

SYLLABUS :-

Brief history of flight vehicle development with emphasis on key ideas; The standard atmosphere; Aircraft components and their function (aerodynamic, propulsive and control); Aircraft performance: steady level flight, climbing and turning flight, range, endurance; fastest climb, including the method of energy; takeoff and landing. Unsteady flight performance, high-speed aircraft, helicopters. Books: E L Houghton and A E Brock, Aerodynamics for Engineering Students, Edward Arnold; E L Houghton and N B Carruthers, Aerodynamics for Engineering Students, Edward Arnold; N X Vinh, Flight Mechanics of High Performance Aircrafts, Cambridge University Press; A C Kermode, Mechanics of Flight, Himalayan Books/Pitman