

SCHEDULE II

Section A

General

1. Educational Qualification— (a) The minimum educational qualification for the following licences shall be a pass in Class Ten from a recognised Board or its equivalent examination :

- (i) Student Pilot's Licence (Aeroplanes/Helicopters/Gliders/Balloons and Microlight aircraft).
- (ii) Private Pilot's Licence (Aeroplanes);
- (iii) Private Pilot's Licence (helicopters);
- (iv) Pilot's Licence (Gliders/Balloons/Microlight aircraft).
- (v) Flight Radio Telephone Operator's Licence.

(b) The minimum educational qualification for the following licences shall be a pass in class Ten plus Two, with Physics and Mathematics, from a recognised Board/university or its equivalent examination :

- (i) Commercial Pilot's Licence (Aeroplanes);
- (ii) Commercial Pilot's Licence (Helicopters);
- (iii) Senior Commercial Pilot's Licence (Aeroplanes);
- (iv) Airline Transport Pilot's Licence (Aeroplanes);
- (v) Airline Transport Pilot's Licence (Helicopters);
- (vi) Student Navigator's Licence;
- (vii) Flight Navigator's Licence
- (viii) Student Flight Engineer's Licence; and
- (ix) Flight Engineer's Licence.
- (x) Flight Radio Telephone Operator's Licence.

2. Flying Experience — (a) The evidence normally required as proof of flying experience shall consist of the production of a personal log book certified by the appropriate authority specified in Sub-Rule (4) of Rule 67A, or of a certified extract therefrom in the form which may be prescribed by the Director-General. Such flying experience shall be to the satisfaction of the Director-General.

(b) The flying experience required for the issue of Private Pilot's Licence and Commercial Pilot's Licences shall be acquired under the supervision of a Flight Instructor and shall be on aircraft having valid Certificate of Airworthiness, maintained in accordance with Rules 57-60 except Rule 59A and entered in the Aircraft Rating of Pilot's licence currently held by him.

(c) The flying experience required for issue of Private Pilot's and Commercial Pilot's

Licences shall be acquired at the flying training organisations approved/recognised by the Director-General except in respect of the applicants qualifying for exemption under Rule 41.

(d) The flying experience acquired for the issue of various categories of flight crew licences shall be counted in the manner set out in Rule 67A.

(e) Flying training shall be completed in accordance with the syllabus prescribed by the Director-General.

3. Air Navigation experience — The evidence of air navigation experience acquired in para (e) of Section V of this Schedule must be produced in the form of personal log book certified by a specified authority, or a certified extract therefrom in the prescribed form and navigation logs and charts. Such air navigation experience shall be to the satisfaction of the Director-General.

4. Flight by night— Flight by night for the purpose of this Schedule, except where otherwise stated, means a flight performed between the period of half an hour after sunset and half an hour before sunrise.

5. Cross-country flight— (a) A cross-country flight for the purpose of Sections J, K, L, M and N of this Schedule, unless otherwise stated, means a flight to a point beyond a radius of one hundred nautical miles from the aerodrome of departure whether over land or sea.

(b) A cross-country flight, for the purpose of Sections E, F & G of this Schedule, shall mean a flight to a point beyond a radius of fifty nautical miles from the aerodrome of departure.

6. Flying tests— (a) The flying tests, prescribed in this Schedule may be carried out in any order by an Examiner approved by the Director-General.

(b) The flying tests shall, nevertheless be carried out only after the pilot under test has passed the examination in Aircraft and Engines on the type appropriate to the category of licence.

(c) Stalling and spinning manoeuvres shall be carried out only on the type of aeroplane approved and the recovery from such manoeuvres completed at the minimum height above the ground or obstruction as laid down in the flight manual of the aeroplane or as specified by the Director-General and in no case below two thousand feet above the ground or obstruction.

(d) the holder of a current Commercial Pilot's Licence (Aeroplanes/Helicopters), Senior Commercial Pilot's Licence, issued by the Director-General, shall not be required to undergo general flying test for the issue of Airline Transport Pilot's Licence (Aeroplanes/Helicopters), provided that the aircraft/helicopter is entered in the Aircraft Rating of his licence and the applicant is in current flying practice on the type.

6A Language Proficiency.— (a) An applicant for the following licences shall have the ability to speak and understand the English language used for radiotelephony communications to the level of proficiency specified by the Director General:—

- (i) Private Pilot's Licence (Aeroplanes);
- (ii) Private Pilot's Licence (Helicopters);

- (iii) Commercial Pilot's Licence (Aeroplanes);
- (iv) Commercial Pilot's Licence (Helicopters);
- (v) Airline Transport Pilot's Licence (Aeroplanes);
- (vi) Airline Transport Pilot's Licence (Helicopters);
- (vii) Flight Engineer's Licence, and
- (viii) Flight Navigator's Licence.

(b) The level of proficiency shall be evaluated in accordance with the procedures laid down by Director General.

(c) The licencing authority shall indicate the level of proficiency in the licence.

[Inserted by – GSR 722(E) dated 6.10.2008 and further amended by GSR No. 94(E) dated 12-02-2009]

7. Examination — (a) The technical and other examinations for the issue of a licence, rating or type rating under this Schedule shall be completed within a period of two and a half years immediately preceding the date of application for the issue of the licence or rating, except for issue of Commercial Pilot's Licence (CPL) and Airline Transport Pilot's Licence (ATPL), and for issue of CPL and ATPL, such period shall be five years.

(b) In case the technical and other examinations and /or tests expire on a holiday, they shall be deemed to be valid till the next working day.

(c) All oral examinations under this Schedule shall be conducted by a board constituted and approved by the Director-General.

(d) An applicant who fails in any subject of the technical examinations specified in this Schedule shall not be permitted to appear for re-examination within a period of six weeks from the date of examination or such lesser period as may be specified by the Director-General.

(e) The candidates shall, on demand by the Examiner/Supervisor furnish proof of identity before each test of examination.

[Amended by GSR No. 297(E) dated 8-04-2010]

8. Applications for a licence or a rating — (a) Applications for issue/validation of a licence and/or a rating shall be made to the Director-General of Civil Aviation, New Delhi and for renewal/revalidation of a licence and/or a rating shall be made either to the Director-General of Civil Aviation, New Delhi or to any other authority designated by him in this behalf on a prescribed form.

(b) Licence and Ratings specified in this Schedule shall be issued in the name as entered in the Class X Certificate of a recognised Board or its equivalent.

(c) Class Ten Certificate of a recognised Board or its equivalent or the Birth Certificate issued by a Municipal Corporation/Committee shall be the documents acceptable as proof of age.

(d) Application for the issue of a licence and/or rating shall be accompanied by :-

- (i) an assessment of medical fitness issued by the Director-General;
- (ii) Three unmounted photographs, of size 3 CMs X 4 CMs, of the applicant's head (uncovered) and shoulders in front view;
- (iii) proof of age as prescribed in para (c) ;
- (iv) a crossed bank/Indian Postal Order/Treasury receipt towards the payment of the prescribed fee, payable in the manner prescribed by the Director-General.
- (v) any other information as required by the Director-General.
- (e) The date of application, shall be the date of receipt of application in the office of the Director-General.
- (f) An aircraft type to be included in the Aircraft Rating of a Pilot's licence shall be the aircraft type on the Indian Register of Civil Aircraft and in respect of which a valid Certificate of Airworthiness is in force.

9. Privileges-No person holding a current pilot's licence shall exercise the privileges of his licence and rating unless he has satisfactorily undertaken a 'Flight Review' in the preceding twenty four months, to show that he maintains the requisite competency and knowledge, in accordance with the procedure laid down by the Director-General in this behalf:

Provided that the requirement of 'Flight Review' shall be deemed to have been met in case the holder of the pilot's licence or rating has satisfactorily undergone any one of the following flying tests or checks in the preceding twenty four months, namely:-

- (a) the skill test required for issued or renewal of the relevant licence or extension of the rating;
- (b) the proficiency checks laid down in the paragraphs specifying the privileges in various Sections of this Schedule relating to pilot's licences; and
- (c) the skill tests required for issue of renewal of Assistant Flight Instructors' Rating or Flight Instructors' Rating, or a competency check required for renewal of these ratings.

Section B
Student Pilot's Licence
(Aeroplanes/Helicopters/Gliders)

1. Requirements for issue of licence — An applicant for a student Pilot's Licence (Aeroplanes/Helicopters/ Gliders) shall satisfy the following requirements:

(a) **Age**— The applicant shall be not less than sixteen years of age on the date of application.

(b) **Educational Qualification**— He shall have passed Class Ten or its equivalent examination from a recognised Board.

(c) **Medical fitness** — He shall produce on a prescribed proforma a certificate of physical fitness from an approved medical practitioner after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39 B.

(d) **Knowledge** — He shall pass oral examination in Air Regulations, Air Navigation, Aviation Meteorology and Aircraft and Engines as per the syllabus prescribed by the Director-General unless he previously held a pilot's licence of a higher category, or is able to produce evidence in the manner prescribed by the Director-General that he is well-versed with the aforesaid subjects.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— The licence may be renewed for a period not exceeding twelve months from the date of fresh medical examination as specified in para 1(C) subject to the total validity of the licence not exceeding twenty four months from the date of issue.

4. Aircraft Rating— The licence shall indicate the class and the types of aeroplanes or helicopters or gliders the holder is entitled to fly. Only those types of aircraft may be entered in the licence in respect of which the candidate has passed the examination in Aircraft and Engines mentioned in para 1(d).

5. Privileges— Subject to the validity of aircraft ratings in the licence and compliance with the relevant provisions of Rules 39B, 39C and 42, the privileges of the holder of a Student Pilot's Licence shall be to fly within Indian territory only, as Pilot-in-Command of any aeroplane, helicopter or glider entered in the aircraft rating of his licence :

Provided that :

(a) he shall fly at all times under the authority and supervision of a Flight Instructor or an Approved Examiner;

(b) he shall fly under Visual Flight Rules only ;

(c) he shall not carry passengers, animals and goods or fly for hire, reward or remuneration of any kind;

(d) he shall not undertake cross-country flights unless he has a minimum of ten hours of solo flight time and has passed the examinations in Air Navigation and Aviation Meteorology.

Note — The Student Pilot's Licence shall be issued by a Flying Club/Government Flying Training School specifically authorised in this regard and subject to the conditions as laid down by the Director-General.

Section C

Student Pilot's Licence (Microlight Aircraft)

1. Requirements for the issue of Licence— An applicant for a Student Pilot's Licence (Microlight Aircraft) shall satisfy the following requirements:

- (a) Age— He shall be not less than sixteen years of age on the date of application.
- (b) Educational Qualification— He shall have passed Class Ten Examination or its equivalent examination from a recognised Board.
- (c) Medical Fitness— He shall produce on a prescribed proforma a certificate of Physical fitness from an approved medical practitioner after undergoing a medical examination, during which he shall have established his medial fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.
- (d) Knowledge— He shall pass oral examination in Air Regulation, Air Navigation, Aviation Meteorology and Aircraft and Engines as per the syllabus prescribed by the Director-General, unless he holds a valid pilot's licence of a higher category, or is able to produce evidence in the manner prescribed by the Director-General that he is well-versed with the aforesaid subjects.
- (e) Security Clearance— Security clearance for the Student Pilot/Pilot will be obtained from the concerned State Police authorities by the Flying Club/Government Flying Training School before commencement of flying training and furnished to the Director-General.

2. **Validity** — The licence shall be valid for a period as specified in Rule 39C.

3. **Renewal**— The licence may be renewed for a period not exceeding twelve months from the date of fresh medical examination as specified in para 1(c) subject to the total validity of the licence not exceeding twenty four months from the date of issue of the licence.

4. **Aircraft Rating** — The licence shall indicate the class and the types of microlight aircraft, the holder is entitled to fly. Only those types of microlight aircraft may be entered in respect of which the candidate has furnished the proof of his having thoroughly familiarised himself with the flight controls, speed profiles, systems, engines and limitations of the aircraft with an Examiner, Flight Instructor or a Pilot authorised by the Director-General.

5. **Privileges**— Subject to the validity of aircraft rating in the licence, and compliance with relevant provisions of Rules 39B, 39C and 42, the privileges of the holder of a Student Pilot's Licence (Microlight) shall be to fly within the Indian territory only, as Pilot in Command of any microlight aircraft entered in the aircraft rating of his licence:

Provided that :

- (a) he shall fly at all times under the authority and supervision of a flight Instructor or an Examiner approved by the Director-General.
- (b) he shall fly under visual Flight Rules only.
- (c) he shall not carry passengers, animals and goods or fly for hire, reward or remuneration of any kind;
- (d) a pilot who has not been exempted from the provisions of Clause (c) of paragraph-1, shall not undertake cross-country flights unless he has a minimum of ten hours of solo flight time on microlight aircraft and has passed the examinations in Air Navigation and Aviation Meteorology.

Note— The student Pilot's Licence shall be issued by a Flying Club/Government Flying Training School specifically authorised in this regard and subject to the conditions as laid down by the Director-General.

Section D

Student Pilot's Licence (Balloons)

1. Requirements for issue of licence— An applicant for a Student Pilot's Licence (Balloons) shall satisfy the following requirements :

(a) Age— He shall be not less than sixteen years of age on the date of application.

