

## Airmen's Academic Examination

**E4**

Qualification	Airline Transport Pilot (Airplane) (Rotorcraft) Multi-crew Pilot (Airplane)	No. of questions; time allowed	20 questions; 40 minutes
Subject	Civil Aeronautics Law (subject code: 04)	Code	CCCC041630

☆ Explanatory Notes: (1) In the designated spaces on the Airmen's Academic Examination Answer Sheet (Multiple-Choice Answers) (mark sheet), write your examinee number, examinee number mark, subject, subject code, subject code mark, qualification, qualification category, name, and date of birth. If you write your examinee number, examinee number mark, subject code, and/or subject code mark incorrectly, computer grading will not be possible and you will fail the subject.

(2) Write your answers on the Airmen's Academic Examination Answer Sheet (Multiple-Choice Answers) (mark sheet).

☆ Point Allocation: All questions are worth five points each.

☆ Pass Mark: The pass mark is 70 %.

- Question 1: How many of the following terms and definitions (a) to (d) stipulated in Article 2 (Definition) of the Civil Aeronautics Act are correct? Choose from (1) to (4) below.
- (a) The term "instrument meteorological condition" means bad weather conditions with a range of vision, specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism, taking the visibility and cloud conditions into consideration.
  - (b) The term "air traffic control area" means any airspace, 200 meters or more above the land or water, and designated in the public notice by the Minister of Land, Infrastructure, Transport and Tourism for the safety of air traffic.
  - (c) The term "international air transport services" means any air transport services operating between one point in the country and another in a foreign country, or between one point and another in the country.
  - (d) The term "instrument flight" means a flight which is performed relying solely on flight instruments to measure the attitude, altitude, position, and course of the aircraft.
- (1) 1                      (2) 2                      (3) 3                      (4) 4
- Question 2: Which of the following items is not included in the items to be described in a Flight Manual stipulated in Article 5-4 (Flight Manual) of the Ordinance for Enforcement of the Civil Aeronautics Act?
- (1) Operating procedures of various systems under normal conditions
  - (2) Items relating to aircraft noise
  - (3) Minimum Equipment List (MEL) in the case that components, etc. are not in normal condition
  - (4) Items relating to engine emissions
- Question 3: Which of the following validity periods of aviation medical certification is correct for an airline transport pilot who operates an aircraft for air transport services to transport passengers (except when renewing the certification)?
- (1) In case the flight operation is performed by two pilots and the age of the pilot is under 60 at the day of issuance: 1 year
  - (2) In case the flight operation is performed by two pilots and the age of the pilot is 40 or over at the day of issuance: 9 months
  - (3) In case the flight operation is performed by two pilots and the age of the pilot is under 40 at the day of issuance: 2 years
  - (4) In case the flight operation is performed by two pilots and the age of the pilot is 60 or over at the day of issuance: 9 months
- Question 4: How many of the following statements (a) to (d) regarding the Aviation English Proficiency Certification are correct? Choose from (1) to (4) below.
- (a) A pilot who engages in a flight conducted between a point within Japan and a point outside of Japan needs to have an Aviation English Proficiency Certification.
  - (b) A pilot who engages in a flight that leaves Japan and arrives in Japan, passing over a country or its territories other than Japan without landing, does not need to have an Aviation English Proficiency Certification.
  - (c) The categories of aircraft which require their pilot to hold an Aviation English Proficiency Certification are aeroplanes and rotorcraft.
  - (d) The validity period of the Aviation English Proficiency Certification is 2 years.
- (1) 1                      (2) 2                      (3) 3                      (4) 4
- Question 5: The following is a part of the provisions of Article 179 (Speed limitation in air traffic control zone, etc.) of the Ordinance for Enforcement of the Civil Aeronautics Act. Which one of the underlined values (1) to (4) is incorrect?
- (i) In the case of aircraft navigating in an air space prescribed under item (i) of Article 82-2 (Air traffic control zone, etc.) of the Act and concurrently in the air space at an altitude of (1) 900 m or less, the indicated air speed listed for each of the classifications of aircraft specified below:
    - (a) Aircraft equipped with reciprocating engines: (2) 160 knots
    - (b) Aircraft equipped with turbine engines: (3) 210 knots
  - (ii) In the case of aircraft navigating in an air space prescribed under item (i) of Article 82-2 (Air traffic control zone, etc.) of the Act and concurrently in the air space at an altitude exceeding (1) 900 m, or aircraft navigating in an air space designated in the public notice by the Minister of Land, Infrastructure, Transport and Tourism, which is in the approach control area and adjoins an air traffic control zone, the indicated air speed of (4) 250 knots.

