

# Airmen's Academic Examination

## M2

<b>Qualification</b>	First class aircraft maintenance technician (Rotorcraft) First class aircraft line maintenance technician (Rotorcraft) Second class aircraft maintenance technician (All aircraft) Second class aircraft line maintenance technician (All aircraft)	<b>No. of questions; time allowed</b>	20 questions; 40 minutes
<b>Subject</b>	Civil Aeronautics Law (subject code : 04)	<b>Code</b>	CCCC042232

**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 statements on the content of the Civil Aeronautics Act is incorrect?

- (1) The Civil Aeronautics Act consists of Chapters I to XI, supplementary provisions and an Appended Table.
- (2) The Order for Enforcement of the Civil Aeronautics Act is established by the Cabinet based on the provisions of the Civil Aeronautics Act.
- (3) The Ordinance for Enforcement of the Civil Aeronautics Act is an Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism that is stipulated based on the provisions of the Civil Aeronautics Act, and with the aim of enforcing the Act.
- (4) The Airworthiness Inspection Manual are established as a notification by the director of the Civil Aviation Bureau, and consist of administrative instructions in Annexes 1 to 4, which are among the standards set forth in paragraph 4, Article 10 of the Civil Aeronautics Act.

Q 2 Which of the following statements corresponding to the text describing "domestic scheduled air transport services" is correct?

- (1) Mean any air transport services operating between two points in the country on a scheduled time along a specified route.
- (2) Mean any air transport services operating between one point and another in the country on a scheduled time along a specified route by using an aircraft they own.
- (3) Mean any air transport services operating between one point and another in the country on a scheduled date and time along a specified route.
- (4) Mean any air transport services operating between two points in the country on a scheduled date and time along a specified route by using an aircraft they own.

Q 3 Which of the following descriptions of the application to be made when the name of the owner of registered aircraft is changed is correct?

- (1) The owner shall apply for "Registration of Change" within 15 days.
- (2) The owner shall apply for "Transfer of Registration" within 15 days.
- (3) The owner shall apply for "Transfer of Registration" within 10 days.
- (4) The owner shall apply for "Registration of Change" within 10 days.

Q 4 Which of the following options as the person who can perform "stamp of a registration mark" is correct?

- (1) Owner of the aircraft
- (2) Operator of the aircraft
- (3) Airworthiness Engineer
- (4) Minister of Land, Infrastructure, Transport and Tourism

- Q 5 Which of the following statements corresponding to the text describing "airworthiness certification" is incorrect?
- (1) The Minister of Land, Infrastructure, Transport and Tourism shall perform airworthiness certification for aircraft based upon application.
  - (2) An aircraft may not be granted airworthiness certification unless it has Japanese nationality.
  - (3) For airworthiness certification, the categories of aircraft use and the aircraft operating limitations specified by the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism shall be designated.
  - (4) The Minister of Land, Infrastructure, Transport and Tourism shall inspect the design and the manufacturing process, and grant airworthiness certification if he/she finds that the said aircraft meets these standards.
- Q 6 Which of the following combinations of categories of work included in repairs in terms of classification of "maintenance and alteration" work is correct?
- (1) Minor preservation, general preservation, slight repair, minor repair, major repair
  - (2) General preservation, slight repair, minor repair, major repair
  - (3) General preservation, slight repair, minor repair
  - (4) Slight repair, minor repair, major repair
- Q 7 Which of the following options as descriptions of aircraft use in the "Designation for operating limitation, etc." is correct?
- (1) Class
  - (2) Matters of limitation
  - (3) Airworthiness category
  - (4) Type of business
- Q 8 Which of the following options as cases where airworthiness certification is invalidated is correct?
- (1) The airworthiness certificate is lost.
  - (2) "Deletion Registration" is applied for.
  - (3) "Registration of Change" is applied for.
  - (4) "Transfer of Registration" is applied for.

Q 9 Which of the following explanations of " Type Certification " in Article 12 of the Civil Aeronautics Act is correct?

- (1) Proof intended for exemption from airworthiness certification of the aircraft
- (2) Proof provided by the Minister of Land, Infrastructure, Transport and Tourism of the type design of aircraft
- (3) Proof provided by the Minister of Land, Infrastructure, Transport and Tourism of the strength, structure and performance of aircraft for each piece of an aircraft
- (4) Proof of the design of type provided in relation to the Aircraft Manufacturing Industry Act

Q 10 The following is the provision specified in Article 24 "Inspection for Repair and Alteration" of the Ordinance for Enforcement of the Civil Aeronautics Act. Which of the following provisions that fit in (A) to (C) is incorrect?