(b) Educational Qualification— He shall have passed Class Ten or equivalent Examination from a recognised Board.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved medical practitioner after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under rule 39B.

(d) Knowledge— He shall pass an oral examination in Air Regulations, Air Navigation, Aviation Meteorology and Aircraft and Instruments as per the syllabus prescribed by the Director-General.

(e) Security Clearance— Security clearance for the Student Pilot/Pilot will be obtained from the concerned State Police authorities by the Flying Club/Government Flying Training School before the commencement of flying training and furnished to the Director-General.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— The licence may be renewed for a period not exceeding twelve months from the date of fresh medical examination as specified in para-1(b) and subject to the total validity of the licence not exceeding twenty four months from the date of issue of the licence.

4. Privileges— Subject to compliance with relevant provisions of Rules -39B, 39C and 412 the privileges of the holder of a Student Pilot's Licence (Balloons) shall be to fly within the Indian territory only as Pilot-in-Command of a Balloon.

Provided that :

(a) he shall fly at all times under the authority and supervision of a Flight Instructor or an Examiner approved by the Director-General;

(b) he shall fly only under Visual Flight Rules.

(c) he shall not carry passengers, animals and goods or fly for hire, reward or remuneration of any kind.

Note— The Student Pilot's Licence shall be issued by a Flying Club/Government Flying Training School specifically authorised in this regard and subject to the conditions as laid down by the Director-General.

Section E

Private Pilot's Licence (aeroplanes)

1. Requirements for issue of licence— An applicant for Private Pilot's Licence shall satisfy the following requirements:

(a) Age— He shall not be less than seventeen years of age on the date of application.

(b) Educational Qualification— He shall have passed Class Ten or equivalent Examination from a recognised Board.

(c) Medical Fitness— He shall produce on a prescribed proforma, a certificate of physical fitness from an approved medical practitioner after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.

(d) Knowledge— He shall pass a written examination in Air Regulations, Air Navigation, Aviation Meteorology and Aircraft and Engines as per the syllabus prescribed by the Director-General.

Provided that an applicant in possession of a valid Private Pilot's Licence (Helicopters) or a Commercial/Airline Transport Pilot's Licence (Helicopters) shall pass an examination in Aircraft and Engines only.

(e) Experience— He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane not less than forty hours of flight time which shall include—

(i) not less than twenty hours of solo flight time;

(ii) not less than five hours of cross-country flight time in accordance with para 5(b) of Section A as the sole occupant of an aeroplane including a flight of not less than one hundred and fifty nautical miles in the course of which full stop landings at two different aerodromes shall have been made;

(iii) not less than ten hours of solo flight time completed within a period of twelve months immediately preceding the date of application for the issue of licence;

(iv) fifty percent of solo flying experience on microlight aircraft acquired during the preceding twenty four months from the date of

application subject to a maximum of ten hours, may be credited towards the total experience required for the issue of the licence.

(v) fifty percent of solo gliding experience shall count towards total flying experience requirement subject to a maximum of ten hours towards total flight time.

(f) Flying Training— He shall have completed flying training in accordance with the syllabus prescribed by the Director-General.

(g) Skill— He shall have demonstrated his competency to perform as a Pilot-in-command or a Co-pilot of an aeroplane, the procedures and manoeuvres prescribed in the syllabus, to the satisfaction of an Examiner, on the type of aeroplane to which the application for the licence relates, within a period of six months immediately preceding the date of application.

2. **Validity** — The licence shall be valid for a period as specified in Rule 39C.

3. **Renewal**— The licence may be renewed on receipt of satisfactory evidence of the applicant —

(a) having undergone a medical examination in accordance with para 1(C); and

(b) having satisfactorily completed not less than five hours of flight time as Pilot-in-command of an aeroplane within a period of twelve months immediately preceding the date of application for renewal or in lieu thereof, having satisfactorily completed the flying test as laid down in para 1 (g) within a period of six months immediately preceding the date of application.

4. **Ratings**— (a) Aircraft Rating— The licence shall indicate the class and the types of aeroplanes the holder is entitled to fly. An open rating for all single piston engine types of aeroplanes having an all-up weight not exceeding one thousand five hundred Kgs. may also be granted if he has completed not less than two hundred and fifty hours as Pilot-in-command and has at least four different types of aeroplanes entered in the aircraft rating of his licence :

Provided that the privileges of the open rating shall be exercised only after having undergone a ground and flight familiarisation with a Flight Instructor or an approved Examiner for the type of aircraft and a certificate to this effect shall be recorded by the Flight Instructor/Examiner in the Pilot's Log Book before the Pilot is released to exercise the privileges of his open-rating.

(b) Night Rating— Night Rating entitles the holder of the licence to carry passengers at night. Conditions for the issue of this rating are detailed below:

(i) he must have completed not less than fifty hours of flight time as Pilot-in-command and as sole manipulator of the controls including not less than five hours by night, which must include a minimum of five take-offs and five landings carried out within the preceding six months of the date of application;

(ii) he must have completed a dual cross-country flight by night of at least one

hundred nautical miles before he can be permitted to undertake sole cross-country flights by night, and

(iii) he must have completed not less than five hours of dual instructions in instrument flying which may include not more than two and a half hours on an approved synthetic flight trainer.

(c) Instrument Rating— Instrument rating entitles the holder of the licence to fly under the Instrument Flight Rules. The standard of medical fitness and conditions for issue of the rating are laid in Section O.

5. Extension of Aircraft Rating— For extension of Aircraft Rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of—

(a) having passed written examination in Aircraft and Engines as mentioned in para 1(d);

(b) having undergone adequate dual instructions and solo flying to gain competency on the type;

(c) having satisfactorily completed the flight test as laid down in para 1(g) on the type within a period of six months immediately preceding date of application for the extension of Aircraft Rating.

6. Privileges— Subject to the validity of endorsements and ratings in the licence and compliance with the relevant provisions of Rules 39-B, 39-C and 42, the privileges of the holder of a Private Pilot's Licence shall be to act, but not for remuneration, as Pilot-on-command or as Co-pilot of any aeroplane which is entered in the Aircraft Rating of his licence and carry passengers therein :

Provided that —

(i) no flight is undertaken for hire or remuneration of any kind, whatsoever;

(ii) the passengers are carried by night only when the holder of licence is in possession of a valid night rating and has carried out not less than five take-offs and five landings by night as Pilot-in-command within a period of six months immediately preceding the date of intended flight; and

(iii) no flight shall be undertaken under the Instrument Flight Rules without being in possession of a valid Instrument Rating.

Section F

Private Pilot's Licence (Helicopters)

1. Requirements for issue of Licence— An applicant for a Private Pilot's Licence (Helicopters) shall satisfy the following requirements namely :

(a) Age— He shall not be less than seventeen years of age on the date of application.

(b) Educational Qualification— He shall have passed Class Ten or equivalent examination from a recognised Board.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved medical practitioner after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.

(d) Knowledge— He shall pass a written examination in Air Regulations, Air Navigation, Aviation Meteorology and Aircraft and Engine as per the syllabus prescribed by the Director-General;

Provided that an applicant in possession of a valid Private Pilot's Licence (Aeroplanes) or a Commercial/Senior Commercial/Airline Transport Pilot's Licence (Aeroplanes) shall pass an examination only in Aircraft and Engines.

(e) Experience— He shall produce evidence of having satisfactorily completed as a Pilot of a helicopter not less than forty hours of flight time, which shall include—

(i) not less than fifteen hours of solo flight time of which not less than ten hours shall have been completed within a period of twelve months immediately preceding the date of application.

(ii) not less than five hours of cross-country flight time as the sole occupant of helicopter or helicopters including a flight of not less than one hundred nautical miles in the course of which full stop landings at two different points shall have been made. This flight time may be included in the flight time required under sub-clause (i).

Provided that a person who has satisfactorily completed not less than three hundred hours of flight time as Pilot-in-command of an aeroplane shall be required to complete on a helicopter not less than twenty hours of total flight time, dual and solo, which shall include not less than ten hours of solo flight time completed within a period of twelve months immediately preceding the date of application for a licence.

(f) Flying Training— He shall have completed flying training in accordance with the syllabus prescribed by the Director-General.

(g) Skill— He shall have demonstrated his competency to perform the procedures and manoeuvres prescribed in the syllabus to the satisfaction of an

Examiner, on the type of helicopter to which the application for the licence relates, within a period of six months immediately preceding the date of application.

2. **Validity** — The licence shall be valid for a period as specified in Rule 39C.

3. **Renewal**— The licence may be renewed on receipt of satisfactory evidence of the applicant —

(a) having undergone a medical examination in accordance with para 1(c); and

(b) having satisfactorily completed not less than five hours of flight time as Pilot-in-command of a helicopter within a period of six months immediately preceding the date of application for renewal or in lieu thereof; having satisfactorily completed the flight test as laid down in para 1(g) within a period of six months immediately preceding the date of application.

4. **Ratings**— (a) Aircraft Rating :

(i) The licence shall indicate the class and the types of helicopter the holder is entitled to fly. An open rating for all single piston engine type of helicopters having an all-up-weight not exceeding one thousand five hundred Kgs. may also be granted if he has completed not less than two hundred and fifty hours as Pilot-as-command and has at least four different types of helicopters entered in the aircraft rating of his licence :

Provided that the privileges of the open rating shall be exercised only after having undergone a ground and flight familiarisation with a Flight Instructor or an approved Examiner for the type of helicopter. A certificate to this effect shall be recorded by the Examiner/Flight Instructor in the Pilot's Log Book before the pilot is released to exercise the privileges of the open rating.

(b) Night Rating— Night Rating entitles the holder to carry passengers at night. Conditions for the issue of this rating are as follows :—

(i) he must have completed not less than 50 hours of flight time as Pilot-in-command of a helicopter and as sole manipulator of the controls, including not less than ten take-offs and ten landing patterns by night within a period of six months immediately preceding the date of application; and

(ii) he must have completed not less than five hours of dual instructions in night flying.

(c) Instrument Rating— Instrument rating entitles the holder to fly under the Instrument Flight Rules. The standard of medical fitness and conditions for issue of this rating are laid down in Section P

5. **Extension of Aircraft Rating**— For extension of Aircraft Rating, to include an additional type of helicopter, an applicant shall be required to produce evidence of —

(a) having passed written examination in Aircraft and Engines as laid down in para 1(d);

(b) having undergone adequate dual instructions and acquired sufficient solo flying experience to gain competency on the type; and

(c) having satisfactorily completed the flying test as laid down in para 1(g) on the type within a period of six months immediately preceding the date of application for extension of Aircraft Rating ;

6. Privileges— Subject to the validity of endorsement and ratings in the licence and compliance with the relevant provisions of rules 39B, 39C and 42, the privileges of the holder of a Private Pilot's Licence (Helicopters) shall be to act, but not for remuneration, as Pilot-in-Command or as a Co-Pilot of any helicopter which is entered in the Aircraft Rating of his licence and carry passengers therein:

Provided that :—

(a) no flight shall be undertaken for hire or remuneration of any kind, whatsoever;

(b) the passengers are carried by night only when the holder of licence is in possession of a valid night rating and has carried out not less than five take-offs and five landings patterns by night as Pilot-in-Command within a period of six months immediately preceding the date of intended flight; and

(c) no flight shall be undertaken under the Instrument Flight Rules without being in possession of a valid Instrument Rating.

Section G

Pilot's Licence (Microlight)

1. Requirements for the Issue of Licence— An applicant for a Pilot's Licence Microlight aircraft shall satisfy the following requirements :—

(a) Age— He shall not be less than seventeen years of age on the date of application.

(b) Educational Qualification— He shall have passed Class Ten or equivalent Examination from a Recognised Board.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved medical practitioner after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under rule 39B.

(d) Knowledge— He shall pass a written examination in Air Regulations, Air Navigation, Aviation Meteorology and Aircraft and Engines as per the syllabus prescribed by the Director-General :

Provided that an applicant in possession of a valid Private Pilot's Licence

(Aeroplanes/helicopters) or a higher category of Pilot's Licence shall upon production of evidence in the form of a Certificate recorded by Flight Instructor/Examiner in the pilot's Log Book to the effect that the pilot has been thoroughly familiarised with the flight controls, speed profiles, systems, engines and limitations of the Microlight aircraft be exempted :

Provided further that an applicant in possession of a valid Pilot's Licence Gliders shall be exempted from examination in Air Regulations and Aviation Meteorology only.

(e) Security Clearance— If not already obtained, security clearance for the Pilot will be obtained from the concerned State Police authorities by the Flying Club/ Government Flying Training School before commencing flying and forwarded to the Director-General.

(f) Experience— He shall produce evidence of having satisfactorily completed not less than forty hours of flight time on microlight aircraft, which shall include —

(i) not less than fifteen hours of solo flight time of which not less than ten hours shall have been completed within a period of twelve months immediately preceding the date of application for the licence; and

(ii) not less than five hours of cross-country flight time as the solo occupant of microlight aircraft including a flight over a distance of not less than fifty nautical miles from the aerodrome of departure and at least one full stop landing at a suitable aerodrome or landing ground other than the aerodrome of departure;

(iii) the holder of a current Private Pilot's Licence (Aeroplanes) or a higher category of Licence (Aeroplanes) shall be exempted from the experience requirements. Such pilots shall, however, be required to carry out familiarisation flights which shall be followed by not less than three solo take-offs and landings. The familiarisation flights shall be carried out under the supervision of an approved Examiner or a Flight Instructor approved by the Director-General.

