

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	A1CC042390

- ◎ 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 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 the pilot competence certificate
- (2) When the person has changed the rating on the pilot competence certificate
- (3) When the person has been certified by the pilot competency assessor
- (4) When the person has passed the competency test conducted by a Japanese air carrier based on its operation manual

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 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 on board and engaged in air navigation and the presence of aircraft crew other than pilots 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 How many of the following statements (a) to (d) regarding aviation medical certification are correct?

Choose from (1) to (4) below.

- (a) The period of validity of an aviation medical certificate shall begin on the date when the medical examination is taken (i.e., the start date of the examination). However, the beginning date for renewal shall be the day after the expiration day of the pre-renewal validity period.
- (b) Once a pilot receives a renewed aviation medical certificate, the old certificate shall become invalid even if it has not yet expired; only the new certificate shall be valid.
- (c) No flight crew shall engage in air navigation services if deemed physically unfit by medical examination standards, even if the individual's aviation medical certificate is still valid.
- (d) The person with the aviation medical certificate (class 1) shall be deemed to have the aviation medical certificate (class 2).

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

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 light was 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) The timing of lighting the landing light is defined to be after takeoff clearance is obtained in the case of takeoff aircraft, or after landing clearance is obtained in the case of landing aircraft. The landing light shall not be lit in other cases.
- (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 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.

Q6 The following statements (1) to (4) 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. Which one is correct?

- (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 including inertial navigation equipment)
- (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 correctly describes the requirements regarding the daytime obstacle markings?

- (1) Any person who has installed any objects with a height of 60 meters 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.

Q8 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 airplane and rotorcraft are of the same order. However, if the craft is towing an object, it has the right of way over an airplane 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 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 shall be 8,000 meters or more.
- (2) Ground visibility or flight visibility shall be 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 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 breaking system shall be lightly used to maintain speed that may be quickly and safely stopped.
- (2) The forward view shall be thoroughly observed.
- (3) The transponder shall be kept activated at all times.
- (4) When there is a danger of collision with aircraft or other objects, the ground guide shall be provided.

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) Preflight checks required by the Civil Aeronautics Act
- (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 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, 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 How many of the following statements (a) to (d) on the expiration of the airworthiness certificate of aircraft are correct? Choose from (1) to (4) below.

- (a) It expires when the aircraft has been found in the airworthiness inspection not to conform to the standards.
- (b) It does not expire even if the operational limits have been temporarily exceeded, if the pilot-in-command determines that the exceedance is minor and does not affect the airworthiness.
- (c) It does not expire if the aircraft's registration has been transferred.
- (d) It expires if the aircraft's registration has been cancelled.

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

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

- (a) Case where emergency evacuation was conducted by using the emergency evacuation slide
- (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) Malfunction of warning devices in an aircraft during flight

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

Q15 Which of the following provisions of Article 198-2 (Flights that May Interfere with the Safety in Air Traffic Control) of the Regulation for Enforcement of the Civil Aeronautics Act is incorrect?

- (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 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 summary of operations shall be appropriately defined for each navigation and aircraft types based on air navigation under particular flight rules.
- (4) Necessary measures shall be taken to secure a 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 approval of a flight dispatcher.
- (b) The pilot-in-command shall be checked by a flight dispatcher for his/her mental and physical conditions.
- (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

Q18 Which of the following is not specified in Article 5-4 (Flight Manual) of the Regulation for Enforcement of the Civil Aeronautics Act as information that should be included in the Flight Manual?

- (1) Various systems that must be operated and other actions that need to be taken in case of emergency
- (2) Description of aircraft structures and their equipment and systems
- (3) Items relating to aircraft noise
- (4) Items relating to engine emission

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 Which of the following correctly describes the airport signs of land airports as stipulated in Article 79 of the Regulation for Enforcement of the Civil Aeronautics Act?

- (1) The runway threshold marking shall be installed for a runway at a land airport over 1,200 meters.
- (2) For a runway over 1,200 meters, aiming point markings shall be installed even if it is not a runway for instrument landing
- (3) The number of vertical stripes of the runway threshold markingsigns (if any) varies depending on the width of runway and is 12 for a runway with a width of 60 meters.
- (4) Signs on a runway shall be white in color, and signs on a taxiway shall be yellow in color.