

航空無線通信士「英語」試験問題

5 問 1 時間 30 分

1. 次の英文を読み、それに続く設問 A-1 から A-5 までに答えなさい。 解答は、それぞれの設問に続く選択肢 1 から 3 までの中から、 答えとして最も適切なものを一つずつ選び、その番号のマーク欄を塗りつぶしなさい。

A chorus of cheers and applause echoed through the NASA Jet Propulsion Laboratory on Sunday night after the high-tech rover, Curiosity, signaled it had survived a dangerous plunge through the thin Mars atmosphere. "Touchdown confirmed," said engineer Allen Chen. "We're safe on Mars." Minutes after the landing signal reached Earth, Curiosity beamed back the first black-and-white pictures from inside the crater showing its wheel and its shadow, cast by the afternoon sun.

Over the next two years, Curiosity will drive over to a mountain rising from the crater floor, poke into rocks and scoop up rust-tinted soil to see if the region ever had the right environment for microscopic organisms to thrive. It is the latest chapter in the long-running search to find out whether primitive life existed early

in the planet's history. The voyage to Mars took more than eight months and spanned 566 million km. The trickiest part of the journey? The landing. Because Curiosity weighs nearly 1 ton, engineers drummed up a new and more controlled way to set the rover down. The nuclear-powered Curiosity, the size of a small car, is packed with scientific tools, cameras and a weather station. It has a robotic arm with a power drill, a laser that can destroy distant rocks, a chemistry lab to search for the chemical building blocks of life and a detector to measure dangerous radiation on the surface.

The landing site near Mars' equator was picked because there are signs of past water everywhere, meeting one of the requirements for life as we know it. Inside Gale Crater is a 5-km-high mountain, and images from space show the base appears rich in minerals that formed in the presence of water. Previous trips to Mars have uncovered ice near the Martian north pole and evidence that water once flowed when the planet was wetter and warmer, unlike today's frigid desert environment.

Curiosity's goal: to scour for basic ingredients essential for life, including carbon, nitrogen, phosphorus, sulfur and oxygen. It's not equipped to search for living or fossil microorganisms. To get a definitive answer, a future mission needs to fly Martian rocks and soil back to Earth to be examined by powerful laboratories.

<注> plunge 降下 poke into つついて穴をあける scoop up ～をすくい上げる rust-tinted さび色になった trickiest 最も慎重な扱いを要する frigid 厳寒の ingredient 成分 phosphorus 燐(りん)

(設問)

A-1 Which of the following best describes the order of events?

1. Curiosity landed on Mars, sent a landing signal to NASA and then transmitted some pictures.
2. Curiosity first sent the landing signal to Earth, then landed and sent pictures.
3. Curiosity sent pictures back to Earth a few minutes before transmitting the landing signal.

A-2 How long is Curiosity scheduled to explore the surface of Mars?

1. For eight months.
2. For about two years.
3. For several days

A-3 Which part of Curiosity's journey was the most difficult?

1. It was a very tricky task to get Curiosity to travel such a long distance.
2. Take-off was especially difficult because Curiosity is so heavy.
3. Touching down on Mars was the biggest challenge.

A-4 Why did NASA select a site near Mars' equator for landing?

1. The equator is the warmest place on Mars.
2. This is the only place on Mars not covered with ice.
3. There is evidence of water having been there in the past.

A-5 What does the writer suggest a future mission to Mars might do?

1. Build a powerful laboratory on Mars.
2. Bring rocks and soil back to Earth.
3. Explore some of the warmer and wetter areas of Mars.

2. 次の英文 A-6 から A-9 までは、航空通信に関する国際文書の規定文の趣旨に沿って述べたものである。この英文を読み、それに続く設問に答えなさい。 解答は、それぞれの設問に続く選択肢 1 から 3 までの中から、答えとして最も適切なものを一つずつ選び、その番号のマーク欄を塗りつぶしなさい。

A-6 Abbreviations and codes shall be used in the international aeronautical telecommunication service whenever they are appropriate and their use will shorten or otherwise facilitate communication.