(g) Flying Training— He shall have completed the flying training in accordance with the syllabus prescribed by the Director-General.

(h) Skill— He shall have demonstrated his competency to perform the procedures and manoeuvres prescribed in the syllabus to the satisfaction of an Examiner, on the type of microlight aircraft to which the application for licence relates, within a period of six months immediately preceding the date of application.

2. **Validity** — The licence shall be valid for a period as specified in Rule 39C.

3. **Renewal**— The licence may be renewed on receipt of satisfactory evidence of the applicant —

(a) having undergone a medical examination in accordance with para 1(c).

(b) having satisfactorily completed not less than five hours of flight time as Pilot-in-command of a microlight aircraft within a period of twelve months immediately

preceding the date of application for renewal or in lieu thereof; having satisfactorily completed the flight test as laid down in para-1(h) within a period of six months immediately preceding the date of application.

4. Aircraft Rating— The licence shall indicate the class and type of microlight aircraft, the holder is entitled to fly. An open rating for all types of microlight aircraft may also be granted if he has satisfactorily completed not less than one hundred hours of flight time as Pilot-in-command of an aeroplane or a microlight aircraft provided that before undertaking a solo flight on any microlight aircraft, he shall have undergone familiarisation with the flight controls, speed profiles, systems, engines and limitations of the aircraft with a qualified microlight pilot having one hundred fifty hours of Pilot-in-command experience and a certificate to that effect recorded in the pilot's log book.

5. Privileges— Subject to the validity of aircraft ratings in the licence and compliance with the relevant provisions of the Rules 39B, 39C and 42 of the Aircraft Rules, 1937, the privileges of the holder of a Pilot's Licence (Microlight) shall be to act as Pilot-in-Command of a microlight aircraft, which is entered in the Aircraft Ratings of his licence, under the Visual Flight Rules.

Section H

Pilot's Licence (Balloons)

1. Requirements for the issue of Licence— An applicant for a Pilot's Licence shall satisfy the following requirements :—

(a) Age— He shall be not less than sixteen years of age on the date of application.

(b) Educational Qualification— He shall have passed Class Ten or equivalent Examination from a recognised Board.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved medical practitioner after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under rule 39B.

(d) Knowledge— He shall pass a written examination in Air Regulations, Air Navigation, Aviation Meteorology, Airmanship and Balloon systems/Aerostatics as per the syllabus prescribed by the Director-General :

Provided that an applicant in possession of a current Pilot's Licence Gliders, Private Pilot's Licence (Aeroplanes/Helicopters), pilot's Licence Microlight aircraft or a higher category of Pilot's Licence shall pass an examination only in airmanship and Balloon system/Aerostatics.

(e) Security Clearance— If not already obtained, security clearance for the Pilot will be obtained from the concerned State Police authorities by the Flying Club/Government Flying Training School before commencing flying training and forwarded to the Director-General.

(f) Experience— He shall produce evidence of having satisfactorily completed as Pilot of a Balloon not less than sixteen hours of flight time as a pilot of free balloons including at least eight launches and ascents of which—

(i) six ascents shall be under instruction;

(ii) one ascent in control, under the supervision of a properly rated Balloon Pilot, to an altitude of not less than one thousand five hundred meters above sea level;

(iii) one ascent under supervision as the sole occupant of a Balloon.

(g) Flying Training— He shall have completed flying training in accordance with the syllabus prescribed by the Director-General.

(h) Skill— He shall have demonstrated his competency to perform the

procedures and manoeuvres prescribed in the syllabus to the satisfaction of an examiner, on the type of the balloon to which the application for the licence relates, within a period of six months immediately preceding the date of application.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— The licence shall be renewed on receipt of satisfactory evidence of the applicant —

(a) having undergone a medical examination in accordance with para 1(c).

(b) having satisfactorily completed at least five ascents as Pilot-in-Command of which at least one ascent should be to an altitude of one thousand five hundred metres or above within a period of six months immediately preceding the date of application or in lieu thereof; having satisfactorily completed the flying test in accordance with para 1(h) within a period of six months immediately preceding the date of application.

4. Night Rating— (a) To exercise the privileges of the licence by night, the applicant shall have completed at least two ascents by night each of not less than 2 hours duration under the supervision of a licensed Balloon Pilot whose licence is not limited to day flying only.

(b) Night Rating shall be valid subject to the licence holder having completed at least two ascents by night of an average duration of one hour each during a period six months immediately preceding the date of intended flight.

5. Privileges— The privileges of the holder of a Pilot's Licence (Balloons) shall be to act as Pilot-in-Command of any Balloon and to carry passengers, tow banners (fixed or otherwise) which do not adversely affect the safety of the Balloon, under the Visual Flight Rules only.

Section I

Pilot's Licence (Gliders)

1. Requirements for the Issue of Licence— An application for the issue of Pilot's Licence Gliders shall satisfy the following requirements :—

(a) Age— He shall be not less than sixteen years of age on the date of application.

(b) Educational Qualification— He shall have passed Class Ten or equivalent Examination from a recognised Board.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved medical practitioner after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under rule 39B.

(d) Knowledge— He shall pass an oral examination in Air Regulations, Air Navigation, Aviation Meteorology and Aircraft & Instruments, and engines in case of motor gliders, as per the syllabus prescribed by the Director-General :

Provided that an applicant in possession of a valid Pilot's Licence Balloons/microlight Aircraft, Private pilot's Licence (Aeroplanes/Helicopters) or a higher category of Pilot's Licence shall pass an oral test in Aircraft and Instruments.

(e) Experience— He shall produce evidence of having satisfactorily completed as Pilot of a Glider —

(i) not less than ten hours of flight time of which not less than five hours shall be solo flight time; and

(ii) not less than seventy five take-offs and landings of which not less than twenty five solo take-offs and landings shall have been completed within a period of six months immediately preceding the date of application for licence.

(f) Flying Training— He shall have completed the gliding training in accordance with the syllabus prescribed by the Director-General.

(g) Skill— He shall have demonstrated his competency as Pilot-in-Command of a Glider, the procedures and maneuvers prescribed in the syllabus to the satisfaction of the Examiner, on the type of glider to which the application for the

licence relates within a period of six months immediately preceding the date of application.

2. **Validity** — The licence shall be valid for a period as specified in Rule 39C.

3. **Renewal**— The licence shall be renewed on receipt of satisfactory evidence of the applicant—

(a) having undergone a medical examination in accordance with para 1(c);

(b) having satisfactorily completed not less than three hours of flight time or twenty take-offs and landings as Pilot-in-Command of a Glider within a period of six months preceding the date of application for renewal or in lieu thereof; having satisfactorily completed the flying tests in accordance with para-1(g) within period of six months immediately preceding the date of application.

4. **Ratings**— (a) Aircraft Rating— The licence shall indicate the type of gliders the holder is entitled to fly.

(i) An open rating to fly all gliders having an all-up-weight not exceeding six hundred kilograms may also be granted if a pilot has satisfactorily completed not less than fifty hours of flight time as Pilot-in-Command in free flight including not less than two hundred take-offs and landings as solo manipulator of controls :

Provided that the privileges of open rating shall be exercised only after having undergone familiarisation flights with Flight Instructor (Glider) or with an approved Examiner or having been thoroughly briefed by an approved Examiner or an Instructor in case of single seater glider and a certificate to that effect recorded by the Examiner/Instructor in the Pilot's log book, before releasing the pilot for flight.

(b) Aero-Tow Rating— Aero-tow Rating entitles the holder to carry passengers in gliders in aero-tow flights. An Aero-tow Rating may be given if a glider pilot has satisfactorily completed in a glider not less than ten aero-tow flights of a total duration of not less than two hours as pilot of a glider :

Provided that no solo aero-tow flights are undertaken, unless at least five dual aero-tow flights have been carried out with a qualified Instructor on board and a satisfactory report to that effect recorded by the Instructor in the pilot's log book before the aero-tow flights are undertaken.

(c) Glider Towing Requirements— No person shall act as Pilot-in-Command of an aircraft towing a glider unless he meets the following requirements :

(i) he holds a valid pilot's licence (other than a Student Pilot's Licence);

(ii) he has an endorsement in his Pilot log book from a person authorised to give instruction in glider towing and is familiar with the techniques and procedures essential to the safe towing of gliders, including airspeed limitations, emergency procedures, signals used and maximum angles of bank;

(iii) he has made and entered in his Pilot's log book at least three flights as sole manipulator of the controls of an aircraft towing a glider under the supervision of a pilot who meets the requirements of this clause and has carried out at least ten flights as 'Pilot-in-Command' of an aircraft towing a glider;

(iv) If he holds only a Private Pilot's Licence (Aeroplanes), he shall have not less than one hundred hours of flight time as Pilot-in-Command.

(d) Motor Glider Rating— Motor Glider Rating entitles the holder to carry passengers in a self launching motor glider. A motor glider rating may be given if the holder of a valid pilot's Licence Glider produces evidence of :

(i) having passed an oral examination in engines;

(ii) having satisfactorily completed as pilot of self-launching Motor glider not less than forty take-offs and landings, out of which not less than ten take-offs and landings shall have been completed as Pilot-in- Command;

(iii) having thoroughly familiarised himself with the flight controls, speed profiles, systems, engines and limitations of the aircraft with an approved Examiner/Glider Instructor and a certificate to that effect recorded by Instructor/Examiner in the Pilot's log book.

5. Extension of Aircraft Rating— For extension of Aircraft Rating to include an additional type of Glider, the applicant shall be required to produce evidence of :—

(i) having passed an oral examination in aircraft and instruments and engines in case of motor gliders, as mentioned in para 1(d) :

(ii) having satisfactorily completed the flying tests in accordance with para-1(g) on the type of glider to which the application relates within a period of six months immediately preceding the date of application for extension of the aircraft rating; and

(iii) having satisfactorily carried out not less than three take-offs and landings as Pilot-in-command as sole manipulator of controls.

6. Privileges— Subject to the validity of the aircraft ratings in the licence and compliance with the relevant provisions of Rules 39B, 39C and 42 of the Aircraft Rules, 1937, the privileges of the holder of Pilots Licence Gliders shall be to act, as Pilot-in-Command off any glider which is entered in the Aircraft Rating of the licence and to carry passengers therein under the Visual Flight Rules.

Note— 1. The privileges granted under this section shall be exercised only when the method of launching is any one of the following:— Winch-launching, Auto-launching, or Launching by aero-tow.

2. If any unconventional method of launching such as rockets, catapults, etc. is adopted, the privileges to fly in command and to carry passengers shall be exercised only after he has completed an approved course of training and a flying test to the satisfaction of the Director-General.

Section J

Commercial Pilot's Licence (Aeroplanes)

1. Requirements for issue of Licence— An applicant for a Commercial Pilot's Licence shall satisfy the following requirements:—

(a) Age— He shall be not less than Eighteen years of age on the date of application:

(b) Educational Qualification— He shall have passed Class Ten plus Two or an equivalent examination with Physics and Mathematics, from a recognized Board/University.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.

(d) Knowledge— He shall pass a written examination in Air Regulations, Air Navigation Meteorology and aircraft and Engines and Signals (practical) examination for interpretation of aural and visual signals, as per the syllabus prescribed by the Director-General :

Provided that the holder of a current Commercial Pilot's Licence (Helicopters) shall be required to pass an examination in Aircraft and Engines only.

(e) Experience— He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane within a period of five years immediately preceding the date of application for licence not less than two hundred hours of flight time, which shall include—

(i) not less than one hundred hours of flight time as Pilot-in-Command of which not less than fifteen hours shall have been completed within a period of six months immediately preceding the date of application for licence;

(ii) not less than twenty hours of cross-country flight time as Pilot-in-Command including a cross-country flight of not less than three hundred nautical miles in the course of which full stop landings at two different aerodromes shall be made;

(iii) not less than ten hours of instrument time of which not more than five hours may be on an approved simulator; and

(iv) not less than five hours of flight time by night including a minimum of ten

take-offs and ten landings as Pilot-in-Command as (sole manipulator of controls) carried out within six months immediately preceding the date of application for licence.

Provided that in case of an applicant who is in possession of a Commercial Pilot's Licence (Helicopters)/Airline Transport Pilot's Licence (Helicopters) and who has satisfactorily completed not less than 1000 hours of flight time as Pilot-in-Command of a helicopter, the above experience requirement of two hundred hours as pilot of an aeroplane shall be reduced to one hundred hours, which shall include –

(i) Not less than seventy five hours of flight time as pilot-in-command including a minimum of twenty five hours of cross country flight time and ten hours of instrument time of which not less than five hours may be on approved simulator;

(ii) Not less than five hours of flight time by night including ten takeoffs and landing patterns; and

(iii) Not less than ten hours of flight time on aeroplane within a period of six months immediately preceding the date of application for issue of licence.

(f) Flying Training— He shall have completed the flying training in accordance with the syllabus prescribed by the Director-General.

(g) Other Requirements— He shall be in possession of a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft issued by the Director-General.

