## 令和5年度 入学試験問題

# 外 国 語

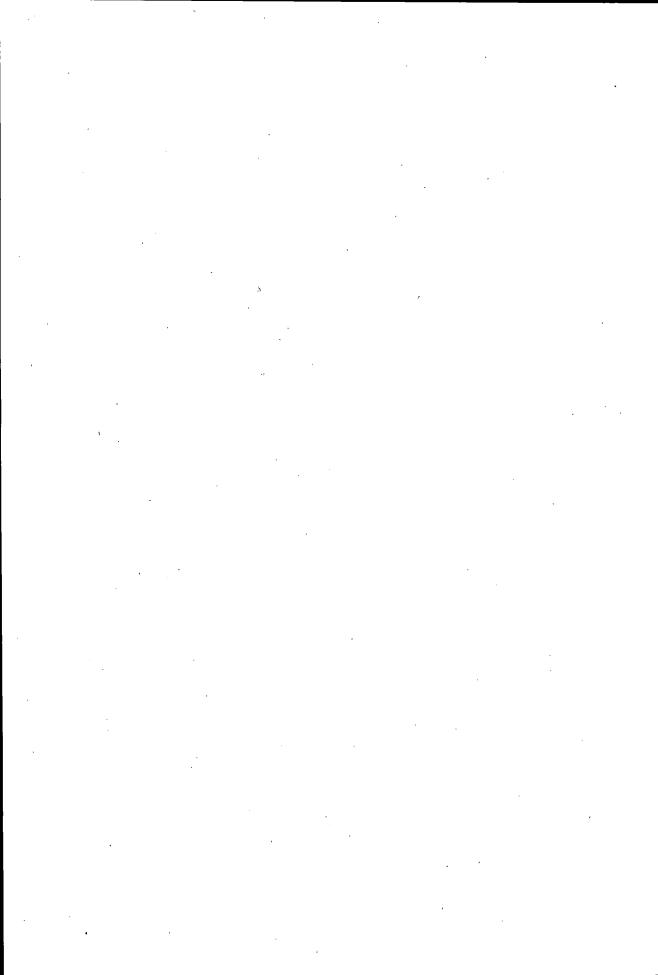
### 英 語

2月25日(土) 10:00—11:45

(全学部共通)

### 注 意 事 項

- 1. 試験開始の合図があるまで、この冊子と答案紙を開いてはいけない。
- 2. 問題冊子のページ数は、18ページである。
- 3. 問題冊子とは別に答案紙が7枚ある。
- 4. 落丁, 乱丁, 印刷不鮮明の箇所などがあったら, ただちに申し出よ。
- 5. 解答にかかる前に答案紙左端の折り目をていねいに切り離し、答案紙のそれぞれの所定の2箇所に受験番号を記入せよ。
- 6. 解答は答案紙の所定の欄に記入せよ。所定の欄以外に書いた答案は無効である。
- 7. 答案紙の右寄りに引かれた縦線より右の部分には、受験番号のほかは記入してはいけない。
- 8. 問題冊子の余白は草稿用として使ってもよい。
- 9. 試験終了後, 退室の許可があるまでは, 退室してはいけない。
- 10. 答案紙は持ち帰ってはいけない。問題冊子は持ち帰ってもよい。



【 次の英文を読み、下記の設問に答えなさい。 (\*の付いた語は注を参照すること)

It is parent's duty. The same thousands of years ago. (2)The pictographs, found in a cave in southwest Egypt near the Libvan border, appear to show swimmers in different phases of a stroke—to my eyes, it looks like the breaststroke. At the time these were painted, the climate was more temperate in this part of the world; there were lakes and rivers where now there is little more than desert. Archaeologists have postulated that the scenes depict an aspect of everyday life at [a, depended, how, learning, on, survival, swim, time, to, when]. One swam to reach the other side of a body of water—perhaps in pursuit of food, or to flee a warring tribe, or to move to safer ground—and one swam simply for sustenance: to catch fish. (3) This makes sense, since most people lived near the water. As Plato observes in the Laws\*, not knowing how to swim was considered as much a sign of ignorance as not knowing how to read. Socrates

put it more starkly: swimming "saves a man from death." Parents taught their children, and presumably children learned from one another. The same obligation has held true for many centuries in Judaism. As stated in the Talmud\*, parents must teach their children three essential things: the Torah\*, how to make a living, and how to swim.

