

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。

Melting ice sheets in Greenland and Antarctica are speeding up the already fast pace of sea level rise, new satellite research shows. At the current rate, the world's oceans on average will be at least 2 feet (61 cm) higher by the end of the century compared to today, according to researchers who published in Monday's Proceedings of the National Academies of Sciences.

Sea level rise is caused by warming of the oceans and melting from glaciers and ice sheets. The research, based on 25 years of satellite data, shows that pace has quickened, mainly from the melting of massive ice sheets. It confirms scientists' computer simulations and is in line with predictions from the United Nations, which releases regular climate change reports. Sea level rise, more than temperature, is a better gauge of climate change in action, said Anny Cazenave, director of Earth Science at the International Space Science Institute in France, who edited the study. Cazenave is one of the pioneers of space-based sea level research.

Global sea levels were stable for about 3,000 years until the 20th century, when they rose and then accelerated due to global warming caused by the burning of coal, oil and natural gas, said climate scientist Stefan Rahmstorf of the Potsdam Institute in Germany.

Two feet of sea level rise by the end of the century "would have big effects on places like Miami and New Orleans, but I don't still view that as catastrophic" because those cities can survive — at great expense — that amount of rising seas under normal situations, Steve Nerem of the University of Colorado said. But when a storm hits like Superstorm Sandy in 2012, sea level rise on top of a storm surge can lead to record-setting damage, researchers said.

<注> Proceedings of the National Academies of Sciences 米国科学学会誌 International Space Science Institution 国際宇宙科学研究所 catastrophic 壊滅的な at great expense 多額の費用をかけて

(設問)

A-1 How does new satellite research describe the change from the current sea level by the end of the century?

1. It will not change during this century.
2. The average sea level will be 2 feet lower than today.
3. The average sea level will be not less than 2 feet higher than today.

A-2 What findings indicate that the melting of massive ice sheets is the main reason for the accelerating rise in sea levels?

1. Only the research based on 25 years of satellite data.
2. Satellite data, scientists' computer simulations and the United Nations' predictions.
3. Satellite data and scientists' computer simulations show rising sea levels but the United Nations' predictions do not.

A-3 When did the acceleration of global sea level change start according to the article?

1. Global sea level change accelerated in the last century.
2. Global sea level change first accelerated in this century.
3. No global sea level change has occurred for the last 3,000 years.

A-4 If two feet of sea level rise occurred by the end of this century, what would happen to places like Miami and New Orleans?

1. Those cities would be submerged.
2. Those cities would attract more beach-goers.
3. Those cities could survive but a superstorm like Sandy would cause a lot of damage.

A-5 Which of the following statements is thought to be true?

1. Global sea levels have always been stable regardless of global warming.
2. The melting of ice sheets in Greenland and Antarctica has already finished.
3. Sea level rise offers a better gauge of climate change in action than temperature does.

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 Calling, and signals preparatory to traffic, shall not exceed one minute when made on the carrier frequency 2182 kHz or on 156.8 MHz, except in cases of distress, urgency or safety.

(設問) What does the above regulation say with regard to the use of frequency 2182 kHz or 156.8 MHz?

1. When sending a safety message, the call must exceed one minute.
2. For distress, urgency or safety communications, calls can exceed one minute.
3. For general communication, a call can exceed one minute but signals shall last less than one minute.

A-7 The governments or appropriate administrations of countries which a ship station or ship earth station visits may require the production of the license for examination. The operator of the station, or the person responsible for the station, shall facilitate this examination. 注) facilitate 容易にする

(設問) What will the operator of, or person responsible for, the station do regarding the license?

1. New copies of the license should be made every time an examination is conducted.
2. The operator of, or person responsible for, the station should show the license to the inspector of the visiting country.
3. The operator of, or person responsible for, the station should facilitate the examination by the government of his or her own country at each port of call.

A-8 If the received messages are not printed immediately, sufficient capacity should be provided to enable at least 20 received distress messages to be stored in the DSC facility. These messages should be stored until readout.

(設問) What is required of the storage capacity of the DSC facility?

1. All messages must be stored after being read out.
2. The DSC facility must be capable of printing at least 20 messages at a time.
3. Distress messages that are not immediately printed out must be stored there until readout.

A-9 Radiotelephony will be the primary method of communication between ATS and aircraft, surface vehicles and fire fighting vehicles on the maneuvering area. It is important that radiotelephony communications be conducted in the standard manner with regard to phraseology and procedures.

注) surface vehicle 地上にある車両 phraseology 語法 maneuvering area 走行区域

(設問) What does the above regulation say about the radiotelephony communications?

1. ATS should talk to aircraft, surface vehicles and fire fighting vehicles in the standard manner.
2. ATS must not use radiotelephony as the primary method when communicating with surface vehicles.
3. It is always necessary for aircraft and fire fighting vehicles to communicate with each other directly using radiotelephony.

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 日本の政府及び主要な海運会社は2025年までに自動運航船舶の実用化を目指している。陸からの遠隔支援のみならず、起こりうる衝突を自動検出するコンピュータプログラムにより、自動運航船舶は最適航路の航海、接岸、離岸ができるようになるであろう。

The government and major (ア) companies in Japan aim to put self-navigating vessels into (イ) use by 2025. With a computer program for the automatic (ウ) of possible (エ) (オ) remote support from the land, the vessels will be able to navigate optimal sea routes, dock and undock.

- | | | |
|---------------|---------------|---------------|
| 1. as well as | 2. break-down | 3. collisions |
| 4. detection | 5. discovery | 6. practical |
| 7. realistic | 8. shipping | 9. without |

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 科学者たちは、サンゴ礁が2020年より前に海水酸性化によって、溶解し始める可能性があると言っている。人間が作る主要な温室ガスである二酸化炭素は海水に溶けて弱酸を形成し、サンゴ礁を構成する物質である炭酸カルシウムを溶解する恐れを持っている。

Scientists have said coral reefs could start to dissolve before 2020 due to the acidification of oceans. Carbon (ア), the main man-made (イ) gas, gives (ウ) to a weak acid in water and threatens to dissolve calcium carbonate, the material (エ) which coral reefs are (オ).

- | | | |
|--------------|---------------|------------|
| 1. build | 2. built | 3. dioxide |
| 4. fireplace | 5. greenhouse | 6. of |
| 7. raise | 8. rise | 9. under |

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 局が受信した呼出しが自局宛かどうか不明である場合は、その呼出しが繰り返され理解されるまで応答してはならない。自局宛の呼出しを受信したが、呼出局の識別が不明の場合は、呼出局のコールサイン若しくは他の識別子を繰り返すように直ちに応答しなくてはならない。

When a station receives a call (ア) being certain that (イ) is intended for it, the station shall not reply (ウ) the call has been repeated and understood. When a station receives a call (エ) is intended for it, but is uncertain of the identification of the calling station, it shall reply (オ) asking for a repetition of the call sign or other identification of the calling station.

- | | | |
|--------------------|----------------|----------------|
| 1. called stations | 2. excluding | 3. immediately |
| 4. many | 5. such a call | 6. until |
| 7. what | 8. which | 9. without |