

SYLLABUS :-

Reviews of the laws of motion, Dynamics of a particle in two or three dimensions, equations of motion of an aircraft treated as a particle, Dynamics of a system of particles, collision and orbit problems, rockets. Dynamics of rigid bodies: kinematics of rigid bodies in two and three dimensions, equations of motion and their solution for selected cases, equations of motion of a rigid aircraft, gyroscopes, Introduction to the principle of virtual work and Lagrangian mechanics. Books: I H Shames, Engineering Mechanics: Statics and Dynamics, Prentice-Hall J L Meriam and L G Kraige, Engineering Mechanics: Dynamics, John Wiley and Sons F P Beer and E R Johnston, Vector Mechanics for Engineers â Statics and Dynamics, McGraw-Hill