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# 外 国 語

英 語

(問題部分 1 ～12 ページ)

注意 解答はすべて答案用紙の指定のところに記入しなさい。

外国語 (英 語) 125 点

I Read the text and answer the following questions. (35)

In many countries around the world, it is common for the state to ask its citizens if they will volunteer to be organ donors. Now, organ donation is one of those issues that bring out strong feelings from many people. On the one hand, it's an opportunity to turn one person's loss into another person's salvation. But on the other hand, it's more than a little perplexing to be making plans for your organs that don't involve you. It's not surprising, therefore, that different people make different decisions, nor is it surprising that rates of organ donation vary considerably from country to country. It might surprise you to learn, however, how much cross-national variation there is. In a study conducted a few years ago, two psychologists, Eric Johnson and Dan Goldstein, found that ( X ) at which citizens consented to donate their organs varied across different European countries, from as low as 4.25 percent to as high as 99.98 percent. What was  
even more striking about these differences<sup>(1)</sup> is that they weren't scattered all over the spectrum, but rather were clustered into two distinct groups — one group that had organ-donation rates in the single digits and teens, and one group that had rates in the high nineties — with almost nothing in between.

What could explain such a huge difference? That's the question I put to a classroom of bright college undergraduates not long after the study was published. Actually, what I asked them to consider was two anonymous countries, A and B. In country A, roughly 12 percent of citizens agree to be organ donors, while in country B, 99.9 percent do. So what did they think was different about these two countries that could account for the choices of their citizens? Being smart and creative students, they came up with lots of possibilities. Perhaps one country was secular while the other was highly religious. Perhaps one had more advanced medical care, and better success rates at organ transplants, than the other. Perhaps the rate of accidental death was  
(2)

higher in one than another, resulting in more available organs. Or perhaps one had a highly socialist culture, emphasizing the importance of community, while the other prized the rights of individuals.

All were good explanations. But then came the curveball. Country A was in fact Germany, and country B was . . . Austria. My poor students were puzzled — what on earth could be so ( Y ) about Germany and Austria? But they weren't giving up yet. Maybe there was some difference in the legal or education systems that they didn't know about? Or perhaps there had been some important event or media campaign in Austria that had encouraged support for organ donation. Was it something to do with World War II? Or maybe Austrians and Germans are more different than they seem. My students didn't know what the reason for the difference was, but they were sure it was *something* ( ア ) — you don't see extreme differences like that by accident. Well, no — but you can get differences like that for reasons that you'd never expect. And for all their creativity, my students never guessed the real reason, which is actually absurdly (3) ( イ ): In Austria, the default choice is to be an organ donor, whereas in Germany the default is not to be. The difference in policies seems ( ウ ) — it's just the difference between having to mail in a simple form and not having to — but it's enough to push the donor rate from 12 percent to 99.9 percent. And what was true for Austria and Germany was true across all of Europe — all the countries with very high rates of organ donation had opt-out policies, while the countries with low rates were all opt-in.

- 1 Fill in the blanks ( X ) and ( Y ) with the most suitable word you can find in the first paragraph for ( X ) and the third paragraph for ( Y ).

2 Choose the most suitable word below to fill in the blanks ( ア ) to ( ウ ). Write the letters (A) to (D) that correspond to your answer.

- |                   |                 |
|-------------------|-----------------|
| (ア) (A) big       | (B) simple      |
| (C) trivial       | (D) nonsensical |
| (イ) (A) important | (B) advanced    |
| (C) simple        | (D) meaningless |
| (ウ) (A) big       | (B) advanced    |
| (C) trivial       | (D) nonsensical |

3 Explain the underlined part marked (1) in Japanese, using around 70 characters. Punctuation should be counted as one character.

4 Translate the underlined sentence marked (2) into Japanese.

5 Explain “the real reason” in the underlined part marked (3) in Japanese, using around 60 characters. Punctuation should be counted as one character.

## II Read the text and answer the following questions. (35)

Take a look at the following list of numbers: 4, 8, 5, 3, 9, 7, 6. Read them aloud. Now look away and spend twenty seconds memorizing that sequence before saying them out aloud again.

If you speak English, you have about a 50 percent chance of remembering that sequence perfectly. If you're Chinese, though, you're almost certain to get it right every time. Why is that? Because as human beings we store digits in a memory loop that runs for about two seconds. We most easily memorize whatever we can say or read within that two-second span. And Chinese speakers get that list of numbers—4, 8, 5, 3, 9, 7, 6—right almost every time because, unlike English, their language allows them to fit all those seven numbers into two seconds.

