

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。

Most days of the week, David Perry heads out to the beach to surf. But on Sunday, he sat with his skateboard taking in sweeping ocean views while a jazz band played, families rode bikes and crews tried to stop a crude oil slick from reaching the California coast.

Offshore oil platforms are always visible from the community known as "Surf City USA," and most days are seen as just another hazard for those venturing out with their boards, the 35-year-old said. Now, the massive spill threatens to keep the ocean off-limits for weeks or months, harm marine life and halt the waterfront activities that are the lifeblood of Southern California's Huntington Beach.

Starting late Friday or early Saturday, pleasure-boaters began reporting an oily sheen in the water. At least 572,000 liters of crude oil spilled from a now-shut off pipeline into the waters off Orange County, officials said. That prompted Huntington Beach officials to close the beach. Authorities on Sunday used speakers to tell visitors to stay out of the water and yellow caution tape was strung between lifeguard towers.

Crews on Sunday deployed skimmers and floating barriers, known as booms, as they tried to stop oil from the massive spill in Southern California from further fouling the beaches, wildlife, and protected wetlands of the area. The contractors also used plastic bags to gather oil from the water. The National Oceanic and Atmospheric Administration (NOAA) says such hands-on work is often used in cleanup response.

The agency says crews will use shovels and other hand tools to remove oil from the shoreline, the low-tech techniques employed when heavy machinery can't reach certain areas. According to the agency, other methods that can be used include flushing oil from the shoreline into the water, where it's easier to collect; industrial vacuums to Hoover up oil from land areas; specialized absorbents that sponge up oil but not water; and in-situ burning, which is setting oil from a new spill on fire while it floats on the surface.

<注> crude oil 原油 oil slick 油膜 sheen 光沢 skimmer 油回収装置 wetland 湿地
assess 評価する absorbent 吸収剤

(設問)

- A-1 What were the crews doing while David Perry sat and viewed the ocean?
- 1. They were venturing out on their own surfboards.
 - 2. They were trying to stop the oil slick from reaching the coast.
 - 3. They had just begun receiving the reports of the oil spill from the pleasure-boaters.
- A-2 What was the status of the damaged pipeline at the time the above article was written?
- 1. The pipeline had been shut off.
 - 2. It was still in use to supply the crude oil to the shore.
 - 3. The pipeline had been removed from the sea by the crews.
- A-3 What did the local authorities do to keep visitors out of the water?
- 1. They used speakers to warn visitors and put up yellow tape.
 - 2. They encouraged skateboarding or cycling instead of surfing.
 - 3. They deployed skimmers and booms to keep visitors out of the sea.
- A-4 What did the NOAA say about how the contractors gathered oil from the water using plastic bags?
- 1. The method should be avoided because bags are inefficient.
 - 2. The plastic bags use advanced techniques to sponge up oil but not water.
 - 3. Such hands-on methods are frequently used in cleanup work for spilled oil.
- A-5 What does "in-situ burning" mean?
- 1. Burning crude oil before it has been refined
 - 2. Burning floating oil at the site of an oil spill
 - 3. Burning oneself while removing oil from the sea

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 On receipt of a distress alert made using digital selective calling techniques or a distress call, ship stations and coast stations shall set watch on the radiotelephone distress and safety traffic frequency associated with the distress and safety calling frequency on which the distress alert was received.

(設問) What must ship and coast stations do if they receive a distress alert transmitted by digital selective calling techniques?

1. Stations have the obligation to set and maintain watch on the relevant radiotelephone frequencies.
2. Stations shall transmit a distress call by radiotelephone on the frequency associated with the distress alert received.
3. Stations receiving a distress alert transmitted using digital selective calling techniques must immediately acknowledge the distress alert.

A-7 Every ship shall carry personnel qualified for distress and safety radiocommunication purposes to the satisfaction of the Administration. The personnel shall be holders of certificates specified in the Radio Regulations as appropriate, any one of whom shall be designated to have primary responsibility for radiocommunications during distress incidents.

(設問) Who shall be designated as the primary person responsible for radiocommunication in distress situations?

1. One of the qualified crew members on board who holds the proper certification
2. Any crew members on board so assigned by the Administration
3. Any crew members regardless of the qualifications defined in the Radio Regulations

A-8 The minimum knowledge, understanding and proficiency required for certification of GMDSS radio personnel shall be sufficient for radio personnel to carry out their radio duties. The knowledge required for obtaining each type of certificate defined in the Radio Regulations shall be in accordance with those regulations. <注> proficiency 習熟度

(設問) What is the minimum knowledge, understanding and proficiency required for certification of GMDSS radio personnel?

1. The length of operating experience on board ship specified in the Radio Regulations
2. Enough knowledge, understanding and proficiency for radio personnel to fulfill their radio duties
3. Knowledge, understanding and proficiency sufficient for the supervision of GMDSS radio personnel

A-9 All stations shall radiate the minimum power necessary to ensure a satisfactory service.

(設問) What power level must a station use?

1. A station must use the minimum possible power even if the service is poor.
2. A station must use the lowest power output necessary to provide an adequate service.
3. Only a minimum number of stations are allowed to radiate the power on the same 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 魚のヒレを非常に強く、それでいて曲げやすくしている背後にある工学的秘密が、コロラド大学ボルダー校が主導する新しい研究により明らかにされた。そのチームによる洞察は、いつの日か、ボタンを押すだけで形状が変化するロボット手術器具や飛行機の翼にさえ使える新しいデザインにつながる可能性がある。

New research led by the University of Colorado Boulder has uncovered the engineering secrets behind what (ア) fish fins so strong yet (イ). The team's (ウ) could (エ) lead to new designs for robotic surgical tools or even airplane wings that change their shape (オ) only the push of a button.

- | | | |
|-------------|---------------|-------------|
| 1. eyesight | 2. flexible | 3. insights |
| 4. makes | 5. once | 6. over |
| 7. someday | 8. transforms | 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 スウェーデンのある大学で開発された数理モデルを用いた研究は、地球温暖化の結果、多くの種が絶滅するだろうと予測した。そのシミュレーションでは、気候変動が極地の生態系に特に大きな影響を与えることを示している。極地の種は、気候変動により自分たちの最適温度を求めて他の地域から新たにやって来る種との競争に敗れる傾向がある。

A study using a (ア) model developed at a university in Sweden (イ) that many species will become extinct as a (ウ) of global warming. The simulations show that climate change will have a (エ) large impact on ecosystems in polar regions. Species in polar regions are liable to (オ) out in competition with new arrivals from other regions seeking their optimum temperatures as the climate changes.

- | | | |
|-----------------|-----------------|--------------|
| 1. addicted | 2. lose | 3. lost |
| 4. consequence | 5. mathematical | 6. numbering |
| 7. particularly | 8. predicted | 9. slightly |

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 周波数2182kHzは、無線通信規則の関連する規定に従って呼出し及び応答のために使用することができる。この周波数は、また海岸局が関連する勧告に定める呼出表を、これとは別の周波数を用いて伝送していることを告知する場合にも使用することができる。

The frequency 2182 kHz may be used for (ア) and reply in accordance with the relevant (イ) of the Radio Regulations. The frequency may (ウ) be used by coast stations to (エ) the transmission, on another frequency, of traffic lists as specified in the Recommendation (オ).

- | | | |
|--------------|--------------|--------------|
| 1. addition | 2. also | 3. announce |
| 4. article | 5. ask | 6. call |
| 7. concerned | 8. contacted | 9. pronounce |