, Analytical Methods in Vibration, MacMillanW T Thompson, Theory of Vibration with Applications, George Allen