

# Airmen's Academic Examination

## E4

Qualification	Airline transport pilot (aeroplane)	No. of questions; time allowed	20 questions; 40 minutes
Subject	Civil Aeronautics Act (subject code: 04)	Code	A1CC042350

- © 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%.

Q1 How many of the following statements (a) to (d) on the operation of aircraft lights in accordance with the Civil Aeronautics Act and the Regulation for Enforcement of the Civil Aeronautics Act are correct? Choose from (1) to (4) below.

- (a) The anti-collision lights and navigation lights (position lights) were lit during navigation in a night flight. To prevent dazzling in clouds, only the anti-collision lights were turned off.
- (b) Since the apron floodlights were lit at night, the anti-collision lights and navigation lights (position lights) were turned off after engine shutdown.
- (c) While taxiing in an airport at night, aircraft equipped with LOGO lights must have them lit.
- (d) During the time of airport operation at night, the navigation lights (position lights) must be lit without exception even while the aircraft is parked.

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

Q2 How many of the following definitions (a) to (d) in accordance with the Civil Aeronautics Act are correct?

Choose from (1) to (4) below.

- (a) The term "airman" means any person who has obtained competence certification for an airman under Article 22 of the Civil Aeronautics Act and includes any pilot, maintenance technician or aircraft dispatcher but does not include cabin crew.
- (b) The term "aircraft" means any apparatus used for air navigation with a person on board as may be specified by Cabinet Order and includes any aeroplane, rotorcraft, glider or airship but does not include drones.
- (c) The term "air navigation facility" means any facility to aid the navigation of aircraft by means of radio wave, lights, colors or signs and includes any radio navigation aid, aeronautical light or obstacle marking.
- (d) The term "instrument meteorological condition" means bad weather conditions with a range of vision, with regard to the visibility and cloud conditions, as specified by Order of the Ministry of Land, Infrastructure, Transport and Tourism.

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

Q3 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 case the flight operation is performed by one pilot 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 one pilot and the age of the pilot is 40 or over at the day of issuance: 1 year
- (3) 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
- (4) 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: 6 months

Q4 How many of the following statements (a) to (d) on aviation English proficiency certification are correct? Choose from (1) to (4) below.

- (a) A pilot who engages in the navigation of aircraft used in air transport services between one point within Japan and another within a foreign country needs to have aviation English proficiency certification.
- (b) A pilot who engages in a flight that leaves Japan and arrives in Japan, passing over any other FIR (other than the Fukuoka FIR), does not need to have aviation English proficiency certification if the flight does not pass territories of a country other than Japan.
- (c) For rotorcrafts, airships and gliders leaving Japan for a foreign country, the pilot does not need to have aviation English proficiency certification.
- (d) When a flight operation that requires aviation English proficiency certification is carried out using an aircraft that requires two pilots, only the pilot-in-command needs to have aviation English proficiency certification.

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

Q5 Which of the following statements regarding airworthiness certification is incorrect?

- (1) Airworthiness certification shall specify the use and operating limitations of aircraft.
- (2) 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.
- (3) No aircraft may be used for air navigation unless it is granted valid airworthiness certification; provided, however, that the same shall not apply to any person when permitted to perform test flights etc. by the Minister of Land, Infrastructure, Transport and Tourism.
- (4) A new airworthiness certificate must be obtained when the aircraft registration is transferred.

Q6 Regarding Article 71-3 (Pilot Competency Assessment etc.) of the Civil Aeronautics Act, a pilot is approved to have passed the pilot competency assessment for the category of aircraft which the person intends to operate and is not required to take the pilot competency assessment by the pilot competency assessor in the following cases. Which one is incorrect?

- (1) When the person has obtained a flight instructor certificate
- (2) When the person has obtained a pilot competence certificate
- (3) When the person's pilot competence certificate rating has changed
- (4) When the person has passed competency tests conducted by a Japanese air carrier based on its operation manual

Q7 Which of the following statements regarding the authority, etc. of the pilot-in-command is incorrect?

- (1) The pilot-in-command may, when a danger occurs or he/she deems 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, when any person conducts a safety impeding act inside or outside the aircraft, restrain that person.
- (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.

Q8 Which of the following acts is not included in Article 164-16 (Prohibition of Safety-threatening Behaviors) of the Regulation for Enforcement of the Civil Aeronautics Act?

- (1) Operation of opening and closing devices of entrance or emergency doors without proper reason
- (2) Smoking in lavatories
- (3) Activating, without proper reason, a mobile telephone or any other electronic device that may hinder the safety of aircraft navigation, as set forth in the public notification issued by the Minister of Land, Infrastructure, Transport and Tourism
- (4) Drinking alcohol brought on board the aircraft by a passenger him/herself

Q9 How many of the following statements (a) to (d) on the right of way between aircraft are correct?

Choose from (1) to (4) below.

- (a) The rights of way of an aeroplane and rotorcraft are in the same order. However, if the aircraft is towing an object, it has the right of way over an aeroplane or rotorcraft that is not towing an object.
- (b) Except during an avoidance maneuver in accordance with RA of TCAS, an aircraft having the right of way must maintain its course, altitude and speed.
- (c) Between aircraft approaching the airport for landing, aircraft approaching under the instrument flight rules shall have the right of way over aircraft intending to land under the visual flight rules.
- (d) When the flight paths of two aircraft with equal priority intersect or come close to each other, the aircraft that sees the other aircraft to its left shall yield its flight path to the other.

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

Q10 Which of the following statements on the meteorological conditions at an airport in a control zone when a pilot tries to take-off or land in accordance with visual flight rules at the airport is correct?