- Question 6: The following are provisions of Article 149 (Devices for Recording Aircraft Operations) of the Ordinance for Enforcement of the Civil Aeronautics Act. Which one is correct?
- (1) The flight data recorder shall be operated continuously over the period from the commencement of the take-off run to the completion of the landing run.
  - (2) The flight data recorder shall be operated continuously over the period from the commencement of engine operation for the purpose of flight to the cessation of engine operation.
  - (3) The cockpit voice recorder shall be operated continuously over the period from the commencement of the take-off run to the completion of the landing run.
  - (4) The cockpit voice recorder shall be operated continuously over the period from the commencement of engine operation for the purpose of flight to the completion of the landing run.
- Question 7: Which of the following correctly describes the requirements regarding the daytime obstacle markings?
- (1) Any person who has installed any objects with a height of 60 m or more above the ground or water shall install daytime obstacle markings on the structures concerned pursuant to the provision of Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism.
  - (2) Any chimney flue, steel tower, column, and other object which is extremely narrow in width relative to its height and which is considered difficult to perceive from aircraft in daylight shall be provided with daytime obstacle markings.
  - (3) The daytime obstacle markings shall include color of coatings, flags and marking means.
  - (4) Daytime obstacle markings shall also be placed on an object on which high-intensity obstacle lights must be installed.
- Question 8: Which of the "correct" and "incorrect" combinations below applies to the four items (a) to (d), which are the documents to be carried by an aircraft for air transport service?
- (a) Onboard flight logbook
  - (b) Document specifying operating limitation
  - (c) Aircraft registration certificate
  - (d) Operation manual
- |     |            |              |              |              |
|-----|------------|--------------|--------------|--------------|
| (1) | a: Correct | b: Incorrect | c: Correct   | d: Correct   |
| (2) | a: Correct | b: Correct   | c: Correct   | d: Correct   |
| (3) | a: Correct | b: Correct   | c: Incorrect | d: Correct   |
| (4) | a: Correct | b: Correct   | c: Correct   | d: Incorrect |
- Question 9: The following statements (a) to (d) describe those aircraft that shall be boarded by an airman who can perform the pilotage of the aircraft other than the pilot-in-command as stipulated by Article 65 (Aircrew to be on board aircraft) of the Civil Aeronautics Act. How many of these statements are correct? Choose from (1) to (4) below.
- (a) Aircraft, because of its structure, which needs two persons for pilotage of aircraft
  - (b) Aircraft which needs two persons for pilotage only for the purpose of a flight according to the special methods and rules, and which engages in a flight according to the special methods and rules
  - (c) Aircraft which is used for air transport of passengers and which engages in a flight under instrument flight rules
  - (d) Aircraft which is used for air transport of passengers and which engages in a flight, the duration of which exceeds 5 hours
- |       |       |       |       |
|-------|-------|-------|-------|
| (1) 1 | (2) 2 | (3) 3 | (4) 4 |
|-------|-------|-------|-------|

- Question 10: Which of the following statements regarding the recent flight experience of a pilot engaged in operating aircraft used for air transport services is correct?
- (1) A pilot engaged in operating aircraft used for air transport services must have experience of six night-time take-offs and six night-time landings in aircraft of the same type used for air transport services, within the 180 days prior to the day on which the pilot is carrying out pilot duties.
  - (2) Flight crew-members carrying out instrument flight shall have instrument flight experience (including simulator flight) of 5 hours or longer within the 180 days prior to the day of the flight.
  - (3) Flight crew-members carrying out instrument flight shall have instrument flight experience (including simulator flight) of 3 hours or longer within the 90 days prior to the day of the flight.
  - (4) A pilot engaged in operating aircraft used for air transport services must have experience of three take-offs and three landings in aircraft of the same type used for air transport services, within the 90 days prior to the day on which the pilot is carrying out pilot duties.
- Question 11: Regarding Article 71-3 (Examination, etc. for Specific Pilot Competence) of the Civil Aeronautics Act, a pilot is approved to have the specific pilot competence for the category of aircraft which the person intends to operate and is not required to take the specific pilot competence examination by the pilot competence examiner in the following cases. Which one is incorrect?
- (1) When the person has obtained the flight instructor certificate
  - (2) When the person has obtained the pilot competence certificate
  - (3) When the person has changed the rating on the pilot competence certificate
  - (4) When the person has passed the competency assessment conducted by a Japanese air carrier based on its operation manual.
- Question 12: Which of the following statements regarding the obligation, authority, etc. of the pilot-in-command is incorrect?
- (1) The pilot-in-command may, when a danger occurs or he/she deems to a danger to be likely to occur to the aircraft or passengers, order the passengers on board regarding the procedures for evacuation or other matters necessary for safety.
  - (2) The pilot-in-command may restrain any person who threatens aircraft safety, irrespective of whether the person is on board or not.
  - (3) The pilot-in-command shall, when an emergent danger occurs to the aircraft during flight, employ every possible means necessary for rescuing passengers and preventing injury or damage to persons or objects on the land or water.
  - (4) The pilot-in-command shall direct and supervise those who perform their duties on board the aircraft.
- Question 13: How many of the following events (a) to (d) fall under the stipulation in Article 166-2 (Report on abnormality) of the Ordinance for Enforcement of the Civil Aeronautics Act? Choose from (1) to (4) below.
- (a) Failure in functions of airport, etc. and air navigation facilities
  - (b) Turbulence of air and other abnormal weather conditions
  - (c) Volcanic explosion and other violent changes in terrestrial and water-related phenomena
  - (d) Cases impeding the safe flight of aircraft
- (1) 1                      (2) 2                      (3) 3                      (4) 4
- Question 14: How many of the following events (a) to (d) fall under the stipulation in Article 166-4 (Report on a case likely to cause an accident) of the Ordinance for Enforcement of the Civil Aeronautics Act? Choose from (1) to (4) below.
- (a) Landing or an attempt to land on a closed runway or a runway being used by other aircraft
  - (b) Case where aircraft crew executed an emergency operation during navigation in order to avoid crashing into or contact with the ground or water
  - (c) Shortage of fuel requiring urgent measures
  - (d) Case where aircraft crew became unable to perform services normally due to injury or disease
- (1) 1                      (2) 2                      (3) 3                      (4) 4

