

# Airmen's Academic Examination

## E4

Qualification	Airline transport pilot (aeroplane) (rotorcraft) (airship) Associate airline transport pilot (aeroplane)	No. of questions; time allowed	20 questions; 40 minutes
Subject	Civil Aeronautics Act (subject code: 04)	Code	CCCC042370

© 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 Which of the following statements is not consistent with the requirements under Article 1 (Purpose of This Act) of the Civil Aeronautics Act?

- (1) 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.
- (2) To promote the development of air transport services by taking measures to improve the navigation efficiency of aircraft.
- (3) To take measures to promote decarbonization in air navigation.
- (4) To secure safety in the operation of unmanned aircraft by setting rules to be complied with.

Q2 Which of the following statements is not consistent with the requirements under Article 68 (Standards of Crew Assignment) of the Civil Aeronautics Act?

- (1) The conditions on the route navigated by the aircraft and the distance between airports, etc. used on that route shall be taken into account.
- (2) The assigned hours and work hours other than the assigned hours shall be allotted in a manner not to impede the safety of navigation of the aircraft due to fatigue.
- (3) Concerning the pilot, the number of other pilots who are also on duty and the presence of crew-members other than pilots who are on board the same aircraft shall be taken into account.
- (4) If passengers are to be transported, the flight duration on the navigation route shall be considered for the number of cabin crew members.

Q3 Which of the following aviation medical certification validity periods is correct for an airline transport pilot?

- (1) Operation by one pilot aged under 60 on the day of issuance: 1 year
- (2) Operation by one pilot aged 40 or over on the day of issuance: 1 year
- (3) Operation by two pilots aged under 60 on the day of issuance: 1 year
- (4) Operation by two pilots aged 40 or over on the day of issuance: 6 months

Q4 How many of the following statements (a) to (d) regarding the Aviation English Proficiency Certification are correct? Choose from (1) to (4) below.

- (a) If an aircraft requires two persons for pilotage for air transportation services and is operated only within Japan, the pilot-in-command of the aircraft still needs to have an Aviation English Proficiency Certification.
- (b) The pilot who engages in a flight that leaves Japan and arrives in Japan, passing over the territories of a country 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) Aircraft which needs two persons for pilotage requiring an Aviation English Proficiency Certification can navigate if both of the two pilots have an Aviation English Proficiency Certification.

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

Q5 Which of the following statements on the speeds prescribed under Article 179 (Speed Limitation in Air Traffic Control Zones) of the Regulation for Enforcement of the Civil Aeronautics Act is correct?

- (1) The indicated air speed is 200 knots in the air traffic information zone.
- (2) The indicated air speed is 250 knots in the air traffic control zone.
- (3) The indicated air speed is 250 knots at all altitudes in the approach control area.
- (4) The indicated air speed is 250 knots in all airspaces in the air traffic control zone at altitudes not more than 3,000 meters.

Q6 The following are provisions of Article 149 (Devices for Recording Aircraft Operations) 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 actuated during operation with the aircrew only.

Q7 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 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.

Q8 How many of the following statements (a) to (d) on the right of way between aircrafts are correct? Choose from (1) to (4) below.

- (a) The rights of way of an aeroplane and rotorcraft are of 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 a TCAS RA, an aircraft having the right of way must maintain its course, altitude and speed.
- (c) When two aircraft are approaching an airport for landing, one shall not cut in front of or overtake the other on the final approach path.
- (d) When the flight paths of two aircrafts 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

Q9 Of the aircraft from (a) to (d) that must be boarded by two or more aircrew capable of performing pilotage of the corresponding aircraft, how many are correct statements according to Article 65 (Aircrew to be on Board Aircraft) of the Civil Aeronautics Act? Choose from (1) to (4) below.

- (a) Aircraft requiring two people for pilotage due to structural considerations
- (b) Aircraft requiring two people for pilotage for flights in line with special methods and regulations and engaging in such flights
- (c) Aircraft used for passenger transport and engaging in flights under instrument flight regulations
- (d) Aircraft used for passenger transport and engaging in flights exceeding three hours

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

Q10 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 or more and six night-time landings or more in aircraft of the same type used for air transport services, or of a similar type to the said type, 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 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 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 or more and three landings or more 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.

Q11 Regarding Article 71-3 (Examination, etc. for Specific Pilot Competence) of the Civil Aeronautics Act, a pilot is approved to have 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 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 a competency assessment conducted by a Japanese air carrier based on its operation manual

Q12 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, when any person conducts a safety impeding act during flight of the aircraft, order another passenger to 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.

Q13 How many of the following events (a) to (d) fall under the stipulation in Article 166-2 (Report on Abnormality) of the Regulation for Enforcement of the Civil Aeronautics Act are correct? Choose from (1) to (4) below.

- (a) Failure in functions of aerodromes and air navigation facilities
- (b) Turbulence of air and other abnormal weather conditions
- (c) Volcanic explosion and other violent changes in terrestrial and watery phenomena
- (d) Cases impeding the safe flight of aircraft

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

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) Abnormal decompression inside an aircraft
- (b) Overrun, undershoot or deviation from a runway (limited to when an aircraft is unable to taxi)
- (c) A situation requiring reporting of minimum fuel
- (d) A situation in which an aircraft cowling, wing tip or any part other than landing gear touches the ground during landing

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

Q15 Which of the following statements relating to Navigation in the Vicinity of Airports etc. 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 an 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.

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 Which of the following statements on the meteorological conditions of an airport in a control zone in take-off or landing 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.

Q18 How many of the following statements (a) to (d) on the explanation of the pilot-in-command of, and a flight dispatcher for, aircraft used for air transport services specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism in Article 77 (Flight Dispatcher) of the Civil Aeronautics Act are correct? Choose from (1) to (4) below

- (a) The pilot-in-command shall not depart the aircraft unless he/she obtains approval of a flight dispatcher.
- (b) A flight dispatcher shall ensure that the physical and mental conditions of the pilot-in-command will not affect his/her performance.
- (c) The pilot-in-command shall not change the flight plan unless he/she obtains approval of a flight dispatcher.
- (d) If any problem arises during the flight, the pilot-in-command shall promptly report it to a flight dispatcher.

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

Q19 The following are provisions of Article 188 (Movement on Ground) of the Regulation for Enforcement of the Civil Aeronautics Act. Which one is incorrect?

- (1) The power system shall be controlled or the braking system shall be lightly used to maintain a speed at which the aircraft may be quickly and safely stopped
- (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, a ground guide shall be provided.

Q20 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