

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。

Connecticut's oyster industry is once again thriving, about 25 years after it almost disappeared. Government and private efforts to clean up Long Island Sound, develop disease-resistant shellfish and find new markets have helped aquaculture become a \$30 million a year business in Connecticut, with oysters accounting for about half of that, state agriculture officials said. There are aquaculture farms up and down the Connecticut shoreline, where ideal habitats exist, especially at the mouths of rivers where the fresh water spills into Long Island Sound. They are all helped by the state of Connecticut, which maintains more than 7,081 hectares of natural shellfish beds. Oystermen get permits to work those public beds, harvesting seed oysters to transplant to their own grounds. "We're the Napa Valley of oysters," the governor of Connecticut said last month, while signing a bill that will give tax breaks to the industry, treating oystermen much like farmers on land.

Over the past three decades, the state has been working with municipalities, industry experts, local harbor management and shellfish commissions, and environmental groups such as Harbor Watch to monitor and improve the water quality of the Sound, the rivers that flow into it and their estuaries. Dick Harris, who founded Harbor Watch, monitors the water quality in seven harbors. He said frequent testing and subsequent investigations have led to the closure of numerous illegal connections to storm drains, where companies had been dumping raw sewage into the water. That has meant cleaner water and far fewer days that oystermen have had to suspend operations because of high bacteria counts. "When I first started this thing, Norwalk Harbor was a disaster," Harris said. "Multiple fish kills happened every year because of the lack of oxygen and extremely high bacteria counts. Today we're in a position where the counts in the outer reaches of the harbor on a normal day are zero."

Last year, when restaurants closed due to the coronavirus pandemic, the oyster market dried up. But some companies were able to adapt. Indian River Shellfish, a small oyster company on the Madison-Clinton line, opened a fish stand so they could sell directly to customers, helping to make up lost revenue. Mike Gilman, one of the owners of the company, is pushing the state to do more to help small operations such as his. "I'd like the state to establish an oyster trail, like the wine trail they already have," Gilman said. "That way people can go up and down the coast from place to place, sampling all the different oysters we have. Then we'd really be the Napa Valley of oysters."

<注> shellfish 貝 aquaculture 水産養殖 Napa Valley ナパバレー (カリフォルニアワインの名産地)
municipality 地方自治体 sewage 汚水

(設問)

A-1 How has aquaculture of Connecticut been performing so far?

1. Oyster aquaculture has always been successful and thriving in the state.
2. Most oyster farmers were not affected by last year's coronavirus pandemic.
3. It has come back from nearly collapsing entirely about a quarter of a century ago.

A-2 According to the article, what is the state of Connecticut doing to foster the oyster industry?

1. It prevents oystermen from using state oyster beds to obtain seed oysters.
2. It provides access to natural oyster beds for the oystermen to obtain seed oysters.
3. It has been helping the industry for a long time with tax breaks to support it financially.

A-3 How was the situation surrounding aquaculture in Connecticut when Dick Harris started monitoring it?

1. Enriched water owing to the stormy dumping of sewage had made the oyster industry very prosperous.
2. Companies' illegal dumping of raw sewage had led to low water oxygen levels and killed many shellfish.
3. Chemical pollution caused by illegal dumping near the aquaculture farms made the local inhabitants sick.

A-4 According to Dick Harris, which of the following describes the current status correctly?

1. The water in some parts of the harbor is now perfectly safe for fish on most days.
2. Norwalk Harbor was funded to develop the oyster beds in response to his request.
3. These days, bacteria counts in the outer reaches of Norwalk Harbor are as bad as ever.

A-5 What did Mike Gilman say about the oyster industry in Connecticut?

1. Connecticut should encourage people to move their oyster farms to Napa Valley.
2. Selling oysters directly to customers was not sufficient for his company to survive during the pandemic.
3. Connecticut can help the oyster industry prosper like the wine industry of Napa Valley by establishing an oyster trail.

2. 次の英文A-6からA-9までは、海上移動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 an urgency announcement or call and message has been transmitted to more than one station and action is no longer required, an urgency cancellation should be sent by the station responsible for its transmission.

(設問) When should an urgency cancellation be transmitted by the station responsible for the urgency announcement or call and message?

1. Only after multiple stations have transmitted their acknowledgement
2. When the required action has been carried out or is no longer needed
3. When the urgency communication has been changed to a distress communication

A-7 Every passenger ship shall be provided with means for two-way on scene radio-communications for search and rescue purposes using the aeronautical frequencies 121.5 MHz and 123.1 MHz from the position from which the ship is normally navigated.

