

SYLLABUS :-

Basic concepts of thermodynamics, first and second laws of thermodynamics and their corollaries, Engine cycles; Basic Principles of Propulsion, Classification and Characteristics of Aerospace Propulsive Devices, Thermodynamic and Real Cycle Analysis, Aviation Fuels, Theory of Propellers; Centrifugal Compressor and its performance; Nozzles, Subsonic and Supersonic Intakes, Combustion Chambers; Rocket propulsion. Books: J D Mattingly, Elements of Gas Turbine Propulsion, McGraw-Hill; J D Mattingly, W H Heiser, D H Daley, Aircraft Engine Design, AIAA; E L Houghton and A E Brock, Aerodynamics for Engineering Students, Edward Arnold; S L Dixon, Fluid Mechanics, Thermodynamics of Turbomachinery, Pergamon Press; H Cohen, G F C Rogers, and H Saravanamuttoo, Gas Turbine Theory, Longman