

tion of aircraft; communication and navigation facilities, aerodromes, search and rescue; rules concerning air transit, customs and health.

(ii) *Air Navigation*.—elementary knowledge of theoretical and practical air navigation including knowledge and use of aeronautical maps and charts, simple projections, time, magnetism, compasses, navigational instruments, radio and radar aids, visual and D.R. navigation, plotting and flight planning.

(iii) *Aviation Meteorology*.—elementary aviation meteorology including significance of aerodrome meteorological observations and warnings; basic knowledge of aviation weather codes and plotings; elementary synoptic meteorology including simple interpretation of weather charts; elementary knowledge of Indian climatology and of meteorological procedures relating to aviation.

(iv) *Aircraft & Engines*.—including elementary knowledge of aerodynamics and theory of flight; general principles and elementary knowledge of design, construction, maintenance and operation of aircraft, engine and instruments; ancillary systems (*e.g.* fuel, hydraulic, etc.) and emergency system installation and equipment; basic knowledge of fuel and lubricants; loading of aircraft; weight distribution and its effect on flight characteristics; operating limitations and handling, care and preflight inspection.

NOTE.—The examination shall be conducted by a Board constituted and approved by the Director General.

(c) *Experience*.—He shall produce evidence of having satisfactorily completed as pilot of an aeroplane within a period of 5 years immediately preceding the date of application for this rating:

(i) not less than 300 hours of flight time as a Pilot-in-Command of aeroplane of which not less than 50 hours shall have been completed within a period of 12 months immediately preceding the date of application; and

(ii) not less than 10 hours flying training as an Instructor under an approved Flight Instructor;

(d) *Other requirements*.—He shall be holder of a current professional pilot licence;

(e) *Skill*.—He shall have demonstrated his competency as an Assistant Flight Instructor to the satisfaction of an Examiner by undergoing the following flying tests within a period of 6 months immediately preceding the date of application for this rating. The aircraft used for the test should be fitted with dual controls:

*The Flying Tests* shall include preflight briefing; preflight inspection and ground handling of aeroplanes, take-offs, climb and general flying; descent and glide; stalling, spinning and recovery; landings, emergency manoeuvres including simulated engine failure on take-offs and de-briefing;

*For multi-engine Aeroplanes*.—The test shall also include at maximum landing weight all manoeuvres used in normal flight with symmetric and asymmetric power: approach, landings and overshoot with one or more engines inoperative.

NOTE.—Stalling and spinning shall be carried out only on the types of aeroplanes approved and from the minimum altitude laid down by the Director General.