(h) Skill— He shall have demonstrated his competency to perform the procedures and manoeuvres prescribed in the syllabus to the satisfaction of an examiner, on the type of aeroplane to which the application for licence relates, within a period of six months immediately preceding the date of application. The Director General may, however, allow Skill Test or part thereof to be carried out on aircraft/ approved Zero Flight Time Training simulator level 'D' for the type of aircraft. The competency shall be demonstrated as in —

(i) general flying test by day;

(ii) general flying test by night;

(iii) a cross-country flight test by day consisting of a flight of not less than two hundred fifty nautical miles in the course of which at least one full stop landing at an aerodrome other than the aerodrome of departure shall be made; and

(iv) a cross-country flying test by night consisting of a flight of not less than one hundred twenty nautical miles returning to the place of departure without landing elsewhere.

2. **Validity** — The licence shall be valid for a period as specified in Rule 39C.

3. **Renewal**— The licence may be renewed on receipt of satisfactory evidence of the applicant —

(a) having undergone a medical examination in accordance with para 1(c) above;

(b) having satisfactorily completed not less than ten hours of flight time as Pilot-in-Command (Fifty percent of flight time as Co-Pilot may be counted towards the requirement of flight time as Pilot-in-Command) within a period of six months immediately preceding the date of application for renewal; or in lieu thereof, having satisfactorily completed the general flying test by day and night as laid down in clause (h) of paragraph 1 within the same period;

(c) having a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft, issued by the Director-General.

4. **Aircraft Rating**— (a) The licence shall indicate the types of aeroplane the holder is entitled to fly.

(b) An open rating for all single piston engine type of aeroplane having an allupweight not exceeding one thousand five hundred Kgs. may also be granted if he has completed not less than one thousand hours of flight time on such types of aeroplanes including not less than five hundred hours as Pilot-in-Command and has at least four different types of aircraft entered in the aircraft rating of his licence:

Provided that the privileges of the open rating shall be exercised only after having undergone a ground and flight familiarisation with a flight Instructor or an approved Examiner and a certificate to this effect shall be recorded by the Examiner in the pilot's log book, before the pilot is released to exercise the privileges of open rating on that type of aircraft.

(c) **Instructor's Rating**— Instructor's Rating entitles the holder to impart flying instructions. The privileges and conditions for the issue of these ratings are laid down in Sections Q & R.

(d) **Instrument Rating**— Instrument Rating entitles the holder to fly under Instrument Flight Rules. Conditions for issue of this rating are laid down in Section O.

5. Extension of Aircraft Rating— For extension of aircraft rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of –

(i) having passed a written examination in Aircraft and Engines as mentioned in para 1(d) and of having gained, under appropriate supervision, experience in flying the aircraft of such type or on approved flight simulator in respect of the following, namely:-

(a) normal flight procedures and manoeuvres during all phases of flight;

(b) abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as power plant, systems and airframe;

(c) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;

(d) procedures for crew incapacitation and crew coordination including allocation of pilot tasks crew cooperation and use of check lists; and

(ii) having satisfactorily completed the general flying tests by day and night in accordance with para 1(h) in respect of the type of aircraft for which the extension of aircraft rating is desired. Such flying tests shall have been completed within a period of six months immediately preceding the date of the application for extension of the aircraft rating.

6. Privileges— Subject to the validity of endorsements and ratings in the licence and compliance with the relevant provisions of Rule 39B, Rule 39C and Rule 42 of the Aircraft Rules, 1937, the privileges of the holder of a Commercial Pilot's Licence shall be :—

(a) to exercise all the privileges of Private Pilot's Licence;

(b) to act as Pilot-in-Command of any aeroplane having an all-up-weight not exceeding five thousand seven hundred Kgs. and which is entered in the aircraft rating of his licence provided that when passengers are to be carried at night, he shall have carried out within a period of six months immediately preceding the date of the intended flight not less than ten take-offs and ten landings by night as Pilot-in-Command:

(c) to act as Co-Pilot of any aeroplane where a Co-Pilot is required to be carried and which is entered in the aircraft rating of his licence :

Provided that for all flights under the Instrument Flight Rules, either as Pilot-in-Command or as Co-Pilot, he shall have a current Instrument Rating:

Provided further that for all flights as Co-Pilot of transport aeroplanes having an all-upweight exceeding five thousand seven hundred Kgs. he shall have carried out within the preceding six months of the intended flight, appropriate proficiency checks in respect of that type of aircraft as required by the Director-General.

Provided also that on attainment of the age of sixty-five years, such privileges shall be restricted to that of Private Pilot's Licence (Aeroplanes).

[Amended by (i) G.S.R No. 400 (E) dated 14th June, 2005

(ii) G.S.R No. 307(E) dated 24th May, 2006

(iii) G.S.R No. 19(E) dated 27th December 2007,

(iii) G.S.R No. 68(E) dated 30th January 2009,

(iv) *G. S. R. No. 11(E) dated 10th January 2011*]

Section K

Commercial Pilot's Licence (Helicopters)

1. Requirements for issue of licence— An applicant for a Commercial Pilot's Licence (Helicopters) shall satisfy the following requirements :—

(a) Age— He shall be not less than eighteen years of age on the date of application.

(b) Educational Qualification— He shall have passed class ten plus two with Physics and Mathematics or its equivalent examination from a recognized Board/University.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.

(d) Knowledge— He shall pass a written examination in Air Regulations, Air Navigation, Aviation Meteorology and Aircraft and Engines and Signals (practical) examination for interpretation of aural and visual signals as per the syllabus prescribed by the Director-General:

Provided that an applicant in possession of a current Commercial Pilot's Licence (Aeroplanes) or higher category of a pilot's licence shall be required to pass an examination in Aircraft and Engines only.

(e) Experience— He shall produce evidence of having satisfactorily completed as pilot of helicopter or helicopters not less than one hundred and fifty hours of flight time, which shall include—

(i) not less than fifty hours of flight time as Pilot-in-Command of a helicopter;

(ii) not less than ten hours of cross-country flight time as Pilot-in-Command of a helicopter;

(iii) not less than ten hours of flight time as Pilot-in-Command of a helicopter within a period of six months immediately preceding the date of application for licence; out of which not less than five hours of flight time by night which shall include not less than ten take-offs and ten landing patterns by night:

(iv) not less than ten hours of instrument instruction time of which not less than five hours may be instrument ground time;

Provided that a person who is holder of a Commercial Pilot's Licence/Senior Commercial Pilot's Licence/Airlines Transport Pilot's Licence (Aeroplanes) and who has satisfactorily completed not less than five hundred hours of flight time as Pilot-in-Command in aeroplane shall be required to complete on a helicopter not less than thirty hours of flight time dual and solo, including not less

than twenty hours of flight time as Pilot-in-Command which shall include: not less than five hours of cross-country time not less than ten take-offs and ten landing patterns and not less than five hours of flight time within a period of six months immediately preceding the date of application for licence.

(f) Flying Training— He shall have completed flying training in accordance with the syllabus prescribed by the Director-General.

(g) Other Requirements— He shall be in possession of a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft issued by the Director-General.

(h) Skill— He shall have demonstrated his competency to perform the procedures and manoeuvres prescribed in the syllabus by day and night to the satisfaction of an approved Examiner, on the type of helicopter to which the application for licence relates, within a period of six months immediately preceding the date of application.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— The licence may be renewed on receipt of satisfactory evidence of the applicant—

(a) Having undergone a medical examination in accordance with para 1(c).

(b) Having satisfactorily completed not less than five hours of flight time as Pilot-in-Command (fifty percent of the flight time as Co-Pilot may be counted towards the requirements of flight time as Pilot-in-Command) of a helicopter within a period of six months immediately preceding the date of application for renewal, or in lieu thereof having satisfactorily completed the flying tests as laid down in para 1(h) within the same period.

(c) Having a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft issued by the Director-General.

4. Ratings— (a) Aircraft Rating— The licence shall indicate the class and types of helicopters the holder is entitled to fly. An open rating for all single engine piston type of helicopters having an all-up-weight not exceeding one thousand five hundred Kgs. may also be granted if he has completed not less than one thousand hours of flight time including not less than two hundred hours as Pilot-in-Command on helicopters and has at least four different types of helicopters entered in the aircraft rating of his licence.

(b) Instructor's Rating— Instructor's rating entitles the holder to impart flying instructions on types of helicopters entered in the aircraft rating of his licence. The privileges and conditions for the issue of these ratings are laid down in Section Q and R of this schedule.

(c) Instrument Rating— Instrument rating entitles the holder to fly under the Instrument Flight Rules. Conditions for issue of the rating are laid down in Section P of this schedule.

5. Extension of Aircraft Rating— For extension of aircraft rating to include an additional

type of helicopter, an applicant shall be required to produce evidence of —

(i) having passed a written examination in Aircraft and Engines as mentioned in para 1(d) and of having gained, under appropriate supervision, experience in flying the aircraft of such type or an approved flight simulator in respect of the following, namely:

(a) normal flight procedures and manoeuvres during all phases of flight;

(b) abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as power plant, systems and airframe;

(c) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;

(d) procedures for crew incapacitation and crew coordination including allocation of pilot tasks; crew cooperation and use of check lists; and

(ii) having satisfactorily completed the general flying tests by day and night in accordance with para 1(h) in respect of the type of aircraft for which the extension of aircraft rating is desired. Such flying tests shall have been completed within a period of six months immediately preceding the date of application for extension of the aircraft rating.

6. Privileges— Subject to the validity of endorsements and ratings in the licence and compliance with the relevant provisions of Rule 39B, Rule 39C and Rule 42 of the Aircraft Rules, 1937, the privileges of the holder of a Commercial Pilot's Licence (Helicopters) shall be—

(i) to exercise all the privileges of Private Pilot's Licence (Helicopters);

(ii) to act as pilot-in-command of any helicopter engaged in operations other than commercial air transportation;

(iii) to act as pilot-in-command in commercial air transportation in any helicopter certified for single-pilot operation; and

(iv) to act as co-pilot in commercial air transportation in any helicopters required to be operated with a co-pilot.

Provided that when passengers are to be carried at night he shall have carried out within a period of six months immediately preceding the date of intended flight not less than five take-offs and five landing patterns and one route check to the satisfaction of an Examiner by night as Pilot-in-Command of a helicopter:

Provided further that for all flights under the Instrument Flight Rules as Pilot-in-Command or as Co-Pilot he shall be required to have current Instrument Rating:

Provided further that he shall have undergone satisfactorily appropriate proficiency checks within the preceding six months of the intended flight carrying passengers, in respect of such types of helicopters entered in the aircraft rating of his licence and specified by the Director-

General.

Provided also that on attainment of the age of sixty-five years, such privileges shall be restricted to that of Private Pilot's Licence (Helicopters).

*[Amended by (i) G.S.R No. 307(E) dated 24th May, 2006
(ii) G. S. R. No. 11(E) dated 10th January 2011]*

Section L

COMMERCIAL PILOT'S LICENCE (AEROPLANES) WITH INSTRUMENT RATING

1. **Requirements for issue of Licence** – An applicant for Commercial Pilot's Licence (Aeroplanes) with Instrument Rating shall satisfy the following requirements :-

(a) Age – He shall be not less than Eighteen years of age on the date of application.

(b) Educational Qualification – He shall have passed Class Ten plus Two or an equivalent examination with Physics and Mathematics, from a recognized Board/University.

(c) Medical Fitness – He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director – General under 39B.

(d) Knowledge – He shall pass a written examination in Air Regulations, Air Navigation, Meteorology and Aircraft and Engines and Signals (practical) examination for interpretation of aural and visual signals, as per the syllabus prescribed by the Director-General:

Provided that the holder of a current Commercial Pilot's Licence (Helicopters) shall be required to pass an examination in Aircraft and Engines and Instrument Rating only.

(e) Experience – He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane within a period of five years immediately preceding the date of application for licence not less than two hundred hours of flight time, which shall include –

(i) not less than hundred hours of flight time as Pilot-in-Command out of which not less than thirty hours flight time as Student Pilot-in-Command which shall include not more than twenty hours of cross country flight time and not more than ten hours circuits-landings with minimum ten landings;

(ii) not less than fifteen hours time as Pilot-in-Command flight time within a period of six months immediately preceding the date of application;

(iii) not less than fifty hours cross-country flight time as Pilot-in-Command including a cross-country flight of not less than three hundred nautical miles in the course of which full stop landings at two different aerodromes shall be made;

(iv) not less than fifty hours of instrument time of which not more than twenty hours may be on an approved simulator, out of which minimum of five hours of instrument time shall have been completed within a period of six months immediately preceding the date of application for the Instrument

Rating; and

(v) not less than five hours time by night including a minimum of ten take offs and ten landings as Pilot-in-Command (as sole manipulator of controls) carried out within six months immediately preceding the date of application for licence:

Provided that in case of an applicant who is in Possession of a Commercial Pilot's Licence (Helicopters) and who has satisfactorily completed not less than one thousand hours of flight time as Pilot-in-Command of a helicopter, the above experience requirement of two hundred hours as pilot of an airplane shall be reduced to hundred hours.

Note- The student-pilot-in-command flight time shall not be logged by instructor in his own log book. Student log book shall indicate student pilot-in-command flight time in remarks column as SPIC with the name of the instructor.

