

解答上の注意：解答は、すべて別紙答案用紙（マークシート）に記入すること。

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。

Surrounded by marine life, including a 2-meter shark, a pair of U.S. astronauts are building an undersea structure. The work is part of an unusual mission for NASA. Together with two other crew members, the astronauts are spending 10 days under water to prepare for outer space flights. They are hoping that such extreme environment training could come in handy on a mission to Mars.

The astronauts' temporary space home is Aquarius. This coral-covered cylinder is believed to be the world's only working undersea habitat. Located 5 km off the coast of Florida at a depth of 30 meters, the research station looks like a yellow submarine resting on the ocean floor.

A group of colorful tropical fish nibbles on the underwater laboratory, which is about the size of a rail car. A nurse shark rests on the ocean floor apparently unaware of the presence of astronauts busy assembling a PVC structure on the sandy floor.

"It's a good place to try things out before we use them in space," said the mission's commander. He added that there are a lot of similarities with conditions in space, especially the need to get things done in a hurry. "It's very hectic. We have to get a certain amount done in a certain period of time. That's identical to space life."

<注> come in handy 役に立つ Mars 火星 habitat 居住場所 nibble 少しずつかじる
PVC(polyvinyl chloride) ポリ塩化ビニル hectic 慌ただしい

(設問)

A-1 What are the astronauts doing under water?

1. They are searching for two NASA crew members.
2. They are working with sharks.
3. They are training for a future mission to Mars.

A-2 Where can the research station, Aquarius, be found?

1. Aquarius is the astronauts' home in space.
2. It is located on a beach in Florida.
3. It is at the bottom of the ocean near Florida.

A-3 How does the nurse shark react to the astronauts building the PVC structure?

1. It is frightened by the presence of the astronauts.
2. It does not seem to mind the astronauts being there.
3. It appears to prevent the astronauts from building the PVC structure.

A-4 What does the mission's commander believe about conditions in space?

1. He says that space is a good place to try things out.
2. He says that life in space is very busy.
3. He says that all conditions under water are completely the same as in space.

A-5 Which of the following sentences is true?

1. NASA believes that conditions under water are similar to those in outer space.
2. Space travel has helped us to understand life on Earth, and especially marine life.
3. NASA is planning to develop more underwater research stations in the future.

2. 次の英文 A-6 から A-9 までは、航空移動業務の無線電話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 Communications shall commence with a call and a reply when it is desired to establish contact, except that, when it is certain that the station called will receive the call, the calling station may transmit the message, without waiting for a reply from the station called.

(設問) When is it possible to commence communications without receiving a reply from the station called?

1. When established contact is desired.
2. When the calling station is sure that the call will be received.
3. When a station is waiting for a reply from a station called.

A-7 If a frequency designated by an aeronautical station proves to be unsuitable, the aircraft station should suggest an alternative frequency.

<注> designate 指定する

(設問) What should an aircraft station do if it believes that the frequency chosen by an aeronautical station is not suitable?

1. The aircraft station must continue to use the frequency chosen by the aeronautical station unless requested to do otherwise.
2. The aircraft station has to wait for instructions from the aeronautical station.
3. The aircraft station should propose a different frequency.

A-8 When an operator transmitting a message considers that reception is likely to be difficult, he should transmit the important elements of the message twice.

(設問) What is the best course of action for a transmitting operator who considers that reception of a message is likely to be difficult?

1. The operator should cancel transmission of the message until reception is likely to improve.
2. The operator should repeat the main points of the message.
3. The operator should transmit the complete message twice.

A-9 An aircraft station should acknowledge receipt of important air traffic control messages or parts thereof by reading them back and terminating the readback by its radio call sign.

<注> acknowledge receipt 受信したことを知らせる parts thereof その部分

(設問) Why would an aircraft station read back important air traffic control messages and then terminate the readback with its radio call sign?

1. In order to show that it has received important air traffic control messages.
2. To improve certain parts of the air traffic control messages.
3. For the purpose of acknowledging any communication with an air terminal.

3. 次の設問 B-1 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 完成までに6年を越す年月を要したその新空港は、史上最大規模の民間土木工事プロジェクトであると信じられている。

The new airport, (ア) took more (イ) six years (ウ) build, is (エ) to be the biggest civil engineering project (オ) history.

- | | | |
|-------------|--------------|----------|
| 1. believed | 2. believing | 3. in |
| 4. on | 5. than | 6. to |
| 7. what | 8. when | 9. which |

4. 次の設問 B-2 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-2 客室乗務員から、客室内に白煙が広がっているとの報告が入っています。現在、操縦室内では煙は見えませんが、何か焦げているような匂いがします。

A flight attendant reports that white smoke (ア) (イ) in the cabin. We cannot (ウ) in the cockpit, but there is a (エ) of something (オ).

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|------------|---------------|-----------|
| 1. be seen | 2. burning | 3. has |
| 4. is | 5. is on fire | 6. see it |
| 7. smell | 8. spreading | 9. wide |

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 もし航空局が航空機局相互間の通信に介入することを必要と認めたら、航空機局は、航空局の指示に従う。

If an aeronautical station finds (ア) necessary to intervene in communications (イ) aircraft stations, (ウ) shall comply with the (エ) given (オ) the aeronautical station.

- | | | |
|-------------------|-------|-----------------------------|
| 1. between | 2. by | 3. each other |
| 4. instructions | 5. it | 6. the aeronautical station |
| 7. these stations | 8. to | 9. which |