

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。

There is more life under the polar seas than previously believed. A marine census released the other day documented 7,500 species living in the Antarctic and 5,500 in the Arctic, including several hundred that researchers believe could be new to science.

Most of these were invertebrates, simple animals without backbones. They also found scores of sea spider species that were as big as a human hand and tiny, shrimp-like crustaceans. Some of these creatures were found at a depth of 3,000 meters in the Arctic basin. "The textbooks have said that there is less diversity at the poles than the tropics, but we found astonishing richness of marine life in the Antarctic and Arctic oceans," said Victoria Wadley, a researcher from the Australian Antarctic Division who took part in the Antarctic survey. "We are rewriting the textbooks."

Gilly Llewellyn, leader of the ocean program for the environmental group WWF-Australia, said that the number of species found shows just how little is known about these regions. "We probably know more about deep space than we do about the deep polar oceans in our own backyard," said Llewellyn.

The survey, which included researchers from 25 countries, took place during the International Polar Year, which ran from 2007 to 2008. Researchers braved up to 16-meter waves on their trip to the Antarctic. Their colleagues in the Arctic worked under the watchful eye of a security guard hired to protect them from polar bears.

Researchers discovered as many as 235 species that were common to both polar seas, a conclusion that was unexpected, since they are separated by 11,000 km. Among them were five whale species, including the gray whale, along with six sea birds and nearly 100 species of crustaceans. "We think of the Arctic and Antarctic as similar habitats, but they are separated by great distances," said Russ Hopcroft, an ecologist at the University of Alaska. "So finding species at both ends of the Earth – some of which don't have a known connection in between – raises a bunch of evolutionary questions."

<注> invertebrate 無脊椎動物 sea spider ウミグモ crustacean 甲殻類 basin 海盆(海山や海嶺によって区切られた比較的平坦な深海底) WWF(=World Wide Fund for Nature) 世界自然保護基金

(設問) A-1 What did the information in the marine census show?

1. There are more different species living in the seas around the south pole than the north.
2. There are more different species living in the seas around the north pole than the south.
3. Many new species were found near the north pole but not in the south.

A-2 According to Victoria Wadley, why is the research important?

1. Some of the animals they have discovered are as big as humans.
2. Scientists previously believed that few species lived in the polar seas.
3. She is hoping to use new textbooks for her research.

A-3 What does Gilly Llewellyn say about our knowledge of the polar seas?

1. If we know more about life in the polar seas, we may be able to understand more about outer space.
2. Even though the polar seas are relatively close to us, we still know very little about them.
3. Research in deep space has helped improve our knowledge of the polar seas.

A-4 Which of the following statements about the research is true?

1. Researchers in both the Arctic and the Antarctic were in danger from polar bears.
2. The research took place in 25 different countries.
3. The research was conducted in the polar seas and researchers found many more species than expected.

A-5 What was one of the surprising conclusions of the research?

1. Scientists did not expect to find so many sea birds near the Antarctic.
2. Scientists did not anticipate so many species would be common to both polar regions.
3. Scientists were shocked to find there are now only five species of whale in the polar seas.

2. 次の英文 A-6 から A-9 までは、無線通信規則に定める「海上における遭難及び安全に関する世界的な制度」の規定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 Every ship, while at sea, shall maintain a radio watch for broadcasts of maritime safety information on the appropriate frequency or frequencies on which such information is broadcast for the area in which the ship is navigating.

(設問) Which of the following is a basic requirement of every ship at sea?

1. Every ship is required to broadcast safety information on the appropriate frequencies.
2. Every ship needs to transmit appropriate information about the area in which it is navigating.
3. Every ship must keep a radio watch for safety information on the appropriate frequencies.

A-7 Before transmitting on the carrier frequency 2182 kHz, a station shall, in accordance with Recommendation ITU-R M.1171, listen on this frequency for a reasonable period to make sure that no distress traffic is being sent.

<注> carrier frequency 搬送波周波数

(設問) What should a station do prior to transmitting on the carrier frequency 2182 kHz?

1. A station intending to use this carrier frequency must listen to it for as long as possible.
2. A station needs to check for any distress traffic before using the frequency.
3. Before using the carrier frequency 2182 kHz, a station should check the appropriate regulation for a reasonable period of time.

A-8 A station or a rescue coordination center which receives a distress alert or call and a distress message shall initiate the transmission of a shore-to-ship distress alert relay addressed, as appropriate, to all ships, to a selected group of ships, or to a specific ship, by satellite and/or terrestrial means.

(設問) What should a station or a rescue coordination center do upon receipt of a distress alert or call and a distress message?

1. A station or a rescue coordination center must address one particular ship to which it will transmit a distress alert relay.
2. A station or a rescue coordination center may select the appropriate recipients and means when relaying a distress alert.
3. A station or a rescue coordination center must transmit a ship-to-shore distress alert relay and begin this transmission with the station's initials.

A-9 When a master has reported a tropical cyclone or other dangerous storm, it is desirable but not obligatory, that further observations be made and transmitted hourly, if practicable, but in any case at intervals of not more than 3 hours, so long as the ship remains under the influence of the storm.

(設問) What is the recommended course of action for a master who has reported a tropical cyclone or other dangerous storm?

1. The master should continue to watch and report on the storm every hour if it is reasonably possible to do so.
2. The master must, without fail, make an hourly report on the cyclone or storm for a minimum of three hours.
3. The master should make every effort to move away from the influence of the storm.

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句を、その設問に続く選択肢 1 から 10 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 自然界には、私たちが驚かすようなすごい能力を持った生物がたくさんいる。例えば、サケは川で生まれ、海で過ごし、3年から5年後に産卵のために生まれた川に戻ってくる。彼らはどのようにして生まれ故郷の川を覚えているのだろうか。

In the natural world, many creatures have remarkable abilities that (ア) us. Salmon, (イ), are born in a stream, live in the sea and then return to the river of their birth three to five years (ウ) (エ) lay eggs. How do they remember the river (オ) they were born?

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|-------------|----------------|------------|
| 1. astonish | 2. for example | 3. lately |
| 4. later | 5. please | 6. that is |
| 7. to | 8. what | 9. where |
| 10. with | | |

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 10 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 昨年の夏、太平洋上をペットボトルにつかまり約2時間漂流していた男性が、リベリア船籍の貨物船に発見され、救助された。この男性は日本人の船員で、沖縄に向けて航行中、転落したことが分かった。

Last summer, a man who (ア) in the Pacific Ocean (イ) some plastic bottles for about 2 hours was found and saved by a cargo ship (ウ) in Liberia. It (エ) that he was a Japanese sailor and had fallen overboard (オ) a voyage to Okinawa.

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| 1. carry out | 2. had been drifting | 3. holding |
| 4. on | 5. recorded | 6. registered |
| 7. riding | 8. turned out | 9. was streaming |
| 10. while | | |

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 10 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 すべての旅客船に乗船するすべての人員は、出港前に数を数えられなければならない。また、非常の際の特別な注意又は介護の必要性を申告している人の詳細は、出港前に記録され、船長に報告されなければならない。

All persons (ア) board all passenger ships shall be counted prior to departure, and (イ) of persons who have declared (ウ) for special care or assistance in (エ) situations shall be recorded and (オ) to the master prior to departure.

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| 1. a need | 2. an obligation | 3. communicated |
| 4. details | 5. emergency | 6. features |
| 7. on | 8. published | 9. unusual |
| 10. with | | |