(f) Flying Training – He shall have completed the flying training in accordance with the syllabus prescribed by the Director-General.

(g) Other Requirements – He shall be in possession of a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft Issued by the Director-General.

(h) Skill – He shall have demonstrated his competency to perform the procedures and manoeuvres prescribed in the syllabus to the satisfaction of an examiner, on the type of aeroplane to which the application for licence relates, within a period of six months immediately preceding the date of application. The competency shall be demonstrated in –

- (i) general flying test by day;
- (ii) general flying test by night;
- (iii) a cross-country flight test by day consisting of a flight of not less than two hundred fifty nautical miles in the course of which at least one full stop landing at an aerodrome other than the aerodrome of departure shall be made;
- (iv) a cross-country flying test by night consisting of a flight of not less than one hundred twenty nautical miles returning to the place of departure without landing elsewhere; and
- (v) ability to fly an aeroplane in respect of which Instrument Rating is desired, solely with the aid of instruments by undergoing an instrument flying test within a period of six months immediately preceding the date of application for the rating. The flying test shall be carried out in accordance with the syllabus prescribed by the Director-General. The Director-General may, however, allow such tests or part thereof to be carried out on an approved simulator for the type of aircraft.

2. Validity – The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period specified in Rule 39C subject to compliance with renewal requirements as stipulated in para 3 hereinafter.

3. **Renewal** – The licence may be renewed on receipt of satisfactory evidence of the applicant.

- (a) having undergone a medical examination in accordance with para 1(c) above
- (b) having satisfactorily completed not less than ten hours of flight time as Pilot-in-Command (Fifty percent of flight time as Co-Pilot may be counted towards the requirement of flight time as Pilot-in-Command) within a period of six months immediately preceding the date of application for renewal, or in lieu thereof, having satisfactorily completed the general flying test by day and night as laid down in clause (h) of paragraph 1 within the same period; and
- (c) having a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft, issued by the Director-General.

4. **Rating** – (a) The licence shall indicate the types of aeroplane the holder is entitled to fly.

(b) Open Rating - An open rating for all single piston engine type of aeroplanes having an all-up-weight not exceeding one thousand five hundred Kgs. may also be granted if he has completed not less than one thousand hours of flight time on such types of aeroplanes including not less than five hundred hours as Pilot-in-Command and has at least four different types of aircraft entered in the aircraft rating of his licence:

Provided that the privileges of the open rating shall be exercised only after having undergone a ground and flight familiarization with a flight Instructor or an approved Examiner and a certificate to this effect shall be recorded by the Examiner in the pilot's log book, before the pilot is released to exercise the privileges of open rating on that type of aircraft.

(c) Instructor's Rating – Instructor's Rating entitles the holder to impart flying instructions. The privileges and conditions for the issue of these ratings are laid down in Sections Q & R.

(d) Instrument Rating – No separate instrument rating is provided for in the licence. The privileges of instrument rating are included in the privileges of this licence provided that the instrument rating flight tests have been carried out to the satisfaction of the Director-General within a period of twelve months immediately preceding the interested flight under Instrument Flight Rules.

5. **Extension of Aircraft Rating** – For extension of aircraft rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of -

(i) having passed a written examination in Aircraft and Engines as mentioned in para 1(d) and of having gained, under appropriate supervision, experience in flying the aircraft of such type or on approved flight simulator in respect of the following, namely:-

- (a) normal flight procedures and manoeuvres during all phases of flight;
- (b) abnormal and emergency procedures and manoeuvres in the event of

failures and malfunctions of equipment, such as power plant, systems and airframe;

(c) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;

(d) procedures for crew incapacitation and crew coordination including allocation of pilot task, crew cooperation and use of check lists; and

(ii) having satisfactorily completed the general flying tests by day and night in accordance with para 1(h) in respect of the type of aircraft for which the extension of aircraft rating is desired. Such flying tests shall have been completed within a period of six months immediately preceding the date of application for extension of the aircraft rating.

6. Privileges –Subject to the validity of endorsements and ratings in the licence and compliance with the relevant provisions of Rule 39B, Rule 39C and Rule 42 of the Aircraft Rules, 1937, the privileges of the holder of a Commercial Pilot’s Licence (Aeroplanes) shall be :-

(a) to exercise all the privileges of Private Pilot’s Licence (Aeroplanes);

(b) to act as Pilot-in-Command of any aeroplane having an all-upweight not exceeding five thousand seven hundred Kgs. And which is entered in the aircraft rating of his licence provided that when passengers are to be carried at night, he shall have carried out within a period of six months immediately preceding the date of the intended flight not less than ten take-offs and ten landings by night as Pilot-in-Command:

(c) to act as Co-Pilot of any aeroplane where a Co-pilot is required to be carried and which is entered in the aircraft rating of his licence:

Provided that for all flights under the Instrument Flight Rules, either as Pilot-in-Command or as Co-pilot, he shall have demonstrated his company in accordance with para 1(h) (v)

Provided further that for all flights as Co-Pilot of transport aeroplanes having an all-up-weight exceeding five thousand seven hundred Kgs. He shall have carried out within the preceding six months of the intended flight, appropriate proficiency checks in respect of that type of aircraft as required by the Director General.

[Inserted by GSR No. 165(E) dated 12-03-2009]

Section M

Airline Transport Pilot's Licence (Aeroplanes)

1. Requirements for issue of Licence— An applicant for an Airline Transport Pilot's Licence shall satisfy the following requirements :—

(a) Age— He shall be not less than twentyone years of age on the date of application;

(b) Educational Qualification— He shall have passed class ten plus two with Physics and mathematics or its equivalent examination from a recognised Board/University.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B;

(d) Knowledge— He shall pass a written and oral examination in Air Regulations, Air Navigation, Avionics (Radio Aids and Instruments), Aviation Meteorology and Aircraft and Engines, and Signals (Practical) examination for interpretation of aural and visual signals as per the syllabus prescribed by the Director-General.

Note: — Holder of a current Commercial Pilot's Licence, shall not be required to pass the examination in Air Regulations and that of Senior Commercial Pilot's Licence shall not be required to pass any of the examinations.

(e) Experience— He shall produce evidence of having satisfactorily completed as a Pilot of an aeroplane not less than one thousand five hundred hours of flight time of which not less than one hundred fifty hours flight time shall be in the preceding twelve months and his total flying experience shall include —

(i) not less than five hundred hours of flight time as Pilot-in-Command or as Co-Pilot performing, under the supervision of a pilot who fulfills the flying experience requirements of a check pilot, the duties and functions of a pilot-in-command provided that at least two hundred hours out of these shall be cross-country flight time, including not less than fifty hours of flight time by night.

Note— Where an aeroplane is required to be operated with a co-pilot in accordance with the provisions of the Flight Manual of the aeroplane, not more than fifty percent of the co-pilot flight time shall be credited towards the total flight time required for the issue of the licence, but not more than fifty percent of the co-pilot flight time under supervision shall be credited towards pilot-in-command flight experience required for issue of the licence, and full credit for such flight time shall be given towards total flight time required for issue of the licence.

(ii) not less than one thousand hours of total cross-country flight time;

(iii) not less than one hundred hours of flight time by night;

(iv) not less than one hundred hours of instrument time under actual or simulated instrument conditions of which not less than fifty hours shall be in actual flight;

(v) not less than ten hours of flight time completed within a period of six months immediately preceding the date of application for the licence.

(f) Other Requirements— (i) He shall be the holder of a Commercial or a Senior Commercial Pilot's Licence. However, this will not be applicable for the issue of Airline Transport Pilot's Licence to a pilot from Armed Forces who otherwise meets the requirements;

(ii) He shall have a current Instrument Rating;

(iii) He shall be in possession of a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft issued by the Director-General.

(g) Skill— He shall have demonstrated his competency to perform by day and by night the procedures and manoeuvres prescribed in the syllabus to the satisfaction of the Examiner, on the type of multi-engine aeroplane to which the application for licence relates within a period of six months immediately preceding the date of application.

The Director General may, however, allow skill tests or part thereof to be carried out on aircraft/ approved Zero flight Time Training simulator level 'D' for the type of aircraft.

Note :— The holder of a current Commercial Pilot's Licence (Aeroplanes)/Senior Commercial Pilot's Licence (Aeroplanes) issued by the Director-General shall not be required to undergo general flying tests for the issue of Airline Transport Pilot's Licence (Aeroplanes) provided that the licence is issued on the type or types of multi-engine aeroplane or aeroplanes, as the case may be, included in the aircraft rating of Commercial Pilot's Licence (Aeroplanes) or Senior Commercial Pilot's Licence (Aeroplanes) and the pilot possesses ten hours of flying experience as Pilot-in-Command or twenty hours as Co-pilot at least on one such multi-engine type within the preceding six months.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— The Licence may be renewed on receipt of satisfactory evidence of the applicant —

- (a) having undergone a medical examination in accordance with para 1(c).
- (b) having satisfactorily completed not less than ten hours flight time as Pilot-in-Command (fifty percent of flight time as Co-Pilot may be counted towards the requirements of flight time as Pilot-in-Command) within a period of six months immediately preceding the date of application for renewal, or in lieu thereof ; having satisfactorily completed the flying tests by day and by night as laid down in clause (g) of paragraph 1 within the same period.
- (c) having a current flight Radio Telephone Operator's Licence, for operation of radio telephone apparatus on board an aircraft, issued by the Director-General.
- (d) having satisfactorily completed Instrument Rating Flight Test on a multi-engine aeroplane entered in the Licence within the preceding twelve months of the date of intended flight.

Note:-Applicants holding Airline Transport Pilot Licence (Aeroplanes), having only single engine aeroplane or aeroplanes entered in the aircraft typerating on the licence, shall be able to renew their licence till 31st December, 2001 only on the basis of satisfactory Instrument Rating Flight Test on single engine aeroplane or aeroplanes entered in the Licence.

4. Ratings— (a) Aircraft Rating— The licence shall indicate the class and the types of aeroplanes the holder is entitled to fly. An open rating for all types of aeroplanes having all-up-weight not exceeding five thousand seven hundred Kgs. may also be granted if he has completed not less than one thousand hours of flight time as a Pilot-in-Command on any aeroplane having an all-up-weight of fourteen thousand Kgs. or above.

(b) Instructor's Rating— Instructor's Rating entitles the holder to impart flying instructions. The privileges and conditions for the issue of these ratings are laid down in Sections Q and R;

(c) Instrument Rating— No separate instrument rating is provided for in the licence. The privileges of instrument rating are included in the privileges of this licence provided that the instrument rating flight tests have been carried out to the satisfaction of the Director-General within a period of twelve months immediately preceding the intended flight under Instrument Flight Rules.

5. Extension of Aircraft Rating— For extension of aircraft rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of——

- (i) having passed a written examination in Aircraft and Engines as mentioned in para 1(d) and of having gained, under appropriate supervision, experience in flying the aircraft of such type or on approved flight simulator in respect of the following, namely:
 - (a) normal flight procedures and manoeuvres during all phases of flight;
 - (b) abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as power plant, systems and

airframe;

(c) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;

(d) procedures for crew incapacitation and crew coordination including allocation of pilot tasks, crew cooperation and use of check lists; and

(ii) having satisfactorily completed the general flying tests by day and night in accordance with para 1(h) in respect of the type of aircraft for which the extension of aircraft rating is desired. Such flying tests shall have been completed within a period of six months immediately preceding the date of the application for extension of the aircraft rating.

6. Privileges— Subject to the validity of endorsements and ratings in the licence and compliance with the relevant provisions of Rules 39B, 39C and 42 of the Aircraft Rules, 1937, the privileges of the holder of an Airline Transport Pilot's Licence shall be :—

(a) to exercise the privileges of a private, a Commercial and a Senior Commercial Pilot's Licence;

(b) to act as Pilot-in-Command or as Co-Pilot of any aeroplane where a Co-Pilot is required to be carried and which is entered in the aircraft rating of his licence :

Provided that he shall not act as Pilot-in-Command of an aeroplane having a all-up-weight exceeding five thousand seven hundred Kgs. unless he has completed on that type of aeroplane not less than one hundred hours of flight time as a Co-Pilot, followed by ten consecutive satisfactory route checks of which not less than five shall be by night under the supervision of a Check Pilot, performing the duties and functions of a Pilot-in-command and has demonstrated his competency to fly as a Pilot-in-Command to the satisfaction of the Director-General.

Provided further that for all flights as Pilot-in-Command or as Co-Pilot on transport aeroplanes having an all-up-weight exceeding five thousand seven hundred Kgs., he shall have undergone satisfactorily within the preceding six months of the intended flight, appropriate proficiency checks in respect of that type of aircraft as required by the Director-General.

Provided also that for all IFR flights as Pilot-in-Command or as Co-pilot, he shall be required to have current Instrument Rating.

Provided also that on attainment of the age of sixty-five years, such privileges shall be restricted to that of Private Pilot's Licence (Aeroplanes).

*[Amended by – (i) G.S.R No. 68(E) dated 30th January 2009 and
(ii) G. S. R. No. 11(E) dated 10th January 2011]*

Section N

Airline Transport Pilot's Licence (Helicopters)

1. Requirements for Issue of Licence— An applicant for an Airline Transport Pilot's Licence (Helicopters) shall satisfy the following requirements —

(a) Age— He shall be not less than twenty-one years of age on the date of application.