(設問) On board passenger ships, where should the equipment for two-way on scene radio-communications using 121.5 MHz and 123.1MHz be located?

1. The bridge of the ship or any place where the ship is normally navigated from
2. Near the antenna for the aeronautical frequencies, namely 121.5 MHz and 123.1 MHz
3. The position from which rescue aircraft can be observed for line-of-sight communications

A-8 Practical Training related to the General Operator Certificate should include training in operational techniques for receiver and transmitter adjustment for the appropriate mode of operation, including digital selective calling (DSC) and narrow band direct-printing telegraph (NBDP).

(設問) What kind of training does the above guidance recommend for the General Operating Certificate?

1. Operators only need to be trained on how to select the appropriate mode of DSC or NBDP.
2. Training should include receiver adjustment only for DSC and transmitter adjustment only for NBDP.
3. Practical training should be given in the operational techniques for transmitter and receiver adjustment.

A-9 The distress alert or call and subsequent messages shall be sent only on the authority of the person responsible for the ship carrying the mobile station or the mobile earth station.

(設問) Who is responsible for authorizing distress calls and the messages immediately after the calls?

1. Such messages can only be sent from mobile stations or ship earth stations by the navigator in charge.
2. Any member of the crew can send a distress call and become the person responsible for the distress communication.
3. The person in charge of the ship carrying the mobile station or mobile earth station for such communications is the person responsible.

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10.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 カメは過剰な水中騒音によって一時的に聴力を失う経験をすることがあると、新たな研究で明らかにされている。この現象は、イルカや魚のような他の海洋動物では以前に指摘されていたが、爬虫類では広く理解されておらず、水生のカメに対する、これ迄とは別の潜在的なリスクを明確に示している。水中の騒音公害と呼ばれるこの大音量の音は、通過する船や沖合の建設工事によって引き起こされうるものである。

New research shows turtles can experience (ア) hearing loss from an excess of underwater noise. This (イ), previously noted in other marine animals (ウ) dolphins and fish, was not widely understood for reptiles and underscores another (エ) risk for aquatic turtles. This high volume of sound, referred to as underwater noise pollution, can be (オ) by passing ships and offshore construction.

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|-------------|---------------|---------------|--------------|
| 1. behavior | 2. caused | 3. consisting | 4. heard |
| 5. instant | 6. original | 7. phenomenon | 8. potential |
| 9. such as | 10. temporary | | |

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10.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 MEGURI2040で知られる「無人運航船プロジェクト」の一部として、日本が5回目の実証実験を完了した。そのプログラムは2月に始まり、コンテナ船やフェリーを使って操縦や着岸や離岸を含む無人自律操船の様々な側面の実証実験を行った。最近の実験では、内航貨物船が4日間に及ぶ長距離航海を行ったが、そこにはひどく混雑した航路の航海も含まれていた。

Japan has (ア) the fifth demonstration and test as part of its Fully Autonomous Ship Program known as MEGURI2040. Starting in February, the program demonstrated different (イ) of unmanned autonomous ship operations including (ウ), docking, and departure using containerships and ferries. In the (エ) test, a coastal cargo ship was sent over long distances during a four-day period, which included navigation through heavily (オ) waterways.

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|-------------|-----------------|--------------|---------------|
| 1. aspects | 2. completed | 3. congested | 4. earliest |
| 5. latest | 6. maneuvering | 7. overflown | 8. propelling |
| 9. surfaces | 10. uncompleted | | |

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10.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 EPIRB（非常用位置指示無線標識）は、SAR（捜索救難）当局に対して警報信号を送るとともに、救助実施機関が遭難船舶へホーミングするのを可能にする。それは海水に接することによって自動的に、または手動によって起動させられる。406MHz EPIRBはコスパス・サーサット衛星を使用するものであり、特定の船舶においてはその搭載が要求される。

An EPIRB (Emergency Position-Indicating Radio Beacon) transmits a signal that (ア) SAR (Search and Rescue) authorities and allows rescue (イ) to home in on the distressed vessel. It is (ウ) automatically upon (エ) to the sea or manually. 406MHz EPIRBs use Cospas-Sarsat satellites and are required on (オ) certain vessels.

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|---------------|---------------|--------------|-------------|
| 1. activated | 2. alerts | 3. board | 4. deck |
| 5. encourages | 6. engines | 7. explosion | 8. exposure |
| 9. facilities | 10. motivated | | |