The ability to swim was a life-and-death matter for fishermen or boatmen, and a mark of a proper education for the higher

for fishermen or boatmen, and a mark of a proper education for the higher classes. In both Greece and Egypt, however, swimming was not among the events at athletic games. Exactly why this would be is never stated in ancient texts, naturally; no more than we would feel compelled to justify today why typing or car driving is not in the Olympics. My sense is that swimming was

seen as more of a utilitarian skill—the "athletic equivalent of the alphabet," as the historian Christine Nutton has put it—and given that nearly everyone knew how to swim, women included, it fell outside an exclusively male sphere. Moreover, swimming was not a spectacular event, like ancient Greek or Roman boxing or pankration\*. And unlike sprints or field events, with their displays of speed and strength, it was not conducive to spectators. While swimming may not have been a competitive event, its value as an all-around exercise was apparently appreciated. Both the ancient historian Pausanias and the writer Philostratus noted that the four-time Olympic boxing champion Tisandrus supplemented his training at the gymnasium with long-distance swimming: in Philostratus's words, "his arms carried him great distances through the sea, training both his body and themselves."

Mastering swimming is an essential prerequisite for certain types of military service today. 

⑤ In his treatise on military training, *De re militari\**, Vegetius recommends, "Every young soldier, without exception, should in the summer months be taught to swim; for it is sometimes impossible to pass rivers on bridges, but both fleeing and pursuing armies are often obliged to swim over them. A sudden melting of snow or fall of rain often makes them overflow their banks, and in such a situation, the danger is as great from ignorance in swimming as from the enemy. The cavalry as well as the infantry, and even the horses and the servants of the army, should be accustomed to this exercise, as they are all equally liable to the same accidents."

⑥ It exerted influence on the training of the military and nobility up through the nineteenth century. In *The Book of the Courtier*, Baldassarre Castiglione endorses the importance of swimming for a gentleman, citing Vegetius for backup. However, neither author explains how to swim. 16 (5) 世紀になるまで、実用的な水泳の手引書は現れなかった。Probably, there was simply not much demand for them.

【出典: Hayes, Bill. Sweat: A History of Exercise. Kindle Edition. Bloomsbury, 2022. 出題の都合上,原文の一部に変更を加えている。】

### 注

・ the *Laws* 『法律』(プラトンの著作)

the Talmud タルムード(ユダヤ教の口伝・説話の集成)

the Torah トーラー(律法)

pankration 古代ギリシャで行われた格闘競技

De re militari 『軍事論』(ウェゲティウスの著作)

#### 設問

- 1. 下線部(1)の文意がもっとも適切に通るように括弧内の10語を並べ替え、2番目、7番目、10番目の語をそれぞれ書き出しなさい。
- 2. 下線部(2)を日本語に訳しなさい。
- 3. 下線部(3)を日本語に訳しなさい。ただし, "this" の具体的内容を文脈に即して明らかにすること。
- 4. 下線部(4)の Tisandrus と水泳との関わりについて、パウサニアスとピロストラトスはどのようなことを述べているか。25 字以内(句読点も含む)の日本語で答えなさい。
- 5. 下線部(5)を英語に訳しなさい。

- 6. ① ~ ⑥ に入るもっとも適切 な文を下記の(ア)~(ク)から選び、記号で答えなさい。ただし、各記号は1回しか 使用できない。
  - (7) A similar perspective held true in ancient Egypt, where most people lived on the Nile or on one of the canals branching from the river.
  - (4) Among the Greeks, it seems to have been expected that everyone—man, woman, and child—should be able to swim.
  - (ウ) In this context, historical evidence for people learning how to swim is limited.
  - (x) Our earliest recorded evidence of swimming comes in a group of cave paintings created during the Neolithic period, dating to about ten thousand years ago.
  - (オ) This was more broadly the case in antiquity.
  - (力) Through the centuries, swimming continued to be an important skill for women.
  - (‡) Vegetius's treatise was translated into Italian, French, and German during the Renaissance.
  - (7) Whereas parents teach their children to ride a bicycle for the sheer fun of it, for the sense of freedom and independence it brings, swimming is taught, first of all, as a basic safety measure.

# Ⅲ 次の英文を読み、下記の設問に答えなさい。 (\*の付いた語は注を参照すること)

Drifting along ocean currents in their mother's shadow, newborn bottlenose dolphins\* sing to themselves. They create a unique siren of squeaks, known as a signature whistle. Scientists have likened this to a human name.