(b) Educational Qualification— He shall have passed class ten plus two with Physics and Mathematics or its equivalent examination from a recognised Board/University;

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B;

(d) Knowledge— He shall pass written and oral examination in Air Regulations, Air Navigation, Avionics (Radio Aids and Instruments), Aviation Meteorology and Aircraft and Engines, and Signals (Practical) examination for interpretation of aural and visual signals, as per the syllabus prescribed by the Director-General.

Note — Holder of a valid Commercial Pilot's Licence (Aeroplanes/Helicopters) and SCPL/ALTP (Aeroplanes) shall not be required to pass the examination in Air Regulations. The holders of commercial Pilot's Licences (Aeroplanes) shall, however, be required to pass the examination in Aircraft and Engines on helicopters.

(e) Experience— He shall produce evidence of having satisfactorily completed as pilot of a helicopter not less than one thousand hours of flight time of which not less than one hundred hours shall be in the preceding twelve months and his total flying experience shall include not less than —

(i) two hundred fifty hours of flight time as Pilot-in-Command or fifty hours as Pilot-in-Command and four hundred hours as Co-Pilot performing the duties and functions of a Pilot-in-Command under the supervision of a Pilot who satisfies the flying experience requirements for Check Pilot;

(ii) two hundred hours of cross-country flight time of which not less than one hundred fifty hours shall be as Pilot-in-Command or as Co-Pilot performing the duties and functions of a Pilot-in-Command under the supervision of a Pilot who satisfies the flying experience requirements for Check Pilot, including not less than twenty hours by night;

(iii) fifty hours of flight time by night;

(iv) forty hours of instrument time under actual or simulated conditions, of

which not more than ten hours may be Instrument Ground Time.

(v) ten hours of flight time completed within a period of six months immediately preceding the date of application for the licence.

Note:— Where a helicopter is required to be operated with a copilot in accordance with provisions of the Flight Manual of the helicopter, not more than fifty percent of the co-pilot flight time shall be credited towards the total flight time required for the issue of the licence, but not more than fifty percent of the co-pilot flight time under supervision shall be credited towards pilot-in-command flight experience required for issue of the licence, and full credit for such flight time shall be given towards total flight time required for issue of the licence.

(f) Other Requirements—

(i) He shall be a holder of a Commercial Pilot's Licence (helicopter). However, this may not be applicable for the issue of an Airline Transport Pilot's Licence (Helicopter) to a qualified pilot from the Indian Armed Forces who otherwise meets the requirements.

(ii) He shall have a current Instrument Rating.

(iii) He shall be in possession of a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft issued by the Director-General.

(g) Skill— He shall have demonstrated his competency to perform by day and by night the procedures and manoeuvres prescribed in the syllabus to the satisfaction of the Examiner on the type of multi-engine helicopter to which the application for licence relates, within a period of six months immediately preceding the date of the application.

Note:— The holder of a valid Commercial Pilot's Licence (Helicopters) issued by the Director-General shall not be required to undergo the general flight tests for the grant of Airline Transport Pilot's Licence (Helicopters) provided that the licence is issued on the type or types of multi-engine helicopter or helicopters, as the case may be, included in the aircraft rating of Commercial Pilot's Licence (Helicopters) and the pilot possesses recent flying experience of at least five hours as Pilot-in-Command or ten hours as Co-pilot on one such multi-engine type.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— The licence may be renewed on receipt of satisfactory evidence of the applicant —

(a) having undergone a medical examination in accordance with para 1(c).

(b) having satisfactorily completed not less than ten hours of flight time as Pilot-in-Command (fifty percent of flight time as a Co-Pilot may be counted towards the

requirement of flight time as Pilot-in-Command) within a period of six months immediately preceding the date of application for renewal, or in lieu thereof having satisfactorily completed the skill tests by day and by night as laid down in clause (g) of paragraph 1 within the same period.

(c) having a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft issued by the Director-General.

(d) having satisfactorily completed Instrument Rating Flight Test on a multi-engine helicopter entered in the licence within the preceding twelve months of the date of intended flight.

Note:—Applicants holding Airline Transport Pilot's Licence (Helicopters), having only single engine helicopter entered in the aircraft rating on the licence, shall be able to renew their licences till 31st December, 2001 on the basis of satisfactory Instrument Rating Flight Test on single engine helicopter type entered in the licence.

4. Ratings— (a) Aircraft Rating— The licence shall indicate the class and the types of helicopters the holder is entitled to fly. An open rating for all types of helicopters having an all-up-weight not exceeding one thousand five hundred Kgs. may also be granted if he has completed not less than one thousand hours of flight time including not less than five hundred hours as Pilot-in-Command on helicopters:

Provided that the privileges of the open rating shall be exercised only after having undergone a ground and flight familiarisation with a Flight Instructor or an approved Examiner, and a certificate to this effect is recorded by the Instructor/Examiner in the Pilot's Log Book, before he is released to exercise the privileges of open rating on that type of helicopter.

(b) Instructor's Rating— Instructor's rating entitles the holder to impart flying instructions. The privileges and conditions for the issue of these ratings are laid down in Section Q and R.

(c) Instrument Rating— Instrument rating entitles the holder to fly under the Instrument Flight Rules. Conditions for issue of the rating are laid down in Section P.

5. Extension of Aircraft Rating— For extension of the aircraft rating to include an additional type of helicopter, an applicant shall be required to produce evidence of —

(i) having passed a written examination in Aircraft and Engines as mentioned in para 1(d) and of having gained, under appropriate supervision, experience in flying the aircraft of such type or an approved flight simulator in respect of the following, namely:

(a) normal flight procedures and manoeuvres during all phases of flight;

(b) abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as power plant, systems and airframe;

- (c) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;
- (d) procedures for crew incapacitation and crew coordination including allocation of pilot tasks, crew cooperation and use of check lists; and
- (ii) having satisfactorily completed the general flying tests by day and night in accordance with para 1(h) in respect of the type of aircraft for which the extension of aircraft rating is desired. Such flying tests shall have been completed within a period of six months immediately preceding the date of application for extension of the aircraft rating.

6. Privileges— Subject to the validity of endorsements and ratings in the licence and compliance with the relevant provisions of Rule 39B, Rule 39C and Rule 42 of the Aircraft Rules, 1937, the privileges of the holder of an Airline Transport Pilot's Licence (Helicopters) shall be :—

- (a) to exercise the privileges of a Private and Commercial Pilot's Licence (Helicopters);
- (b) to act as Pilot-in-Command or as a Co-Pilot of any helicopter where a Co-Pilot is required to be carried and which is entered in the aircraft rating of his licence:

Provided that he shall not act as Pilot-in-Command of a helicopter having an all-up-weight exceeding five thousand seven hundred Kgs. unless he has completed on that type of helicopter not less than one hundred hours of flight time as a Co-Pilot followed by ten consecutive satisfactory route checks including not less than five by night under the supervision of a Check Pilot, performing the duties and functions of a Pilot-in-Command and has demonstrated his competency to fly as Pilot-in-Command to the satisfaction of the Director-General :

Provided further that for all flights as Pilot-in-Command or as Co-Pilot on transport helicopters, he shall have carried out within the preceding six months of the intended flight appropriate proficiency checks in respect of that type of helicopter as required by the Director-General.

Provided also that for all flights under the instrument flight rules (specified in Schedule IV to the Aircraft Rules, 1937) as pilot-in-command or as co-pilot he shall be required to have current Instrument Rating.

Provided also that on attainment of the age of sixty-five years, such privileges shall be restricted to that of Private Pilot's Licence (Helicopters).

Section

O

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ment Rating

(Aeroplanes)

1. Requirements for Issue of Rating— An applicant for an Instrument Rating shall satisfy the following requirements: —

(a) Knowledge— He shall pass a written and oral examination in Air Regulations, Air Navigation, Aviation Meteorology and Instrument Rating as per syllabus prescribed by the Director-General for issue of Commercial Pilot's Licence. He shall also pass a practical test on interpretation of aural and visual signals as per the syllabus prescribed by the Director-General.

(b) Experience— He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane—

(i) not less than one hundred hours of flight time as a Pilot-in-Command including not less than fifty hours of cross-country flight time;

(ii) not less than forty hours of instrument time of which not more than twenty hours shall be instrument ground time. A minimum of five hours of instrument time shall have been completed within a period of six months immediately preceding the date of application for the Instrument Rating :

Provided that in the case a pilot who holds a current Instrument Rating (Helicopters), he shall have not less than one hundred hours of flight time as Pilot-in-Command of an aeroplane including not less than twentyfive hours of cross-country flight time and not less than twenty hours of instrument time of which not more than ten hours may be on an approved simulator.

(c) Other Requirements — He shall be :

(i) holder of a current Pilot's Licence (Aeroplanes);

(ii) holder of a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft issued by the Director-General.

(d) Flying Training— He shall have completed the flying training in accordance with the syllabus as prescribed by the Director-General.

(e) Skill— He shall have demonstrated to the satisfaction of the Examiner his competency to fly an aeroplane in respect of which Instrument Rating is desired, solely with the aid of instruments by undergoing an instrument flying test within a period of six months immediately preceding the date of application for the rating. The flying test shall be carried out in accordance with the syllabus as prescribed by the Director-General. The Director-General may, however, allow such tests or part

thereof to be carried out on an approved simulator for the type of aircraft.

2. Validity — (a) The rating shall be valid for a period of twelve months from the date of issue of the rating.

(b) In the case of renewal, the period of validity of the rating shall be for a period of twelve months which shall commence from the date following the date of expiry of the previous validity subject to the condition that the application for renewal has been submitted within one month preceding the date of expiry and all other requirements for renewal are met on the date of application.

(c) In cases other than those referred to in clause (b), the validity of renewal of the rating shall commence from the date of renewal of the rating.

3. Renewal— The Instrument Rating may be renewed on receipt of satisfactory evidence of the applicant :

(a) having satisfactorily completed the Instrument Rating Flight Test as laid down in para 1(e).

(b) having a valid Flight Radio Telephone Operator's Licence issued by the Director-General for operation of radio telephone apparatus on board an aircraft.

4. Extension of Instrument Rating— For extension of Instrument Rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of having satisfactorily completed the flight test in accordance with para 1(e) in respect of the type of aeroplane for which the extension of Instrument Rating is desired. The flight test shall have been completed within a period of six months immediately preceding the date of application for the extension of Instrument Rating.

5. Privileges— Subject to the validity of the Instrument Rating, the privileges of the holder thereof shall be to fly under the Instrument Flight Rules, the types of aeroplanes on which he has demonstrated his competency in accordance with para 1(e) :

Provided that a pilot, who has demonstrated his competency by undergoing an Instrument Rating Flight test on a single-engine aeroplane not exceeding an all-up-weight of five thousand seven hundred Kgs., shall exercise the privileges of his Instrument Rating on all single engine aeroplanes within the aforesaid weight category :

Provided further that a pilot, who has demonstrated his competency by undergoing an Instrument Rating Flight test on a Multi-engine aeroplane not exceeding an all-up-weight of five thousand seven hundred Kgs., shall exercise the privileges of his Instrument Rating on all multi-engine aeroplanes within the aforesaid weight category.

Notwithstanding anything said here-in-before, the holder of an Instrument Rating on any transport aeroplane, shall exercise his privileges only on the type of aeroplane on which the Instrument Rating Flight test has been satisfactorily carried out;

Provided further that the holder of an Instrument Rating on aeroplanes having an all-up-weight exceeding five thousand seven hundred Kgs. shall exercise the privileges of his Instrument Rating only on the type of aeroplane on which the Instrument Rating Flight test has been satisfactorily carried out.

Provided also that, notwithstanding anything said herein before, the holder of an Instrument Rating on any multi-engine aeroplane may exercise the privileges of Instrument Rating on any single engine aeroplane entered in the aircraft rating of his licence.

[Amended vide (i) GSR No. 165(E) dated 12-03-2009; and

(ii) G. S. R. No. 11(E) dated 10th January 2011]

Section P

Instrument Rating (Helicopters)

1. Requirements for issue of Rating— An applicant for an Instrument Rating (Helicopters) shall satisfy the following requirements :—

(a) Knowledge— He shall pass a written and oral examination in Air Regulations, Air Navigation and Aviation Meteorology as per the syllabus prescribed for the issue of a Commercial Pilot's Licence (Helicopters). He shall also pass signals (Practical) examination for interpretation of aural and visual signals for the issue of this rating as per the prescribed syllabus.

(b) Experience— He shall produce evidence of having satisfactorily completed as a pilot of a helicopter not less than one hundred fifty hours of flight time which shall include not less than —

(i) one hundred hours of flight time as Pilot-in-Command or fifty hours of flight time as Pilot-in-Command and one hundred hours as Co-Pilot performing the duties and functions of a Pilot-in-Command under the supervision of a Pilot who satisfies the flying experience requirements of a Check Pilot.

(ii) fifty hours of cross-country flight time as Pilot-in-Command of a helicopter or fifteen hours as Pilot-in-Command and seventy hours as Co-Pilot performing the duties and functions of a Pilot-in-Command under the supervision of a Pilot who satisfies the flying experience requirements of a Check Pilot.