That example comes from Stanislas Dehaene's book *The Number Sense*. As Dehaene explains:

Chinese number words are remarkably ( ǎ ). Most of them can be uttered in less than one-quarter of a second (for instance, 4 is “sì” and 7 “qī”). Their English equivalents—“four,” “seven”—are longer: pronouncing them takes about ( ¼ ) of a second. The memory gap between English and Chinese apparently is entirely due to this difference in length. <sup>(1)</sup>In languages as diverse as Arabic, Chinese, English and Hebrew, there is a correlation between the time required to pronounce numbers in a given language and the memory span of its speakers. In this domain, the prize for the efficacy goes to the Cantonese dialect of Chinese, whose brevity grants residents of Hong Kong an excellent memory span of 10 digits.

It turns out that there is also a big difference in how number-naming systems in Western and Asian languages are constructed. In English, we say

fourteen, sixteen, seventeen, eighteen, and nineteen, so one might expect that we would also say oneteen, twoteen, threeteen, and fiveteen. But we don't. We use a different form: eleven, twelve, thirteen, and fifteen. Similarly, we have forty and sixty, which sound like the words they are related to (four and six). But we also say fifty and thirty and twenty, which sort of sound five and three and two, but not really. And, for that matter, for numbers above twenty, we put the "decade" first and the unit number second (twenty-one, twenty-two), whereas for the teens, we do it the other way around (fourteen, seventeen, eighteen). The number system in English is highly ( う ). Not so in China, Japan, and Korea. They have a logical counting system. Eleven is *tén*-one. Twelve is *ten*-two. Twenty-four is *two*-*tens*-four and so on.

That difference means that Asian children learn to count much ( え ) than American children. Four-year-old Chinese children can count, on average, to forty. American children at that age can count only to fifteen, and most don't reach forty until they're five. By the age of five, in other words, American children are already a year ( お ) their Asian counterparts in the most fundamental of math skills.

The regularity of their number system also means that Asian children can<sup>(2)</sup> perform basic functions, such as addition, far more easily. Ask an English-speaking seven-year-old to add thirty-seven plus twenty-two in her head, and she has to ( か ) the words to numbers (37 + 22). Only then can she do the math: 2 plus 7 is 9 and 30 and 20 is 50, which makes 59. Ask an Asian child to add three-tens-seven and two-tens-two, and then the necessary equation is right there, embedded in the sentence. No number translation is necessary: It's five-tens-nine.

1 Choose the most suitable word below to fill in the blanks ( あ ) to ( か ). Write the letters (A) to (D) that correspond to your answer.

- |     |                  |                 |               |               |
|-----|------------------|-----------------|---------------|---------------|
| (あ) | (A) fast         | (B) quick       | (C) long      | (D) brief     |
| (い) | (A) one-third    | (B) one-quarter | (C) one-fifth | (D) one-sixth |
| (う) | (A) standardized | (B) irregular   | (C) developed | (D) countable |
| (え) | (A) later        | (B) faster      | (C) shorter   | (D) slower    |
| (お) | (A) behind       | (B) late        | (C) advanced  | (D) ahead     |
| (か) | (A) assign       | (B) compare     | (C) stick     | (D) convert   |

2 Translate the underlined sentence marked (1) into Japanese.

3 Explain why such is the case with Asian children in the underlined part marked (2) in Japanese.

4 Write ○ for true statements and × for false statements.

- (1) According to the author, if the counting system were logical, “oneteen” would be theoretically more appropriate than “eleven” in English.
- (2) American children have to wait until the age of five before they can learn to count faster than their Chinese counterparts.
- (3) Chinese speakers can remember more digits than English speakers because they have a longer memory loop.
- (4) Unlike in English, in Chinese “decade” units precede number units in both the teens and the twenties.
- (5) It is highly probable that Chinese speakers in Hong Kong have a slightly shorter memory span than those in other areas of China.

III Read the text and answer the following questions. (30)

I walked for half an hour without sighting a habitation. Then, just off the road, I saw a small frame cottage with a porch and a window lighted by a lamp. I tiptoed\* onto the porch and looked in the window; an elderly woman with soft white hair and a round pleasant face was sitting by a fireside reading a book. There was a cat curled in her lap, and several others slumbering\* at her feet.

[ 1 ]

I knocked at the door, and when she opened it I said, with chattering teeth: "I'm sorry to disturb you, but I've had a sort of accident; I wonder if I could use your phone to call a taxi."

[ 2 ]

"Oh, dear," she said, smiling. "I'm afraid I don't have a phone. Too poor. But please, come in." And as I stepped through the door into the cozy\* room, she said: "My goodness, boy. You're freezing. Can I make coffee? A cup of tea? I have a little whiskey my husband left — he died six years ago."

[ 3 ]

While she fetched it I warmed my hands at the fire and glanced around the room. It was a cheerful place occupied by six or seven cats of varying alley-cat colors. I looked at the title of the book Mrs. Kelly — for that was her name, as I later learned — had been reading: it was *Emma* by Jane Austen, a favorite writer of mine.