(設問) When should abbreviations and codes be used in the aeronautical telecommunication service?

1. Abbreviations and codes should be used whenever it is possible to do so.
2. It is only appropriate to use abbreviations and codes in short communication.
3. It is best to use abbreviations and codes in cases where they will shorten or improve communication.

A-7 The urgency communications have priority over all other communications, except distress, and all stations shall take care not to interfere with the transmission of urgency traffic.

(設問) Which type of transmissions take precedence over all others?

1. Urgency communications have the highest priority.
2. Distress communications must always take precedence.
3. Transmissions that stop interference precede all other forms of transmissions.

A-8 Before transmitting, a station shall take precautions to ensure that it will not interfere with a communication already in progress and that the station called is not in communication with another station.

(設問) What is one of the checks that a station should perform before beginning a transmission?

1. Before making a transmission, a station may not decide to confirm the progress of the station being called.

2. A station should check whether the station being called is communicating with another station prior to a transmission.
3. A station is not required to take any special precautions before making a transmission.

A-9 When a radiotelephone call from an aircraft station has been made to an aeronautical station, but no answer has been received, a period of at least ten seconds should elapse before a subsequent call is made to the aeronautical station.

(設問) How should an aircraft station respond if there is no answer to a radiotelephone call?

1. The aircraft station should repeat the call within ten seconds of the original call.
2. The aircraft station should wait a minimum of ten seconds before making any further calls to the aeronautical station.
3. The aircraft station should make sure that subsequent calls to the aeronautical station are no longer than ten seconds.

3. 次の設問 B-1 の日本語に対応する英訳文の空欄 (ア) から (オ) までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。 解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

(設問)

B-1 電波塔としては世界一高いと認められた 634 メートルの東京スカイツリーは、観光客に大変な人気である。観光客は、地上 350 メートルと 450 メートルにある展望台まで上がることができる。晴れた日の眺望は格別だそうだ。

The 634 meter Tokyo Sky Tree, (ア) as the world's tallest broadcasting tower, is proving very (イ) among tourists. Visitors can ascend to the observation decks at 350 and 450 meters (ウ) the ground. The view (エ) to be very special (オ) a clear day.

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| 1 above | 2 favorable | 3 is noticed |
| 4 is said | 5 on | 6 popular |
| 7 recognized | 8 recommended | 9 with |

4. 次の設問 B-2 の日本語に対応する英訳文の空欄 (ア) から (オ) までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。 解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

(設問)

B-2 国内線 LCC の就航は、人々の大きな関心を呼んでいるが、すでに海外の LCC10 社が日本で運航を開始している。そのような LCC が増えれば、日本の人々が世界各地に安い費用で行けるようになるだけでなく、同

時に多くの人々を日本に呼び込むことになるだろう。

The introduction of low-cost carriers on (ア) routes (イ) strong interest and already ten such foreign carriers have started connecting services in Japan. The increase in such services promises not only to help Japanese people travel more (ウ) all over the world but at (エ) time to (オ) many more people to Japan.

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|--------------|---------|--------------|
| 1 any | 2 bring | 3 cheaply |
| 4 domestic | 5 inner | 6 is drawing |
| 7 is pulling | 8 make | 9 the same |

5. 次の設問 B-3 の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

（設問）

B-3 航空通信業務を行うすべての局は、協定世界時(UTC)を使用しなければならない。真夜中は、一日の終わりとして 2400 で、一日の始めは 0000 として示さなければならない。日時グループは、6 数字で構成し、最初の 2 数字が月の日付を、後の 4 数字が UTC の時と分を示すものとする。

Universal Coordinated Time-UTC-shall (ア) by all stations (イ) the aeronautical telecommunication service. Midnight shall be designated (ウ) 2400 for the end of the day and 0000 for the beginning of the day. A date-time group shall (エ) six figures, the first two figures representing the date of the month and (オ) four figures the hours and minutes in UTC.

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|--------------|---------------|-----------|
| 1 as | 2 be examined | 3 be used |
| 4 consist in | 5 consist of | 6 in |
| 7 the last | 8 the latest | 9 to |