- (1) Flight visibility is 8,000 meters or more.
- (2) Ground visibility or flight visibility is 5,000 meters or more.
- (3) The height of clouds is 300 meters or more above the ground surface or water surface.
- (4) The height of clouds is 150 meters or more above the aerodrome altitude, and the aircraft can fly away from the clouds.

Q11 Which of the following statements on the description of emergency equipment stipulated in Article 150 of the Regulation for Enforcement of the Civil Aeronautics Act is correct?

- (1) An aircraft required to be equipped with life jackets shall be equipped with life jackets at least equal to the total number of seats.
- (2) An aircraft having 19 or more passenger seats used for air transport services shall be equipped with lifeboats capable of accommodating all people on board.
- (3) An aircraft that is used for air transport services and has more than 30 passenger seats shall be equipped with medical supplies for emergency use and medical devices.
- (4) If the take-off or landing path of an aircraft goes over water, portable lights installed in the aircraft shall be waterproof.

Q12 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 an instrument flight shall have instrument flight experience (including simulated instrument flight) of 5 hours or longer within the 180 days prior to the day of the flight.
- (3) Flight crew-members carrying out an instrument flight shall have instrument flight experience (including simulated instrument 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, or of a similar type to the said type, within the 90 days prior to the day on which the pilot is carrying out pilot duties.

Q13 Which of the following statements on the speeds prescribed under Article 179 (Speed Limitation in Air Traffic Control Zone, etc.) of the Regulation for Enforcement of the Civil Aeronautics Act is correct?

- (1) The indicated air speed is 250 knots in the air traffic control zone.
- (2) The indicated air speed is 250 knots in the air traffic information zone.
- (3) The indicated air speed is 250 knots in the approach control area.
- (4) The indicated air speed is 250 knots in all airspaces at altitudes not more than 3,000 meters.

Q14 How many of the following events (a) to (d) that fall under the stipulations in Article 166-4 (Reporting on Cases that are Likely to Cause an Accident) of the Regulation for Enforcement of the Civil Aeronautics Act are correct? Choose from (1) to (4) below.

- (a) Landing on a runway different from a runway designated by the Minister of Land, Infrastructure, Transport and Tourism, or an attempt to land on such a runway
- (b) A case where the cowling, wing tip, or any other part of the aircraft other than the landing gear comes in contact with the ground surface in landing
- (c) Abnormal decompression inside an aircraft
- (d) A case where aircraft crew become unable to perform services normally during flight due to injury or illness

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

Q15 Which of the following explanations of aerodrome markings such as those installed at land airports, as specified in Article 79 (Criteria for Establishing Airports) of the Regulation for Enforcement of the Civil Aeronautics Act, is incorrect?

- (1) Runway threshold markings are installed on runways for instrument landing of land-based aerodromes, etc.
- (2) If runway threshold markings are installed, vertical stripes are laid according to the classification of runway widths, and the number of vertical stripes is 16 on runways with a width of 60 meters.
- (3) Stopway markings (chevron markings) are installed on paved overrun areas that are constructed only with the aim of reducing damage to aircraft caused by deviation from a runway of land-based aerodromes, etc.
- (4) Touchdown zone markings are installed only on runways for instrument landing with a length of 1,200 meters or more of land-based aerodromes, etc.

Q16 Which of the following statements regarding the standards for the permit for air navigation under particular flight rules of Article 83-2 of the Civil Aeronautics Act is incorrect?

- (1) The aircraft shall have the functionality and systems needed for air navigation under particular flight rules.
- (2) The flight crew, the aircraft maintenance personnel and the flight dispatcher shall have the knowledge and experience needed for air navigation under particular flight rules.
- (3) The summary of operations shall be appropriately defined for each navigation and aircraft type based on air navigation under particular flight rules.
- (4) Necessary measures shall be taken to secure safe navigation of aircraft.

Q17 The following are provisions of Article 149 (Equipment for Recording Aircraft Operational Parameters) of the Regulation for Enforcement of the Civil Aeronautics Act. Which one is correct as a description of the period of operation of the devices required to be installed?

- (1) 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.
- (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) Any device capable of recording the content of data link communication shall be operated continuously for the same period as the period required for the cockpit voice recorder.
- (4) Even if the aircraft is required to be equipped with a device for recording aircraft operations, the recording device need not be activated during operation with the aircrew only.

Q18 Which of the following items need not be stated in the Operation Manual?

- (1) Procedures for performing operations management
- (2) Criteria for a minimum equipment list in case equipment or other items do not work properly
- (3) Procedures to give flight crew the experience and knowledge necessary for flight operations
- (4) Mandatory replacement limits for equipment and other items

Q19 Which of the following statements relating to Article 189 (Navigation Rules in the Vicinity of an Airport) of the Regulation for Enforcement of the Civil Aeronautics Act is incorrect?

- (1) An 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) Even in the case that the meteorological conditions do not meet the minimum conditions for continuing the landing approach at the airport, etc., when an aircraft passes a specific 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 a lower altitude.
- (4) An aircraft shall follow the approach procedure based on the instrument flight rules and the flight procedure established for the relevant airport, etc.



Q20 Of the following statements, how many are correct according to Article 1 (Purpose of This Act) of the Civil Aeronautics Act? Choose from (1) to (4) below.

- (a) To ensure the safety of aircraft and to prevent problems arising from navigation of aircraft in conformity with both the provisions of the Convention on International Civil Aviation as well as the standards, practices and procedures adopted as Annexes hereto.
- (b) To promote the development of air transport services by taking measures to improve the navigation efficiency of aircraft.
- (c) To take measures to promote decarbonization in air navigation.
- (d) To secure safety in the operation of unmanned aircraft by setting rules to be complied with.

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