

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	CCCC042330

© 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 correct as the explanation of obstacle markings?

- (1) Any person who has installed an object with the height of 60 meters or more above the ground or the water must install obstacle markings upon the object pursuant to the provisions of Order of the Ministry of Land, Infrastructure, Transport and Tourism.
- (2) Obstacle markings must be installed on all chimneys, steel towers, columns, and other objects whose width is extremely narrow compare to their height, which are considered difficult to be perceived from aircraft in the light of day.
- (3) Obstacle markings must include paint colors, flags and signs.
- (4) Obstacle markings must be installed on objects which require installation of high intensity obstruction lights.

Q2 Which of the following statements is incorrect as the response to be made in the event of failure of the telecommunication device during flight under the instrument flight rules concerning Article 206 (Air Navigation in Case of Communication System Failure) of the Regulation for Enforcement of the Civil Aeronautics Act?

- (1) The aircraft was in visual meteorological conditions, and landed at the nearest airport, etc., where it was deemed possible to land safely.
- (2) The aircraft was in visual meteorological conditions. However, since the pilot was not sure whether or not the visual meteorological conditions would be maintained until the aircraft landed at the nearest airport, the aircraft headed for the destination in accordance with the obtained clearance.
- (3) Since the aircraft was in instrument meteorological conditions, it headed for the destination in accordance with the obtained clearance, and immediately changed its altitude from the last altitude designated to the altitude specified in the notified flight plan.
- (4) Since the aircraft was flying on a course deviating from an approved course in accordance with instructions from the control authorities, the aircraft headed for the nearest reporting point on the approved course and returned to the course.

Q3 Which of the following statements on the aviation medical certification is incorrect?

- (1) The beginning date of the period of validity of an aviation medical certificate shall be the date when a medical examination was taken (starting date of the examination). However, the beginning date for the renewal shall be the issuance date.
- (2) If a new aviation medical certificate is issued for renewal and is received, the period of validity of the old aviation medical certificate before renewal is regarded as having expired even if the period of validity has not expired, and only the new aviation medical certificate after renewal is valid.
- (3) No member of the flight crew of an aircraft shall, when he/she becomes physically unfit under the medical examination standards, engage in air navigation services, even if his/her aviation medical certificate is still valid.
- (4) If the airman having an aviation medical certificate has changed his/her registered domicile, address or name, he/she may apply for its reissuance.

Q4 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

Q5 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 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.

Q6 Of the aircraft from (1) to (4) that must be boarded by two flight crew capable of performing pilotage of the corresponding aircraft, which of the following statements is correct according to Article 65 (Flight crew to Be on Board Aircraft) of the Civil Aeronautics Act?

- (1) Aircraft for which, because of its structure, complete handling of engines and airframes cannot be provided only by the pilot
- (2) Aircraft which is engaged in a non-stop flight over a section of 550 kilometers or more (other than that which is equipped with navigation equipment or the like as specified by Ordinances of Ministry of Land, Infrastructure, Transport and Tourism)
- (3) Aircraft which is used for air transport of passengers and which engages in a flight, the duration of which exceeds 3 hours
- (4) Aircraft which is used for air transport of passengers and engages in flights under instrument flight rules

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 (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.

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 manoeuvre in accordance with RA of TCAS, an aircraft having the right of way must maintain its course, altitude and speed.
- (c) Between aircrafts 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 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 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.

Q10 Which of the following statement 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 they are granted valid airworthiness certification; provided, however, that the same shall not apply to any person when permitted performing 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.

Q11 How many of the following items (a) to (d) are knowledge and skills a pilot-in-command should possess pursuant to Article 72 (Requirements of Pilot-in-Command on Board an Aircraft Used for Air Transport Services) of the Civil Aeronautics Act are correct? Choose from (1) to (4) below.

- (a) Pre-flight checks
- (b) Aviation English Proficiency Certification
- (c) Supervision of flight crew-members and cabin crew-members
- (d) Safety management of aircraft operations including measures to deter safety-threatening behavior etc. and crisis measures

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

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, 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 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 is correct as the description of a measure to be taken by the pilot-in-command if the aircraft flies in violation of air traffic instructions due to unavoidable circumstances such as change in weather conditions, etc.?

- (1) Land at the nearest aerodrome and report to control authorities in writing without delay.
- (2) Notify the Minister of Land, Infrastructure, Transport and Tourism to that effect after arriving at the destination.
- (3) Report to the air traffic control provider that issued the instruction without delay.
- (4) Report to the flight dispatcher without delay.

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 items is not mentioned in Article 198-2 (Flights that may Interfere with the Safety in Air Traffic Control) of the Regulation for Enforcement of the Civil Aeronautics Act?

- (1) Flight involving frequent changes in aircraft attitude
- (2) Flight that induces stall
- (3) Flight that radically changes altitude
- (4) Extremely high speed flight

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 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 the approval of a flight dispatcher.
- (b) The 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 the approval of the flight dispatcher.
- (d) If any problem arises during the flight, the pilot-in-command shall promptly report it to the flight dispatcher.

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

Q18 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 Regulation for Enforcement of the Civil Aeronautics Act?

- (1) Matters relating to engine emission
- (2) Matters relating to noise within the aircraft
- (3) Operating procedures of various systems under normal conditions
- (4) Matters relating to aircraft operating limitations

Q19 Which of the following statements relating to Article 189 (Navigation Rules in the Vicinity of 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 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.

Q20 How many of the following events (a) to (d) fall under the stipulation in Article 221-2 (Report of Situations which Affect Safety) of the Regulation for Enforcement of the Civil Aeronautics Act? Choose from (1) to (4) below.

- (a) Any event in which any important system for safety installed in the aircraft does not function normally.
- (b) Any event in which emergency equipment or first aid kits do not function normally.
- (c) Any event in which an aircraft exceeds operating limitation or significantly deviates from the designated airway or altitude.
- (d) Any damage to the structure of the aircraft.

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