(iii) forty hours of Instrument time in helicopters of which not more than twenty hours shall be instrument ground time. A minimum of five hours of instrument time shall have been completed on helicopters within a period of six months immediately preceding the date of application:

Provided that in the case of a Pilot who holds a current Instrument Rating(Aeroplanes), he shall have not less than fifty hours of flight time as Pilot-in-Command of helicopter including not less than twenty hours of cross-country flight time and not less than twenty hours of instrument flight time of which not more than ten hours may be instrument ground time.

(c) Other Requirements— He shall be:

(i) holder of a current Pilot's Licence (Helicopters).

(ii) holder of a current Flight Radio Telephone Operator's Licence for operation of radio telephone apparatus on board an aircraft issued by the Director-General.

(d) Flying Training— He shall have completed the flying training in accordance with the syllabus as prescribed by the Director-General.

(e) Skill— He shall have demonstrated his competency to fly a helicopter in respect of which Instrument Rating is desired, solely with the aid of instruments by undergoing an instrument flying test to the satisfaction of an Examiner within a period of six months immediately preceding the date of application for the rating. The flight test shall be carried out in accordance with the syllabus as prescribed by the Director-General. The Director-General may, however, allow such tests or part thereof to be carried out on an approved simulator for the type of aircraft.

2. Validity — (a) The rating shall be valid for a period of twelve months from the date of issue of the rating.

(b) In the case of renewal, the period of validity of the rating shall be for a period of twelve months which shall commence from the date following the date of expiry of the previous validity subject to the condition that the application for renewal has been submitted within one month preceding the date of expiry and all other requirements for renewal are met on the date of application.

(c) In cases other than those referred to in clause (b), the validity of renewal of the rating shall commence from the date of renewal of the rating.

3. Renewal— The Instrument Rating may be renewed on receipt of satisfactory evidence of the applicant:

(a) having satisfactorily completed the Instrument Rating Flight Test as laid down in para 1(e).

(b) having a current Flight Radio Telephone Operator's Licence issued by the Director-General for operation of radio telephone apparatus on board an aircraft.

4. Extension of Instrument Rating— For extension of Instrument Rating to include an additional type of helicopter, an applicant shall be required to produce evidence of having satisfactorily completed the flight tests in accordance with para 1(e) in respect of the type of helicopter for which the extension of Instrument Rating is desired. The flight test shall have been completed within a period of six months immediately preceding the date of application for the extension of Instrument Rating.

5. Privileges— Subject to the validity of the Instrument Rating, the privileges of the holder shall be to fly under the Instrument Flight Rules, the types of helicopters on which he has demonstrated his competency in accordance with para 1(e).

*[Amended by (i) G.S.R No. 307(E) dated 24th May, 2006;
(ii) G. S. R. 240 dated 13th December 2010; and
(iii) G. S. R. No. 11(E) dated 10th January 2011]*

Section Q

Assistant Flight Instructor's Rating (Aeroplanes/Helicopters)

1. Requirements for issue of Rating— An applicant for an Assistant Flight Instructor's Rating shall satisfy the following requirements :—

(a) Age— He shall be not less than eighteen years of age on the date of application.

(b) Knowledge— He shall pass a written or oral examination in the following subjects in accordance with the prescribed syllabus :—

- (i) Mechanics of flight;
- (ii) Methods and techniques of flying instructions;
- (iii) Flight instruments.

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

(i) not less than two hundred hours of flight time as a Pilot-in-Command of an aeroplane of which not less than fifty hours shall have been completed within a period of eighteen months immediately preceding the date of application; and in the case of helicopters, not less than one hundred hours flight time as a Pilot-in-Command of a helicopter, of which not less than fifty hours shall have been completed within a period of eighteen months immediately preceding the date of application; and

(ii) not less than ten hours of flying training as an Instructor as per the syllabus prescribed by the Director-General under an approved Flight Instructor/Examiner.

(d) Other Requirements— He shall be the holder of an appropriate current professional pilot's licence.

(e) Skill— He shall have demonstrated to the satisfaction of the Examiner his competency as an Assistant Flight Instructor by performing the procedures and manoeuvres prescribed in the syllabus within a period of six months immediately preceding the date of application.

2. Validity — (a) The rating shall be valid for a period of twelve months from the date of issue of the rating.

(b) In the case of renewal, the period of validity of the rating shall be for a period of twelve months which shall commence from the date following the date of expiry of the previous validity subject to the condition that the application for renewal has been

submitted within one month preceding the date of expiry and all other requirements for renewal are met on the date of application.

(c) In cases other than those referred to in clause (b), the validity of renewal of the rating shall commence from the date of renewal of the rating.

3. Renewal— The Assistant Flight Instructor's Rating may be renewed on receipt of satisfactory evidence of the applicant—

(a) having satisfactorily completed not less than twenty hours of flight time as an Assistant Flight Instructor and also satisfactorily completed the competency checks within a period of twelve months immediately preceding the date of application for renewal;

or

(b) having satisfactorily completed oral or written examination in relevant aviation subjects as laid down in para 1 (b) and the flying tests as laid down in para 1(e) within a period of six months immediately preceding the date of application for renewal.

4. Privileges— Subject to the validity of endorsements and rating in his pilot's licence of which this Assistant Flight Instructor's Rating forms a part, the privileges of the holder of an Assistant flight Instructor's Rating shall be to impart instructions during flight by day only and under the authority and supervision of a Flight Instructor, on all types of aeroplanes/helicopters having all-up-weight not exceeding one thousand five hundred Kgs., and which are entered in the Aircraft Rating of his licence :
Provided that he shall not authorise any Student Pilot to undertake his first solo flight and shall not impart instructions in aerobatics and night flying.

[Amended by G. S. R. No. 11(E) dated 10th January 2011]

Section R

Flight Instructor's Rating (Aeroplanes/Helicopters)

1. Requirements for issue of rating— An applicant for a Flight Instructor's Rating shall satisfy the following requirements—

(a) Age— He shall be not less than twenty years of age on the date of application.

(b) Knowledge— He shall pass a written or oral examination in the following subjects in accordance with the prescribed syllabus—

- (i) Mechanics of flight;
- (ii) Methods and techniques of flying instructions;
- (iii) Flight instruments.

(c) Experience— He shall produce evidence of having satisfactorily completed as pilot of an aeroplane or a helicopter, as the case may be, within a period of five years immediately preceding the date of application for this rating :

(i) (a) twenty hours by night during which at least twenty take-offs and twenty landings have been carried out;

(b) three hundred hours of flight time on aeroplanes or one hundred fifty hours on helicopters, as the case may be, satisfactorily completed in the capacity of an Assistant Flight Instructor or Qualified Flight Instructor in the service of Defence Forces..

(ii) an approved Flight Instructor's course :

Provided that in case of a pilot from Defence Forces who has successfully completed the Qualified Flight Instructor's course and also satisfies requirements as laid down in para 1(c) and 1(d) may be considered for the issue of Flight Instructor's Rating if he has not less than twenty hours of flight time as Flight Instructor within a period of twelve months immediately preceding the date of application.

(d) Other Requirements— He shall be—

(i) the holder of a current Commercial Pilot's Licence (Aeroplanes/Helicopters)/ Senior Commercial Pilot's Transport Licence, Airline Transport Pilot's Licence (Aeroplanes/Helicopters);

(ii) the holder of a current Instrument Rating.

Note : In the absence of a current Instrument Rating, an applicant will not be permitted to impart instruction in Instrument Flying.

(e) Skill— He shall have demonstrated his competency as a Flight Instructor by performing procedures and manoeuvres prescribed in the syllabus by day and by night to the satisfaction of an approved Examiner within a period of six months immediately preceding the date of application.

2. Validity — (a) The rating shall be valid for a period of twelve months from the date of issue of the rating.

(b) In the case of renewal, the period of validity of the rating shall be for a period of twelve months which shall commence from the date following the date of expiry of the previous validity subject to the condition that the application for renewal has been submitted within one month preceding the date of expiry and all other requirements for renewal are met on the date of application.

(c) In cases other than those referred to in clause (b), the validity of renewal of the rating shall commence from the date of renewal of the rating.

3. Renewal— The Flight Instructor's Rating may be renewed on receipt of satisfactory evidence of the applicant having satisfactorily completed not less than twenty hours of flight time as well as the competency checks as a Flight Instructor within a period of twelve months immediately preceding the date of application for renewal; or in lieu thereof satisfactorily completed oral or written examination in relevant aviation subjects as laid down in para 1(b) and the flying tests as laid down in para 1(e) within the same period together with having successfully completed a Flight Instructor's refresher course approved by the Director-General,

4. Aircraft Rating— The rating shall indicate the class and the types of aeroplanes/helicopters as the case may be on which the holder is entitled to impart instructions.

5. Extension of aircraft rating— For extension of aircraft rating to include additional types of aeroplanes/helicopters, as the case may be, having an all-up-weight exceeding five thousand seven hundred Kgs., the applicant shall be required to produce evidence of —

(a) having obtained appropriate aircraft rating for that type on his professional pilot's licence;

(b) having satisfactorily completed not less than five hundred hours of flight time as Pilot-in-Command on aeroplanes or three hundred hours of flight time as Pilot-in-Command on helicopters, as the case may be; and

(c) having satisfactorily completed the flying tests as laid down in para 1(e) on the type desired to be included in this rating.

Note — Requirements mentioned in (b) and (c) may be varied by the Director-General under special circumstances in the case of an experienced Flight Instructor who has successfully completed a course approved by the Director-General.

6. Privileges — Subject to the validity of endorsements and ratings in the Pilot's licence of which this Flight Instructor's Rating forms a part and also any endorsement on this rating, the privileges of the holder of a Flight Instructor's Rating shall be :—

(a) to impart flying instructions on aeroplanes/helicopters, as the case may be, having an all-up-weight not exceeding five thousand seven hundred Kgs. and which is entered in the aircraft rating of his licence, and also on an aeroplane/helicopter having an all-up-weight exceeding five thousand seven hundred Kgs. and which is entered in his Instructor's Rating.

(b) to supervise and authorise solo flights by student pilots and supervise flying instructions imparted by Assistant Flight Instructors.

[Amended by G. S. R. No. 11(E) dated 10th January 2011]

Section U

Student navigator's Licence

1. Requirements for issue of licence — An applicant for a Student Navigator's Licence shall satisfy the following requirements—

(a) Age— He shall be not less than twenty years of age on the date of application;

(b) Educational Qualification— He shall have passed class ten plus two with Physics and Mathematics or its equivalent examination from a recognised Board/University.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.

(d) Knowledge— He shall pass a written examination with oral and practical tests in Air Regulations, Air Navigation, Flight Navigation, Instruments, Radio/Radar Aids, Astronomical Navigation and Aviation Meteorology; and Signals (Practical) test for interpretation of aural and visual signals in accordance with the syllabus as prescribed by the Director-General.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— The licence may be renewed on receipt of satisfactory evidence of the applicant having undergone a medical examination in accordance with clause (c) of paragraph 1 and subject to satisfactory exercise of privileges.

4. Privileges— Subject to compliance with the relevant provisions of Rule 39B, Rule 39C and Rule 42 of Aircraft Rules, 1937, the privileges of the holder of a Student Navigator's Licence shall be to act as a Navigator on any flight, where a Flight Navigator is required to be carried in accordance with Rule 38 A provided that he shall so act at all times under the direct supervision of a licensed Flight Navigator and solely for the purposes of gaining practical experience in navigation to qualify for a Flight Navigator's Licence.

Section V

Flight Navigator's Licence

1. Requirements for issue of licence— An applicant for a Flight Navigator's Licence shall satisfy the following requirements :

(a) Age— He shall be not less than twenty-one years of age on the date of application;

(b) Educational Qualification— He shall have passed class ten plus two with Physics and Mathematics or its equivalent examination from a recognised Board/University.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination, during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.

(d) Knowledge— He shall pass a written examination with oral and practical tests in Air Regulations, Air Navigation, Flight Navigation, Instruments, Radio/Radar Aids, Astronomical Navigation and Aviation Meteorology; and Signals (Practical) test for interpretation of aural and visual signals in accordance with the syllabus as prescribed by the Director-General.

(e) Experience— (i) The applicant shall have completed in the performance of the duties of a flight navigator not less than two hundred hours of flight time acceptable to the Director-General, in aircraft engaged in cross-country flights, including not less than thirty hours by night;

(ii) When the applicant has completed as a pilot not less than two hundred hours of flight time acceptable to the Director-General, such experience to the extent of one hundred hours cross-country flight time shall be considered as experience for the purpose of sub-clause (i);

(iii) The applicant shall produce evidence of having satisfactorily determined the aircraft's position in flight, and used that information to navigate the aircraft, as follows:

(a) by night — not less than twenty five hours by celestial observations; and

(b) by day — not less than twenty five hours by celestial observations in conjunction with self-contained or external referenced navigation systems.

(f) Skill— The applicant shall have demonstrated in flight by day and by night within a period of six months immediately preceding the date of application, the ability to perform as flight navigator of an aircraft with a degree of competency appropriate to privileges of a flight navigator during which he should have shown

(i) the exercise of good judgement and airmanship;

- (ii) application of aeronautical knowledge;
- (iii) performed all duties as part of an integrated crew; and
- (iv) communicated effectively with other flight crew members.