In contrast to most mammals, dolphins cannot use voices as their identifying feature because they become distorted at different depths. [ 7 ] that, they invent a melody—a pattern of sound frequencies held for specific lengths of time—that they use to identify themselves for the rest of their lives. Bottlenose dolphins (*Tursiops truncatus*) can even imitate the whistles of their friends, calling out their names if they are lost. Additional information, such as reproductive status, can be conveyed by changing the volume of different parts of the whistle, not [ 1 ] how people emphasize certain words to add nuance. But how do dolphins decide what to call themselves? By eavesdropping on six dolphin populations in the Mediterranean Sea, researchers at the University of Sassari in Italy revealed that differences in signature whistles were mostly determined by their habitat and population size, [ 1 ] a study published in May in *Scientific Reports*. Sound travels differently in distinct environments, so dolphins create signature whistles that best suit their surroundings, say the study authors.

Dolphins living among seagrass, the researchers found, gave themselves a short, shrill name compared to the baritone sounds of dolphins living in muddier waters. [ エ ], small pods displayed greater pitch variation than larger groups, which may help with identification when the probability of repeated encounters is higher.

But not all scientists view ( ① ) and group size as the main drivers of signature whistles. Jason Bruck, a biologist at Stephen F. Austin State University, believes that ( ② ) play a crucial role. He points to a study of

dolphins living in Sarasota Bay, Florida, where dolphins created unique signature whistles using inspiration from community members. Crucially, the dolphins tended to base their whistles on cetaceans\* that they spent less time with. "This avoids the problem of every dolphin being named John Smith," Bruck says.

Laela Sayigh, a research specialist at Woods Hole Oceanographic Institution in Massachusetts, agrees. From her work studying cetacean communication for over three decades, Sayigh estimates that 30 percent of dolphins' signature whistles are based on their mother's whistle, while others invent a name that is nothing like their mom's and closer to that of their (③). Others still produce a unique whistle that is distinct from any of their family members. Marine researchers still do not know why some bottlenoses base their whistles on family members and others on lesser acquaintances.

Sayigh believes that factors such as ( ④ ) play a role. For example, mothers who interact more with others expose their calves to a greater variety of signature whistles, giving them more sounds to add to their repertoire. Demonstrating this in wild populations, [ 🛪 ], proves tricky.

"It's very difficult to figure out what forces are influencing a calf over the period of signature whistle development, which requires extensive observations," Sayigh says. "You are watching only a tiny fraction of the actual developmental period. [ 力 ] there is some kind of crucial interaction, you might not be capturing it."

While the signature whistles of female dolphins will barely change throughout their life, male dolphins may adjust their whistle to mirror the signature whistle of their best friend. Male-male pair bonds are common in certain populations, and can be stronger than the bond between a mother and her calf. "We see this in Sarasota all the time," Sayigh says. "These male (⑤) are extremely strong pair bonds where the males are together all the time and they frequently converge on their signature whistles."

In addition to an individual signature whistle, dolphins may invent a shared whistle to promote ( ⑥ ) within their group. Dolphins often broadcast the group whistle when coordinating their behavior with others, such as foraging for food and guarding mates.

Brittany Jones, a scientist at the National Marine Mammal Foundation who specializes in dolphin communication, has studied a group of eight dolphins that have been trained by the U.S. Navy. Five of the dolphins, who have lived together for 21 years, shared a group whistle, but they each kept enough distinctive characteristics to identify themselves.

"These shared whistles, although very similar between dolphins, were slightly more similar within an individual [ ‡ ] between dolphins," Jones says. This suggests that other dolphins may be able to identify who is making the whistle, suggesting it conveys both group and individual identity.

Like the human equivalent, signature whistles contain a lot of information.

Scientists believe there is still more to unlock, including whether dolphins use their impressionist skills to deceive and whether they talk about their friends behind their back. Uncovering the complexity of how these animals use signature whistles may reveal just how imaginative their inner world really is.

【出典:Barker, Holly. "How Do Dolphins Choose Their Name?" *Discover Magazine*, 6 July 2022. 出題の都合上,原文の一部に変更を加えている。】

注.

bottlenose dolphin バンドウイルカ
cetacean クジラやイルカ等の動物

#### 設 問

1.	下線部(1)について,	なぜ科学者な	こちがそう	してきたのか,	30 字以内(句読点も
	含む)の日本語で説	明しなさい。		•	

2.		ア	]~[	キ	]に入るもっ	とも	適切	な表現	を選び,	記号で答え	なさい。	文
	頭	に入	る場合	も小	文字で表記し	てま	<b>5る</b> 。	各記号	は1回し	か使用でき	ない。	

