



GOVERNMENT OF INDIA

OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION
TECHNICAL CENTER, OPPOSITE SAFDARJUNG AIRPORT, NEW DELHI

CIVIL AVIATION REQUIREMENT
SECTION 7 - FLIGHT CREW STANDARDS
TRAINING AND LICENSING

SERIES B PART IV
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Subject : Syllabus for Examination for Issue of Commercial Pilot's Licence and Instrument Rating- Aeroplanes.

1. INTRODUCTION

Sections J of Schedule II of the Aircraft Rules, 1937, stipulates, amongst other requirements, that the applicant shall have to pass a written examination as per the syllabus prescribed by the DGCA for issuance of Commercial Pilot's Licence (CPL). Sections O lays down similar requirements for issue of Instrument Rating (IR) of aeroplanes. This part of the CAR lays down the main topics of syllabus for the written examination for issue of CPL and issue of IR in accordance with the provisions of Schedule II. These topics of syllabus are in conformity with the knowledge requirements prescribed in ICAO Annex 1.

This CAR is issued under the provisions of Schedule II and Rule 133A of the Aircraft Rules, 1937.

2. SYLLABUS

2.1 Commercial Pilot's Licence (Aeroplanes) & Instrument Rating (Aeroplanes)

2.1.1 Air Regulations

- a) Aircraft Act, 1934 – Chapter I, Section Short title and extent, definitions, power to detain aircraft, penalty for act in contravention of rules made under the act, penalty for flying so as to cause danger;
- b) Aircraft Rules, 1937;

- c) rules of the air;
- d) appropriate air traffic services practices and procedures.

2.1.2 Aircraft General Knowledge

- a) principles of operation and functioning of aeroplane power plants, systems and instruments;
- b) operating limitations of appropriate aeroplanes and power plants; relevant operational information from the flight manual or other appropriate document;
- c) use and serviceability checks of equipment and systems of appropriate aeroplanes;
- d) maintenance procedures for airframes, systems and power plants of appropriate aeroplanes;

2.1.3 Flight Performance and Planning

- a) effects of loading and mass distribution on aeroplane handling, flight characteristics and performance; mass and balance calculations;
- b) use and practical application of take-off, landing and other performance data;
- c) pre-flight and en-route flight planning appropriate to operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic service procedures, position reporting procedures; altimeter setting procedures; operations in areas of high density traffic;

2.1.4 Human Performance and Limitations

Human performance and limitations relevant to the commercial pilot- aeroplanes;

2.1.5 Meteorology

- a) interpretation and application of aeronautical meteorological reports, charts and forecasts, use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry;
- b) aeronautical meteorology; climatology of relevant areas in respect of the elements having an effect upon aviation; the movement of pressure systems, the structure of fronts and the origin and characteristics of significant weather phenomenon which affect take-off, en-route and landing conditions; hazardous weather avoidance;

2.1.6 Navigation

- a) air navigation, including the use of aeronautical charts, instruments and navigation aids; an understanding of the principles and characteristics of appropriate navigation systems; operation of airborne equipment; practical aspects of air navigation and dead reckoning techniques;

- b) practical air navigation using radio navigation aids;
- c) use, accuracy and reliability of navigation systems used in departure en-route, approach and landing phases of flight; identification of radio navigation aids;

2.1.7 Operational Procedures

- a) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes, abbreviations and instrument procedure charts for departure, enroute, descent and approach;
- b) appropriate precautionary and emergency procedures; safety practices associated with flight under IFR;
- c) action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;
- d) operational procedures for carriage of freight; potential hazards associated with dangerous goods;
- e) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aeroplanes;

2.1.8 Principles of Flight

Principles of flight relating to aeroplanes;

2.1.9 Radio Telephony

Radiotelephony procedures and phraseology as applied to VFR and IFR operations; action to be taken in case of communication failure;

2.2 DELETED



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