2. **Validity** — The licence shall be valid for a period as specified in Rule 39C.

3. **Renewal**— The licence may be renewed on receipt of satisfactory evidence of the applicant—

(a) having undergone a medical examination in accordance with clause (c) of paragraph 1;

(b) having completed as a Flight Navigator not less than twenty hours of flight time during which he shall have navigated an aircraft by the use of dead reckoning, radio bearings and such other aids as are available to him in navigating an aircraft within a period of twelve months immediately preceding the date of application for renewal, or in lieu thereof having satisfactorily completed the tests as laid down in clause (f) of paragraph 1 within the same period.

4. **Privileges**— Subject to compliance with the relevant provisions of Rule 39B, Rule 39C and Rule 42 of Aircraft Rules, 1937, the privileges of the holder of a Flight Navigator's Licence shall be to act as a Flight Navigator on any flight where a Flight Navigator is required to be carried in accordance with Rule 38A.

Section W

Student Flight Engineer's Licence

1. Requirements for the issue of licence— An applicant for a Student Flight Engineer's Licence shall satisfy the following requirements—

(a) Age— He shall not be less than twenty-one years of age on the date of application.

(b) Educational Qualifications— He shall have passed class ten plus two with Physics and Mathematics or its equivalent form a recognised Board/University.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approval Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.

(d) Technical Qualification— He shall have completed a Flight Engineer's Ground Course of Instructions in the basic technical and aeronautical knowledge required of a Flight Engineer as approved by the Director-General.

(e) Knowledge— Subject to the successful completion of the course mentioned in clause (d) above, he shall pass a written examination in the following subjects—

(i) Regulations and procedures, including rules, in so far as duties of flight engineers are concerned;

(ii) Fundamental of aerodynamics and theory of flight and navigation;

(iii) General principles of constructions, maintenance and functioning of airframe, power plants, including their accessories, instruments, installed equipment and related systems;

(iv) Selected elements of flight planning, including centre of gravity computation, fuel consumption and endurance, power plant output and centre of power output, engine power curves and mathematical computation involved;

(v) Aircraft performance characteristics and limitations;

(vi) Flight documentation relating to the duties of flight engineers;

(vii) Procedures in the event of power plant or system malfunction or emergencies particularly in the event of fire;

(viii) Knowledge of varying meteorological conditions and their effect on

aircraft, power plant operations;

(ix) Detailed knowledge of flight/operation manuals, including the knowledge of the functioning of the aircraft systems and other components installed in the systems;

(x) Procedures of airworthiness checks, defects reporting, pre-flight inspection, types of fuel precautions during refuelling and use of external power.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— Licence may be renewed for a period not exceeding twelve months from the date of a successful medical examination.

4. Aircraft Rating— Licence shall indicate the type of aircraft on which the holder is entitled to fly in the capacity of a student flight engineer.

5. Extension of aircraft rating— For extension of aircraft rating to include an additional type of aircraft, an applicant shall have completed a flight engineer's ground course of instructions as per para 7.2 approved by the Director-General and passed a written examination subsequent to successful completion of the approved course, in aircraft engine and systems pertaining to the type of aircraft for which extension of aircraft rating is desired.

6. Privileges— Subject to the validity of endorsements and ratings in the licence, the privileges of the holder of a student flight engineer's licence shall be to act as a student flight engineer on any type of aircraft entered in aircraft rating of his licence and which has separate flight engineer's station, provided that :

(a) he shall so act at all times under personal supervision of a flight engineer and solely for the purpose of gaining flight experience required for obtaining a flight engineer's licence;

(b) he shall not act as a student flight engineer of a transport aircraft carrying passengers unless he has satisfactorily completed a course of training for a minimum of ten hours on local training flights or non-passenger carrying flight during which he shall have carried out not less than ten take-offs and ten landings and he has been certified fit by an examiner to operate as student flight engineer on the type of transport aircraft carrying passengers. Out of the ten hours stipulated as training experience, not more than eight hours shall be on an approved synthetic device shall not count towards the ten landings referred to above.

7. Flight Engineer's Ground Course of Instructions as referred to in para 1(d) shall consist of : (i) Basic Course, (ii) Type Course, as per the details given in para 7.1 below :

7.1 Basic Course: The duration of the course shall be decided by the Director-General, keeping in view the educational and experience background of trainees and course shall consist of the following subjects:

(a) Aircraft rules and civil airworthiness requirements in so far as duties of flight engineers are concerned.

(b) Theory of flight.

- (c) Properties of air.
- (d) Basic airframe and associated systems.
- (e) Basic engine— gas turbine engine or piston engine including propeller system as applicable.
- (f) Basic electrical.
- (g) Ground instruments.
- (h) Ground handling and servicing procedures.
- (i) Weight and balance.
- (j) Emergency equipments.
- (k) Fuel Systems.
- (l) Ice and rain protection.

7.2 Type Course— The duration of the course shall be as approved by the Director-General of keeping in view complexity of aircraft and shall cover the following subjects :—

- (a) Aircraft systems and accessories including malfunction analysis.
- (b) Aircraft engines— Gas turbine engine or piston engine, including propeller system as applicable, including malfunction analysis.
- (c) Fuel management.
- (d) Ground handling and servicing procedures.
- (e) Weight and balance.
- (f) Use of cockpit list/minimum equipment list.
- (g) External and internal pre-flight checks.
- (h) Normal operation procedures.
- (i) Alternate or emergency operating procedures.
- (j) Aircraft performance.
- (k) Documents relating to aircraft airworthiness.
- (l) Emergency equipment.
- (m) Fire protection systems.
- (n) Aircraft system, power plants systems, instrument system, electrical system operating limitation.
- (o) Ice and rain protection.
- (p) Landing gear and breaking system.
- (q) A general knowledge of normal, abnormal and emergency use of radio, communication, navigation and radar systems.

8. Exemption— Where an applicant produces acceptable evidence that he has attended a ground course of instructions or has passed Aircraft Maintenance Engineer's Licence examinations of at least equal standards in any subject specified earlier in this section, he may be granted exemption from the requirements of paras 7.1 and 7.2, as applicable, by the Director-General.

Section X

Flight Engineer's Licence

1. Requirement for the issue/extension of licence— An applicant for issue/extension of flight engineer's licence shall satisfy the following requirements—

(a) He must have a current Student Flight Engineer's Licence on the type of aircraft which is desired to be included in the aircraft rating of his flight engineer's licence.

(b) Medical fitness— He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B.

(c) Experience— An applicant shall produce evidence of having completed within a period of twelve months immediately preceding the date of his application for licence hundred hours of flying experience on the type of aircraft desired to be included in the licence. Out of this flying experience not more than fifty hours shall be obtained on an approved synthetic flight trainer.

(d) Skill— He shall have demonstrated his competency as a flight engineer to the satisfaction of Director-General of Civil Aviation approved Examiner by undergoing the following tests on the type of aircraft to which the application relates within a period not exceeding six months immediately preceding the date of such application:

(i) Normal Operations— A check on representative air route covering

- pre-flight inspection;
- refuelling procedure;
- inspection of appropriate maintenance documents;
- all normal procedure applicable to his duties as specified in the relevant parts of
Operations Manual, crew co-operation; and
- defect reporting.

(ii) Abnormal and alternate (stand by) operation— A check on his ability to recognise abnormal functioning of systems and use of alternate (stand by) procedures.

(iii) Emergency procedures— Demonstration of practical knowledge of emergency procedures and the ability to take appropriate action in the event of engine failure occurring particularly during take-offs and

landings.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— The licence may be renewed on receipt of satisfactory evidence of an applicant—

(a) having undergone a successful medical examination in accordance with clause (b) of paragraph 1;

(b) having satisfactorily completed not less than twenty hours of Flight time as a flight engineer within a period of six months immediately preceding the date of application for renewal or in lieu thereof having flight tests as laid down in clause (d) of paragraph 1 within the same period.

4. Aircraft rating— The licence shall indicate the type of aircraft the holder is entitled to fly in the capacity of a flight engineer.

5. Extension of aircraft rating— For extension of aircraft rating to include an additional type of aircraft, an applicant shall be required to produce evidence of—

(a) having a current student flight engineer's licence on the type of aircraft which is desired to be included in the aircraft rating of his licence;

(b) having completed within a period of twelve months immediately preceding the date of the application for extension of aircraft rating, fifty hours of flying experience on the type of aircraft desired to be included in his licence. Out of this flying experience not more than twentyfive hours shall have been obtained on an approved synthetic flight trainer.

(c) having successfully completed the flight test as laid down in clause (d) of paragraph 1 in respect of the type of the aircraft for which the aircraft rating is desired, within a period of six months immediately preceding the date of the application for extension of aircraft rating.

6. Privileges— Subject to the endorsements and rating in the licence, the privileges of the holder of a flight engineer's licence shall be to act as flight engineer in any aircraft of a type specified in the aircraft rating of his licence provided during the preceding twelve months he has demonstrated his competency as per para 1(d) (ii) and (iii) above, to an approved examiner, to undertake duties of flight engineer in the type of aircraft or in an approved flight simulator.

Section Y

Flight Radio Telephone Operator's Licence

1. Requirements for issue of licence— An applicant for a Flight Radio Telephone Operator's Licence shall satisfy the following requirements :

(a) Age— He shall be not less than eighteen years of age on the date of application;

(b) Educational Qualification— He shall have passed class ten plus two with Physics and Mathematics or its equivalent examination from a recognised Board/University.

(c) Medical Fitness— He shall produce on a prescribed proforma a certificate of physical fitness from either an approved medical practitioner or an approved medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director-General under Rule 39B;

(d) Knowledge/Technical Qualifications— He shall produce a valid Radio Telephone Operator's (Restricted or General) Certificate endorsed for Aeromobile Service issued or recognised by the Central Government under the Indian Wireless Telegraphy Rules, 1954;

(e) Other Requirements— He may be required to pass, at the discretion of the Director-General, a test to establish his knowledge of the current aeromobile radio-telephone operating practices and procedures, standards and recommended practices pertaining to air traffic control communication as promulgated by the Director-General from time to time;

(f) He shall produce satisfactory evidence of having completed not less than two months of satisfactory experience as a Flight Radio Telephone Operator and obtained experience of at least ten hours during the proceedings twelve months in an aircraft equipped with radio apparatus in accordance with Rule 63 :

Provided that an applicant who has not had the experience as required above may be granted a provisional licence for a period not exceeding one year in order to enable him to obtain the necessary experience :

Provided further that an applicant who is licensed flight crew will not be required to produce evidence of experience.

(g) Skill— He may, if so necessary, be subjected to a flight check as provided under Rule 12(3) of the Indian wireless Telegraphy Rules, 1954, to establish his competency as a Flight Radio Telephone Operator.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— A licence shall be renewed on production of satisfactory evidence of—

(a) having undergone a medical examination in accordance with clause (c) of paragraph 1;

(b) having a current Radio Telephone Operator's (Restricted or General) Certificate (Aeromobile Service) issued or recognised by the Central Government under the Indian Wireless Telegraphy Rules, 1954.

4. Privileges— Subject to the endorsements in the licence, the privileges of the holder of a Flight Radio Telephone Operator's Licence shall be to act as a Flight Radio Telephone Operator on any aircraft equipped with radio apparatus in accordance with Rule 63 including radio apparatus which communicates by radio telephony, except that the holder of a provisional licence shall, at all times, operate under the supervision of a person holding a Flight Radio Telephone Operator's Licence.

Section Z

Flight Radio Telephone Operator's (Restricted) Licence

1. Requirements for issue of licence— An applicant for a Flight Radio Telephone Operator's (Restricted) Licence shall satisfy the following requirements—

(a) Age— He shall be not less than sixteen years of age on the date of application.

(b) Educational Qualifications— He shall have passed class ten or its equivalent examination from a recognised Board.

(c) Medical Fitness— He shall produce on a prescribed proforma an assessment of medical fitness from an approved medical practitioner in accordance with Rule 39B. The period of validity of the medical assessment shall be as prescribed in Rule 39C.

(d) Knowledge— He shall pass a written examination and practical test in accordance with the syllabus as prescribed by Director-General.

(e) Experience— He shall be the holder of a Student Pilot's Licence (Aeroplanes, Helicopters, Gliders, Microlights or Balloons) or a Private Pilot's Licence (Aeroplanes or Helicopters) or a Pilot's Licence (Microlight, Gliders or Balloons).

(f) Skill— He may, if so necessary, be subjected to a flight check to show his competency in operation of Flight Radio Telephone apparatus on board an aircraft.

2. Validity — The licence shall be valid for a period as specified in Rule 39C.

3. Renewal— A licence will be renewed on production of satisfactory evidence of—

(a) having undergone a medical examination in accordance with para 1(c).

(b) having satisfactorily completed not less than five hours of solo flight time on an aircraft fitted with radio telephone apparatus for two-way communication during which he had operated the radio telephone apparatus.

4. Privileges— Subject to the endorsement in the licence, the privileges of a holder of a Flight Radio Telephone Operator's (Restricted) Licence shall be to operate radio telephone apparatus on board an aircraft for two-way communications on VHF.