Select from options (1) to (4).

Article 24 Any repair or alteration which is to receive inspections to the extent specified by Ordinances of the Minister of Land, Infrastructure, Transport and Tourism which is to receive inspections pursuant to paragraph 1, Article 17 of the Act shall be listed in each item of the lower column under the following table according to the classification of aircraft listed in each item of the upper column under the same table.

[Upper column]	[Lower column]
Classification of aircraft	The extent of Repair or Alteration
(i) Aircraft set forth in paragraph 1, Article 19 of the Act	(Omitted)
(ii) Aircraft other than those listed in the preceding item	(a) (Omitted) (b) The following repair or alteration to be performed for an aircraft set forth in item (ii) under paragraph (4), Article 10 of the Act and other repair or alteration which is likely to affect engine noise of the aircraft  (1) (A) (2) (B) (3) (C) (c) (Omitted)

- (1) Any repair or alteration accompanying change of nacelle shape and other major change of aircraft shape
- (2) Repair or alteration accompanying change of the engine or its parts installed in an aircraft (limited to noise absorbing materials and other parts that may affect the noise of an aircraft)
- (3) Repair or alteration accompanying any major change in matters of limitation of the engine
- (4) Repair or alteration accompanying any major change in takeoff and landing performance

- Q 11 If an aircraft with airworthiness certification is maintained for the "Confirmation of Maintenance or Alteration," the aircraft maintenance technician must ensure that the aircraft can be used for navigation. Which of the following statements on the confirmation in this case is correct? Note that an aircraft that is used for air transport services and specified under Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism is excluded.
- (1) Shall be made of the plan for and the processes of maintenance or alteration of an aircraft, and the current conditions after completion of the work.
  - (2) Shall be made of the plan for maintenance or alteration of an aircraft, and the current conditions after completion of the work.
  - (3) Shall be made of the processes of maintenance or alteration of an aircraft, and the current conditions after completion of the work.
  - (4) Shall be made of the current conditions after completion of the work of maintenance or alteration of an aircraft.
- Q 12 If the class of aircraft used for the practical examination is "Single-Engine Piston Land" in the "Rating on Competence Certification," which of the following classes of aircraft for the rating is correct?
- (1) Single-Engine Piston Land
  - (2) Single-Engine Piston Land and Single-Engine Piston Sea
  - (3) Single-Engine Piston Land and Multi-Engine Piston Land
  - (4) Single-Engine Piston Land, Multi-Engine Piston Land, Single-Engine Piston Sea, and Multi-Engine Piston Sea
- Q 13 Which of the following statements on matters that must be indicated on aircraft is incorrect? Note that cases where permission under the provision under the proviso of paragraph 1, Article 11 the Civil Aeronautics Act is obtained shall be excluded.
- (1) The aircraft nationality shall be displayed as "JA" in upper-case alphabets, without ornamentation.
  - (2) The registration mark of an aircraft shall be displayed in four Arabic figures or upper-case alphabets, without ornamentation.
  - (3) Nationality marks and registration marks shall be displayed clearly, using a durable method.
  - (4) The registration mark shall precede the nationality mark.

Q 14 Concerning "Flight Logbook," which of the following options as cases where the aircraft operator shall enter matters specified by an Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in the flight logbook is incorrect?

- (1) The aircraft is used for navigation.
- (2) The aircraft is repaired.
- (3) The aircraft is altered.
- (4) Permission of the Minister of Land, Infrastructure, Transport and Tourism is obtained for the aircraft for a test flight.

Q 15 Which of the following statements corresponding to the text describing a cockpit voice recorder is correct?

- (1) Shall be operated continuously over the period from the commencement of the take-off run to the completion of the landing run.
- (2) Shall be operated continuously over the period from being turned on for the purpose of flight to being turned off after completion of the flight.
- (3) Shall be operated continuously over the period from the commencement of engine operation for the purpose of flight to the cessation of engine operation after completion of the flight.
- (4) Shall be operated continuously over the period from the transfer of the aircraft from an apron area for the purpose of flight to its halt in the apron area after completion of the flight.

