

第二級総合無線通信士「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黒く塗りつぶしなさい。

2020 aerial surveys of the Great Barrier Reef showed coral bleaching is sweeping across the area off the east coast of Australia for the third time in five years. Bleaching has struck all three regions of the world's largest coral reef system and is more widespread than ever, scientists from James Cook University in Queensland have said.

The air surveys of 1,036 reefs found bleached coral in the northern, central and southern areas, James Cook University professor Terry Hughes said. "As summers grow hotter and hotter, we no longer need an El Nino event to trigger mass bleaching at the scale of the Great Barrier Reef," Hughes said. "Of the five events we have seen so far, only 1998 and 2016 occurred during El Nino conditions." El Nino is a climate pattern that starts with a band of warm ocean water in the central and east-central Pacific around the equator and affects global weather. The Great Barrier Reef is made up of 2,900 separate reefs and 900 islands. It is unable to recover because there is not enough time between bleaching events. "We have already seen the first example of back-to-back bleaching — in the consecutive summers of 2016 and 2017," Hughes said, adding that the number of reefs spared from bleaching is shrinking as it becomes more widespread. He said underwater surveys will be carried out later in the year to assess the extent of damage.

In early March, David Wachenfeld, chief scientist at the Great Barrier Reef Marine Park Authority, said the reef was facing a critical period of heat stress over the coming weeks following the most widespread coral bleaching the natural wonder has ever endured. The Authority, the government agency that manages the coral expanse off northeast Australia, said ocean temperatures over the next month would be crucial to how the reef recovers from heat-induced bleaching.

<注>aerial 空の coral bleaching サンゴの白化現象 coral reef サンゴ礁 trigger きっかけとなる
back-to-back 連続的な consecutive 引き続く assess 評価する expanse 拡大
crucial 決定的な

(設問)

A-1 How was the survey which found the widest ever coral bleaching of the Great Barrier Reef performed?

1. They used the satellite images.
2. The survey was performed using aircraft.
3. They used large motor vessels which sailed across the coral areas.

A-2 What is professor Terry Hughes' view on the relationship between the mass coral bleaching and El Nino?

1. El Nino is the sole factor behind the mass coral bleaching of the Great Barrier Reef.
2. The mass coral bleaching can only be caused by a combination of a hot summer and El Nino.
3. Since the summers are getting hotter and hotter, this mass coral bleaching can occur even without El Nino.

A-3 What happened to the Great Barrier Reef during the summers of 2016 and 2017?

1. Most of those bleached coral reefs recovered over the period of 2016 to 2017.
2. Unbleached areas of the Great Barrier Reef shrank due to the back-to-back bleaching.
3. As the summers of 2016 and 2017 were relatively cold, the coral bleaching did not happen.

A-4 What was going to be done to assess the damage to the Great Barrier Reef later in 2020?

1. Underwater surveys of the Great Barrier Reef were planned.
2. More aerial surveys were expected in order to assess how the corals had been damaged.
3. A survey on the distribution of the sea water temperature of the Great Barrier Reef regions was expected.

A-5 What does David Wachenfeld's phrase "the natural wonder" refer to?

1. The Great Barrier Reef
2. The exceptionally hot summers
3. The wide spread of bleached coral reefs

2. 次の英文A-6からA-9までは、無線通信業務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黒く塗りつぶしなさい。

A-6 When it is necessary for a ship station to send signals for testing or adjustments which are liable to interfere with the working of neighboring coast stations, the consent of these stations shall be obtained before such signals are sent.

(設問) In which of these cases is a ship station prohibited from sending signals without the prior consent of nearby coast stations?

1. When it sends any signal to the coast stations
2. When it sends test or adjustment signals which are requested by the coast stations
3. When it sends test or adjustment signals which are likely to cause interference to the coast stations' communications

A-7 When a ship station is called on the carrier frequency 2,182 kHz, it should reply on the same carrier frequency unless another frequency is indicated by the calling station.

(設問) What should a ship station do when it is called on the carrier frequency 2,182 kHz?

1. It should always reply on a different frequency from 2,182 kHz.
2. It should reply on the frequency 2,182 kHz even when the calling station indicates another frequency.
3. It should reply on the frequency 2,182 kHz when the calling station does not specify another frequency.

A-8 Control of the VHF radiotelephone channels, as required for navigational safety, shall be immediately available on the navigation bridge convenient to the conning position.

<注> conning position 操舵を指揮する場所

(設問) Where should control of the VHF radiotelephone channels be set?

1. It should be set freely in a convenient position anywhere on the ship.
2. It should be set near the conning position on the bridge where it can be used at once.
3. It should be set far from the conning position on the bridge so as not to obstruct steering.

A-9 An aircraft shall be advised by the appropriate aeronautical station to transfer from one radio frequency to another in accordance with agreed procedures. In the absence of such advice, the aircraft station shall notify the appropriate aeronautical station before such a transfer takes place.

(設問) When may an aircraft station change the radio frequency in the absence of advice from an aeronautical station?

1. Only after informing the aeronautical station of the change.
2. The aircraft station may never transfer to another radio frequency without the advice of an aeronautical station.
3. It is up to the aircraft to notify the necessary aeronautical station as soon as possible after transferring the frequency.

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黒く塗りつぶしなさい。

（設問）

B-1 ある日本の造船会社がまもなく船の自動運行システムの販売を開始する。これまで、航法システムは常にあらかじめ決めた進路に沿って船を操縦していたが、この新しいシステムは航路を計画し、船を自動的に埠頭に着けることができる。この製品には、レーダーや船舶識別装置など、さまざまなテクノロジーが束ねられている。このシステムは、早ければ来年度にも市場に出る予定だ。

A Japanese shipbuilder will soon start selling an (ア) navigation system for ships. Up to now, navigation systems have always steered ships along a predetermined course but this new system can plan routes and allow vessels to (イ) automatically. The product (ウ) various technologies, including radar and ship (エ) equipment. This system will go on the market as early as the next (オ) year.

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|-------------|--------------|-------------------|
| 1. animated | 2. automated | 3. bundles |
| 4. common | 5. dock | 6. fiscal |
| 7. fixes | 8. homing | 9. identification |

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黒く塗りつぶしなさい。

（設問）

B-2 私たちの惑星はほとんどが海で覆われており、人間の海に関する活動はかつてないほど激しくなっているが、海洋の生物多様性については際立ってほとんど分かっていない。海洋生物多様性は極めて複雑なので、これは当然のことだ。種の多様性とバランスは、健康で生産的な生態系を共に支えている。

Although our planet is mostly covered by ocean and human (ア) activity is more intense than it has ever been, we know remarkably (イ) about the ocean's biodiversity. This is no surprise because marine biodiversity is extremely (ウ). The (エ) and balance of species together support healthy and productive (オ).

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|---------------|-------------|-------------|
| 1. a little | 2. awkward | 3. complex |
| 4. ecosystems | 5. little | 6. maritime |
| 7. marriage | 8. multiple | 9. variety |

5. 次の設問B-3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黒く塗りつぶしなさい。

（設問）

B-3 遭難呼出し及び遭難通信の受信を容易にするため、156.8 MHzによるすべての伝送は最小限にとどめなければならない。かつ、1分間を超えてはならない。

To facilitate the reception of distress calls and distress (ア), all transmissions (イ) 156.8 MHz shall be (ウ) to a (エ) and shall not (オ) one minute.

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|-----------|------------|--------------|
| 1. exceed | 2. in | 3. kept |
| 4. leap | 5. medium | 6. minimum |
| 7. on | 8. traffic | 9. transport |