(A) according to

(B) compared to

(C) however

(D) if

(E) instead of

(F) like

(G) meanwhile

(H) thus

(I) unlike

3. ( ① )~( ⑥ )に入るもっとも適切な表現を選び、記号で答えなさい。ただし、各記号は1回しか使用できない。

(A) alliances

(B) changes

(C) cohesion

(D) habitat

(E) independence

(F) siblings

(G) sociability

(H) social factors

4. 下線部(2)の具体的内容を 30 字以内(句読点も含む)の日本語で説明しなさい。

5. 下線部(3)を日本語に訳しなさい。

- 6. 空欄 あ に入る一文として最も適切なものを以下から 選び、記号で答えなさい。
  - (A) They allow dolphins to communicate with each other about a variety of matters, including food and danger.
  - (B) They are a method that dolphins use to coordinate their hunting and mate-guarding activities.
  - (C) They are used by dolphins to identify family members in various environments, such as muddy or clear water.
  - (D) They reflect the dolphins' social status and location, such as the depth of water.
  - (E) They reveal dolphins' family ties and friendships, as well as aspects of their environment.

III Three international students at a university in Japan, Izabel from Brazil, Melati from Indonesia, and Oliver from Australia, are queuing up to have lunch together in the cafeteria. Read the conversation and answer the following questions.

Oliver: Strewth! The queue's a bit slow, isn't it? Decided what you're going to have today, have you, Melati? I've got my eye on a double portion of chicken nuggets to start with, followed by a bowl of sukiyaki or the pork katsudon set.

Melati: Wow! Have you got hollow legs?

Oliver: No, it's just that I was late for early morning soccer practice today and didn't have time for breakfast, so I'm starving.

Melati: Oh, right. Well, I think I'm going to [ 7 ] for the vegetable curry and rice. What are you going to have, Izabel?

Izabel: Well, the tofu salad looks tempting.

Oliver: Tofu? Seriously?

**Izabel:** Yes, why not?

Oliver: That white, wobbly stuff? Yuck! It looks so bland and unappetizing.

Melati: You should try it, Olly. I've had it and it's really delicious, especially with the Japanese-style dressing. It's very healthy, too.

Oliver: You're not both vegetarians, are you?

Melati: I'm not, no. What about you, Izzy?

Izabel: I'm not yet either, but given the way the world is going, I think I'm definitely moving in that direction.

Melati: You're not the only one. Several of my environmentally-conscious friends have turned vegetarian in the last few years.

Oliver: Hold on a second! What has being a vegetarian got to [ 1] with the state of the planet?

Melati: Well, for a start, giving up on meat could do a lot to reduce

deforestation, which is a big problem in my country.

Oliver: You don't [ ウ ]?

**Izabel:** Mine, too. Brazil loses a huge amount of its natural forest in the Amazon every year, and much of the land is used for raising cattle for beef. I'm getting more and more concerned about the loss of biodiversity, the soil erosion and desertification, not to mention the effect it all has on global warming.

Oliver: Well, maybe, but I play a lot of sport so I need plenty of protein.

And we Aussies do [ \_ \_ ] our barbecues. There's no way I could stop eating meat.

Melati: Well, perhaps, in a sense, you don't have to.

Oliver: How [オ]?

**Melati:** There are several meat substitutes available now, usually made from plants like soybeans.

Oliver: Oh no, we're back to tofu again!

Melati: No, this is totally different. About a year ago, a big hamburger chain in my country started selling hamburgers made with soybeans. They had an amazingly meaty taste and texture and were a huge hit, especially with young people.

Oliver: Soybeans, eh? Well, I'm not sure.

**Izabel:** How about fungus meat then?

Oliver: What? You've lost me there. Are you talking about mushrooms or something?

**Izabel:** I mean mycoprotein. It's a kind of protein that you get from fungi. Professor Sato was talking about it in class just the other day, don't you remember?

Oliver: Um, I think I overslept and missed that one.

Melati: Oh really, Oliver! You [ カ ], your trouble is ...

Oliver: All right, all right, you don't need to go on about it, Mel. What

did she say, anyway?

**Izabel:** Well, according to Professor Sato, if we could just replace twenty percent of the world's beef consumption with mycoprotein, we could halve the destruction of the planet's forests over the next thirty years.

Melati: Yes, and it would [ ‡ ] greenhouse gas emissions by half too.

Oliver: And you reckon it really is like meat?

Yes. And Professor Sato said that products made with it [ // ] you up more than the usual sources of protein like those chicken nuggets of yours.

**Melati:** And even though mycoprotein is rich in fiber, it is low in calories and fat so it is good for people who are on a diet.