Q 16 The following is the provision specified in Article 212-4 of the Ordinance for Enforcement of the Civil Aeronautics Act "The Contents of the Safety Management Manual".  
Which of the phrases that should fit in (A) is correct? Select from options (1) to (4).

Article 212-4 As for the contents of the safety management manual specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 103-2 paragraph (2) of the Act, the matters listed in the upper column of the following table shall be specified in the lower column of the table.

[Upper column]	[Lower column]
(A)	(i) Matters related to basic policy (ii) Matters related to compliance with relevant laws, safety management manual and other rules and regulations for ensuring transportation safety (iii) Matters related to management
(Omitted)	(i) Matters related to organization (ii) Matters related to responsibility of the person in charge of management for ensuring transportation safety (iii) Matters related to authority and responsibility of a safety manager
(Omitted)	(i) Matters related to communication and co-ownership of information (ii) Matters related to consideration and implementation of preventive measures against accident, etc. (iii) Matters related to correspondence in case of accident, disaster, etc. (iv) Matters related to implementation of internal audit and other operation and confirmation of its management situation. (v) Matters related to education and training (vi) Matters related to preparation and management of documents for transportation safety (vii) Matters related to improvement of implementation and management of operation
(Omitted)	Matters concerning method of appointment of a safety manager

- (1) Matters concerning policies for operations of services for ensuring transportation safety
- (2) Matters concerning the system for the implementation and management of operations for ensuring transportation safety
- (3) Matters concerning the method for the implementation and management of operations for ensuring transportation safety
- (4) Matters concerning appointment of a safety manager

Q 17 Which of the following manuals that domestic air carriers shall establish is incorrect?

- (1) Operation manual
- (2) Maintenance manual
- (3) Safety management manual
- (4) Approved organization exposition

- Q 18 The following is the provision set forth in Article 145-2 "Offences related to Operations at Certified Facilities" of the Civil Aeronautics Act. Which of the following combinations of words/phrases that fit in (a) to (d) is correct? Select from options (1) to (4).

Article 145-2 Any person who has been certified under Article 20 paragraph 1 shall, when he/she falls under any of the following cases, be liable to a/an (a) of up to one million yen.

- I In the case of conducting operations pertaining to (c) under Article 20 paragraph 1 without obtaining approval under the provisions of paragraph 2 of the same article, or without complying with the approved (b)
- II In the case of violating a/an (d) under the provision of paragraph 6 of Article 20

	(a)	(b)	(c)	(d)
(1)	Prison sentence	• Safety management manual	• Agreement	• Operations
(2)	Fine	• Approved organization exposition	• Approval	• Order
(3)	Imprisonment	• Maintenance manual	• Permission	• Operations
(4)	Petty fine	• Approved organization exposition	• Authorization	• Operations

- Q 19 Which of the following options as "standards as specified in Annex No. 2" as set forth in paragraph 2, Article 14 of the Ordinance for Enforcement of the Civil Aeronautics Act is correct?

- (1) Standards for aircraft noise
- (2) Standards for aircraft engine emissions (excluding carbon dioxide)
- (3) Standards for operational limitations
- (4) Standards for the strength, structure or performance to ensure safety of the aircraft and its equipment

- Q 20 The following text explains "human capabilities and limitations." Which of the combinations of words/phrases that fit in (a) to (d) is correct? Select from options (1) to (4).

When a human detects information in response to an external stimulus, he/she thinks of an action to be taken while checking against his/her own knowledge or memory, and as a result, reacts to the external information by making a movement. This series of actions is called (a) of a human.

There is a limit to the amount of information that a human can process at a time. Therefore, if the processing capacity is exceeded, he/she makes a (b), or (c) the pieces of information, and then performs information processing. (d) works to determine which input(s) should be (b) or (c), how to make a decision, and how to move into action.

In addition, these (a) have limitations, and are susceptible to factors such as experience, training, motivation, tension, external environmental conditions, state of psychological burden, and physical condition.

	(a)	(b)	(c)	(d)
(1)	Situational cognitive function	• sorting out	• disposition	• sensory action
(2)	Judgmental decision function	• accumulation	• judgment	• perceptual action
(3)	Habituation function	• scrutiny	• disregard	• conscious action
(4)	Information processing functions	• selection	• ordering	• attentional action