

英語

I 次の会話文の①～⑤の（ ）に入れるのに最も適切な語または句を、それぞれ a～d のうちから一つ選んで記号で答えなさい。(ただし、文頭に来るべき語も、選択肢では小文字で書いてあります。)

- ① A: I can't find my phone!
B: You () left it in the taxi.
a. must b. might have
c. should d. would have
- ② A: What's your plan for the weekend?
B: I'm going hiking, () it doesn't rain.
a. unless b. in case c. although d. provided
- ③ A: Is this the museum you told me about?
B: Yes! It's definitely worth ().
a. visiting b. visited c. to visit d. to be visited
- ④ A: Have you heard about Bob? He hasn't arrived at the meeting yet.
B: () would be a shame.
a. not his coming b. do not come
c. being not d. his not coming
- ⑤ A: Do you think we'll finish our project by this Friday?
B: It depends on () quickly everyone works.
a. that b. what c. how d. whether

Ⅱ 次の会話文を読んで、文中の⑥～⑩に入る最も適切なものを、それぞれ a～e のうちから一つ選んで記号で答えなさい。(ただし、文頭に来るべき語も、一人称主格の“I”以外、選択肢では小文字で書いてあります。)

Ms. Tanaka: Before we start today's lesson, I asked Yuki to tell us a little about her experience studying abroad. Yuki?

Yuki: Thanks, Ms. Tanaka. Hi everyone. I studied in Canada for three months last year, and (⑥).

Ms. Tanaka: Thanks, Yuki. If anyone has questions for her, feel free to ask.

Taro: Wow, that sounds amazing. Was it (⑦)?

Yuki: Yes, it was. I was really nervous at first, especially about speaking English every day.

Taro: I think I'd be nervous too. How did you manage?

Yuki: At first, (⑧), but people were very kind. I also kept a small notebook of new words and expressions. That helped a lot.

Taro: That's a smart idea. Did you stay with a host family?

Yuki: Yes, and they were wonderful. They taught me about Canadian culture and even took me on a long road trip up into the mountains.

Taro: That road trip sounds really exciting! (⑨).

Yuki: Oh yeah, it was. We drove from Vancouver to the Rocky Mountains. The scenery was amazing—so many mountains, lakes, and forests. We even saw a bear from the car!

Taro: That must've been unforgettable.

Yuki: It was! We stayed in a small cabin and went hiking every day. I learned so much, not just English, but also how

much (⑩).

Taro: That sounds like a dream. Do you want to go abroad again?

Yuki: Definitely. I'd love to go back and maybe study at a university there in the future.

Ms. Tanaka: Thank you, Yuki. That was very inspiring. I hope your story encourages others to try studying abroad and explore new cultures, too.

- a. it must have been a long drive
- b. your first time going overseas
- c. it was one of the best experiences of my life
- d. people in Canada enjoy nature
- e. I made a lot of mistakes

III

次の文章を読んで、後の設問に答えなさい。

Why is Japan's earthquake alert chime scary? Composer shares sound's science

TOKYO—When an earthquake measuring a lower 5 or stronger on the 7-point Japanese seismic intensity scale is predicted, public broadcaster NHK airs an emergency earthquake alert chime on TV and radio, known for its distinctive melody. Even in noisy environments, this sound is clear and can evoke a sense of fear. But why is that?

The chime was created by Tohru Ifukube, 79, professor emeritus at the University of Tokyo who specializes in welfare engineering. He is also the nephew of the late Akira Ifukube, renowned for composing the main theme of the movie “Godzilla.”

According to Ifukube, the alert chime uses a melody where the pitch changes rapidly in a short period. Sound travels as vibrations, which are converted into electrical signals in the inner ear and sent to the brain. This process allows the brain to extract changes in sound, making the chime easy to hear even amid background noise or when hearing ability ^⑭is diminished. Such sounds with rapid frequency modulation are known as “FM sounds,” and natural examples include babies’ cries and the calls female monkeys use to attract males. “Among mammals, FM sounds act as stimuli to signal danger,” Ifukube explains.

NHK commissioned Ifukube to create the chime in 2007, with the core

requirements being that the listener feel a sense of urgency, that it wouldn't ^⑮induce discomfort or anxiety, that it be audible in noisy environments, and even by those with mild hearing impairments. Searching for a melody that met these criteria, he hit upon his graduate research on FM sounds.

“Rather than a buzzer sound, I want music that carries a message,” Ifukube thought. His attention then turned to the first chord of the third movement of his uncle Akira’s symphony “Sinfonia Tapkaara.” By changing the key, the chord’s notes became “C, E, G, B-flat, D-sharp.” The D-sharp added tension, so he decided to make this chord the base of the chime.

The final selection was narrowed down to five candidates, and an evaluation experiment was conducted with 19 participants, including those with congenital severe hearing loss, age-related hearing loss, children and adults. The current chime, which includes dissonance, was chosen.

“Tapkaara” in the Ainu language means “stand up and dance.” Ifukube remarked, “Stand up and evacuate. It was a perfect fit for the chime,”

【出典】 Mainichi Japan

<https://mainichi.jp/english/articles/20250519/p2a/00m/0sc/008000c>

【注】 lower 5 or stronger : 震度5弱以上 seismic intensity scale : 震度

evoke : 呼び起こす professor emeritus : 名誉教授 renowned : 有名な

amid : 〜の中で modulation : 抑揚, 変調 impairments : 損失, 欠損

chord : コード, 和音 congenital : 生まれつきの dissonance : 不協和音

問1 本文の内容に合致するように、⑪～⑬の各質問の答えとして最も適切なものを、それぞれ a～d のうちから一つ選んで記号で答えなさい。

- ⑪ Why is Japan's earthquake alert chime considered scary or urgent?
- a. Because it was modeled after emergency sounds in the U.S.
 - b. Because it includes loud explosions.
 - c. Because it plays a siren followed by spoken instructions.
 - d. Because it uses FM sounds, which mammals associate with danger.
- ⑫ How did Ifukube decide on the notes for the earthquake chime?
- a. He used an old Japanese folk melody known for its intensity.
 - b. He selected notes randomly after testing listener reactions.
 - c. He changed the key of a chord from his uncle's symphony.
 - d. He copied an alarm from his engineering research that is used by the military.
- ⑬ Why was the final version of the chime chosen?
- a. It was the most popular melody in a nationwide survey.
 - b. It performed best in a test with people of various ages and hearing abilities.
 - c. It was very similar to a traditional Japanese evacuation tune.
 - d. It used both the frequencies and melodies recommended by medical experts.

問2 下線部⑭, ⑮の内容を最もよく表している英語を, それぞれ a ~ d のうちから一つ選んで記号で答えなさい。

⑭ is diminished

- a. has become smaller or weaker
- b. improved over time
- c. delayed in arrival
- d. has remained completely unchanged

⑮ induce

- a. protect from danger
- b. entertain someone with effort
- c. cause to happen
- d. cause something to slow down