

# Airmen's Academic Examination

# E4

Qualification	Airline Transport Pilot (Airplane) Multi-crew Pilot (Airplane)	No. of questions; time allowed	20 questions; 40 minutes
Subject	Civil Aeronautics Law (subject code: 04)	Code	CCAA041850

- ⊙ 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%.

- Q 1 Which of the following definitions in Article 2 (Definition) of the Civil Aeronautics Act is incorrect?
- (1) The term "landing strip" means a rectangular area of an aerodrome which is provided for the takeoff or landing of aircraft in a definite direction.
  - (2) The term "air traffic control area" means any airspace, 200 meters or more above the land or water, and designated for the safety of air traffic in the public notice by the Minister of Land, Infrastructure, Transport and Tourism.
  - (3) The term "domestic scheduled air transport services" means any air transport services operating between one point in Japan and another in a foreign country, or between two points outside of Japan.
  - (4) The term "air transport services" means any business using aircraft to transport passengers or cargo for remuneration upon demand.
- Q 2 Which of the following statements regarding the airworthiness certificate is incorrect?
- (1) No aircraft may be granted airworthiness certification unless it has Japanese nationality; provided, however, that the same shall not apply to any aircraft as specified by Cabinet Order.
  - (2) Airworthiness certification shall describe the categories of aircraft and the operating method of aircraft as prescribed by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism.
  - (3) No aircraft may be used for air navigation unless it has a valid airworthiness certificate. However, the same shall not apply to the performance of test flights, etc. when permitted by the Minister of Land, Infrastructure, Transport and Tourism.
  - (4) The period of validity of an airworthiness certificate shall be one year; provided, however, that the period of validity of such airworthiness certificate with regard to aircraft used for air transport services shall be the period specified by the Minister of Land, Infrastructure, Transport and Tourism.
- Q 3 Which of the following statements regarding the validity periods of aviation medical certification for an airline transport pilot who operates an aircraft for air transport services to transport passengers is correct?
- (1) In the case the flight operation is performed by two pilots and the age of the pilots is under 60 at the day of issuance: 1 year
  - (2) In the case the flight operation is performed by two pilots and the age of the pilots is 40 or over at the day of issuance: 9 months
  - (3) In the case the flight operation is performed by two pilots and the age of the pilots is under 40 at the day of issuance: 2 years
  - (4) In the case the flight operation is performed by two pilots and the age of the pilots is 60 or over at the day of issuance: 9 months
- Q 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

Q 5 The following is a part of the provisions of Article 179 (Speed limitation in air traffic control zones, etc.) of the Ordinance for Enforcement of the Civil Aeronautics Act. Which one of the underlined values (1) to (4) is incorrect?

1 In the case of aircraft navigating in an air space prescribed under Item (i) of Article 82-2 (Air traffic control zones, 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) 170 kt

(b) Aircraft equipped with turbine engines: (3) 200 kt

2 In the case of aircraft navigating in an air space prescribed under Item (i) of Article 82-2 (Air traffic control zones, 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 kt.

Q 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.

Q 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

(4) Daytime obstacle markings shall also be placed on an object on which high-intensity obstacle lights must be installed.

Q 8 Which of the following items (a) to (d) are documents that must be carried onboard an aircraft used for air transport services? Choose the correct true and false combinations.

(a) Onboard flight logbook

(b) Document specifying operating limitation

(c) Aeronautical charts appropriate for the flight sectors, flight method, and other particular aspects of flight operations

(d) Maintenance manual

	(a)	(b)	(c)	(d)
(1)	true	false	true	true
(2)	true	true	true	true
(3)	true	true	false	true
(4)	true	true	true	false

Q 9 The following statements (a) to (d) describe those aircraft that must have an airman who can maneuver the aircraft on board 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 6 hours

(1) 1                      (2) 2                      (3) 3                      (4) 4

Q 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.

Q 11 How many of the following items (a) to (d) are the items of knowledge and skills required for pilot-in-command under Article 72 (Requirements of pilot-in-command on board an aircraft used for air transport services) of the Act? Choose from (1) to (4) below.

- (1) Pre-take-off checks related to the operation of aircraft
- (2) Dispatcher's approval of aircraft departure and changes to flight plan
- (3) Supervision of flight crew-members and cabin crew-members
- (4) Aircraft maneuvers and measures in normal and non-normal conditions

Q 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.

Q 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

Q 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

Q 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.

Q 16 Which of the following is incorrect as 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?

- (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 flight dispatcher shall have the knowledge and experience 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.

Q 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

Q 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

Q 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.

Q 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.