- Question 15: Which of the following statements regarding the method of navigation in the vicinity of an airport, etc. is incorrect?
- (1) The aircraft under instrument flight rules shall not take off when the meteorological conditions at the airport, etc. do not meet the minimum conditions for take-off.
  - (2) In case the meteorological conditions do not meet the minimum conditions for continuing the landing approach at the airport, etc. when the aircraft passes a specified location above the approach height threshold, the landing approach may be continued to the approach height threshold when instrument flight rules are being used for landing.
  - (3) The landing approach shall not be continued when instrument flight rules are being used for landing and the position of the aircraft cannot be confirmed by means of continuous visual contact and recognition of visual references at the approach height threshold or lower altitude.
  - (4) The aircraft shall follow the approach procedure based on the instrument flight rules and the flight procedure established for the relevant airport, etc.
- Question 16: Which of the following provisions of Article 191-4 (The standards for the permit for air navigation under particular flight rules) of the Ordinance for Enforcement of the Civil Aeronautics Act is incorrect?
- (1) The aircraft shall have the functionality and the system which are needed for air navigation under particular flight rules.
  - (2) The aircraft crew, the aircraft maintenance personnel and the management of air transport service shall have the knowledge and ability which are needed for air navigation under particular flight rules.
  - (3) The operation procedures shall be appropriately defined for each type of navigation under particular flight rules and aircraft types.
  - (4) Necessary measures shall be taken to secure a safe navigation of aircraft.
- Question 17: How many of the following items (a) to (d) fall under the stipulation in Article 194 (Articles prohibited from being transported) of the Ordinance for Enforcement of the Civil Aeronautics Act? Choose from (1) to (4) below.
- (a) Toxic substances
  - (b) Pressurized gas
  - (c) Oxidizing substances
  - (d) Articles with sufficient capability to kill or injure humans
- (1) 1                      (2) 2                      (3) 3                      (4) 4
- Question 18: Which of the following cruising altitudes for an RVSM-approved aircraft flying under IFR is incorrect in the light of Article 177 (Cruising altitude) of the Ordinance for Enforcement of the Civil Aeronautics Act?
- (1) When the heading of the aircraft is 0° or more to less than 180° in magnetic bearing: 41,000 ft
  - (2) When the heading of the aircraft is 180° or more to less than 360° in magnetic bearing: 42,000 ft
  - (3) When the heading of the aircraft is 0° or more to less than 180° in magnetic bearing: 45,000 ft
  - (4) When the heading of the aircraft is 180° or more to less than 360° in magnetic bearing: 43,000 ft
- Question 19: The following are provisions of Article 188 (Movement on ground) of the Ordinance for Enforcement of the Civil Aeronautics Act. Which one is incorrect?
- (1) A speed from which an aircraft may be quickly and safely stopped by controlling the power system or by lightly applying the brake system shall be maintained.
  - (2) The forward view shall be thoroughly observed.
  - (3) The speed shall be lower than the speed limit specified for the area.
  - (4) When there is a danger of collision with aircraft or other objects, the ground guide shall be provided.
- Question 20: Which of the following items need not be stated in the Operation Manual?
- (1) Procedures to give experience and knowledge necessary for flight operation to flight crew
  - (2) Operational procedures and performance limitations of aircraft
  - (3) Minimum Equipment List (MEL) in the case that components, parts and emergency equipment are not in normal condition
  - (4) Maximum hours of use for equipment, etc.