Oliver: Well, in that case, I wouldn't mind giving it a try. Look, there's a suggestion box for the cafeteria over there. I'll drop a message in asking them to add some mycoprotein dishes to the menu.

Izabel: Great idea!

Oliver: OK, but wait! First things first. The queue's moving, so come on, grab a tray!

### **QUESTIONS**

- 1. Which of the options below most closely matches the meaning of Melati's question to Oliver in the underlined part after (1)? Indicate your answer by writing ONE alphabet letter on the answer sheet.
  - (A) Do you always eat so much meat?
  - (B) Have you got holes in your legs?
  - (C) How can you eat so much?
  - (D) What's wrong with your legs?
  - (E) Why are you so thin?
- 2. Select the most appropriate word from the list below to match the emotions expressed by phrases (a) to (e). Answer using the numbers (1) to
  - (9). Do not use any number more than ONCE.
  - (1) amusement
- (2) comfort
- (3) confusion

- (4) disbelief
- (5) encouragement
- (6) enthusiasm

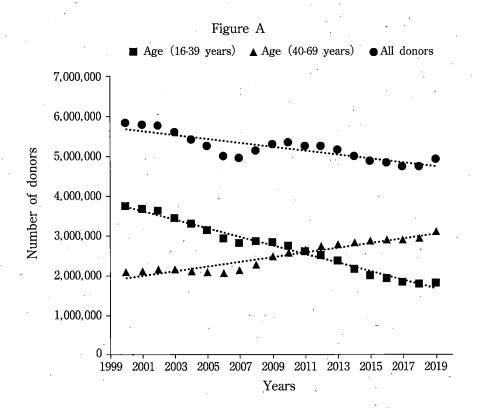
(7) envy

- (8) expectation
- (9) irritation

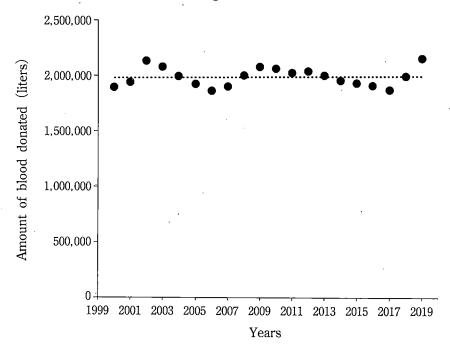
- 3. Based on the conversation, which TWO of the following can be inferred to be most likely true?
  - (A) A hamburger chain in Indonesia invented the protein made from mushrooms.
  - (B) Izabel and Oliver have been taking the same class.
  - (C) Izabel has tried mycoprotein meat and thought that its taste was very similar to that of regular meat.
  - (D) Izabel is considering becoming a vegetarian.
  - (E) Oliver has given his suggestion to the cafeteria.
  - (F) Oliver thinks that fungus meat is disgusting.
  - (G) Professor Sato's textbook shows that mycoprotein is nutritious.
  - (H) The three students are concerned about the environment in their respective countries.
- 4. Select the most appropriate word from the list below to fill in the blanks (7) to (7). Answer using the numbers (1) to (8). Do not use any number more than ONCE.
  - (1) come (2) cut (3) do (4) fill
  - (5) go (6) know (7) love (8) say
- 5. In the underlined phrase after (2), Melati says that several of her environmentally-conscious friends have turned vegetarian in the last few years. There are many other things that people do to try to reduce their impact on the environment. Give one example and explain how you think it helps to reduce the impact. Your answer should be between 25 and 35 English words in length. (Indicate the number of words you have written at the end of your answer. Do not count punctuation such as commas or periods as words.)

## (空白ページ)

IV Every year, the Japanese Red Cross Society collects blood from voluntary donors and delivers blood products to those who need them. Figure A below shows how the numbers of younger (between the ages 16 and 39) and older (between the ages 40 and 69) blood donors have changed in Japan from 2000 to 2019, as well as how the number of all blood donors has changed for the nineteen-year period. Figure B shows the total amount of blood donated in Japan from 2000 to 2019. Linear trend lines are shown in dotted lines.







Adapted from: Ministry of Health, Labour and Welfare website https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/000063233.html

#### **QUESTIONS**

- 1. Describe what the three trend lines in Figure A show. Write approximately 30 to 50 words. (Indicate the number of words you have written at the end of your answer. Do not count punctuation such as commas or periods as words.)
- 2. Describe the trend depicted in Figure B, and explain how the amount of blood donated per donor has changed since 2000 by referring to both Figures A and B. Write approximately 30 to 50 words. (Indicate the number of words you have written at the end of your answer. Do not count punctuation such as commas or periods as words.)