[ 4 ]

When Mrs. Kelly returned with a glass of ice and a dusty quarter-bottle of bourbon, she said: "Sit down, sit down. It's not often I have company. Of course, I have my cats. Anyway, you'll spend the night? I have a nice little guest room that's been waiting such a long time for a guest. In the morning you can walk to the highway and catch a ride into town, where you'll find a garage to fix your car. It's about five miles away."

[ 5 ]

When I explained the truth of the matter, she responded indignantly: "You did exactly the right thing. I wouldn't set foot in a car with a man who had sniffed a glass of wine. That's how I lost my husband. Married forty years, forty happy years, and I lost him because ( X ). If it wasn't for my cats..." She stroked an orange tabby\* purring\* in her lap.

[ 6 ]

We talked by the fire until my eyes grew heavy. At last: "Forgive my babbling on. You have no idea how much pleasure it gives me. But it's way past your bedtime. I know it is mine."

(2) She escorted me upstairs, and after I was comfortably arranged in a double bed under a blissful load of pretty scrap-quilts\*, she returned to wish me goodnight, sweet dreams. I lay awake thinking about it. What an exceptional experience — to be an old woman living alone here in the wilderness and have a stranger knock on your door in the middle of the night and not only open it but warmly welcome him inside and offer him shelter. If our situations had been reversed, I doubt that I would have had the courage, to say nothing of the generosity.

- (Notes) tiptoe: to walk silently and stealthily  
slumbering: sleeping  
cozy: comfortable  
tabby: a kind of cat  
purr: to make a quiet and continuous sound  
scrap-quilt: a decorative cover for a bed, made with leftover scraps of many different materials and patterns

1 Where do the following passages go? Choose the number [ 1 ] to [ 6 ] in the text.

[あ] I said a little whiskey would be very welcome.

[い] I wondered aloud how she could live so isolatedly, without transportation or a telephone; she told me her good friend, the mailman, took care of all her shopping needs. "Albert. He's really so dear and faithful. But he's due to retire next year. After that I don't know what I'll do. But something will turn up. Perhaps a kindly new mailman. Tell me, just what sort of accident did you have?"

2 Choose the most appropriate sentence from (A) to (D) for the blank ( X ).

- (A) he drank himself to death
- (B) a drunken man beat him to death in a bar
- (C) he was too drunk to notice a fire on the stove
- (D) a drunken driver ran him down

3 Which of the following expressions is closest in meaning to the underlined expressions marked (1) and (2). Write the letters (ア) to (エ) that correspond to your answer.

(1) It's not often I have company.

(ア) I often need someone to help me.

(イ) Utility meter has not been checked for long.

(ウ) It is rare I have a visitor here.

(エ) I am neglecting my business these days.

(2) I know it is mine.

(ア) I've got to go to bed by now.

(イ) It is my pleasure to have conversation with you.

(ウ) It is still early for me to go to bed.

(エ) This is how I spend my time in bed.

4 In the underlined part marked (3), in what way did the narrator think Mrs. Kelly's experience to be exceptional? Explain in Japanese.

5 Translate the underlined sentence marked (4) into Japanese.

IV Read the text and answer the following questions. (25)

There are several disadvantages with renewable energy. First, it is difficult to generate the quantities of electricity that are as large as those produced by traditional methods such as using coal, natural gas or nuclear energy. This may mean that we need to reduce the amount of energy we use or simply build more energy facilities.

The second problem with renewable energy sources is the reliability of supply. Renewable energy often relies on the weather for its source of power. Hydro generators need rain to fill dams to supply flowing water. Wind turbines need wind to turn the blades, and solar panels need clear skies and sunshine.

Third,

### Cost of energy (yen/kWh\*) 2011

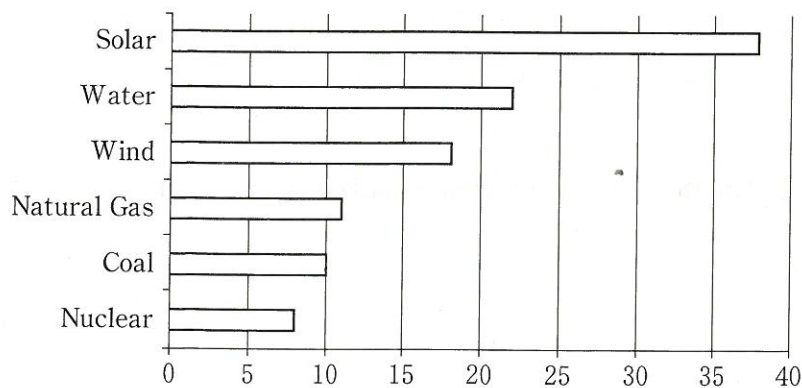


Figure 1 (Adapted from『日本経済新聞』2012年1月23日夕刊)

(Note) kWh: kilo watt hour

- 1 Complete the last paragraph based on the data presented in Figure 1.  
Answer in English, using around 40 words.
  
- 2 Despite all of these disadvantages, what advantages does renewable energy have compared to traditional energy sources? Answer in English, using around 50 words.