## 令和7年度 一般選抜(後期)

11時30分~13時00分

## 英 語

 問題冊子1~10頁

 解答用紙1~2頁

## 注 意 事 項

- 1. 試験開始の合図 [チャイム] があるまで、この注意をよく読むこと。
- 2. 試験開始の合図 [チャイム] があるまで、問題冊子は表紙を上に、解答用紙は裏面を上に置き、 問題冊子は開かないこと。
- 3. 試験開始の合図 [チャイム] の後に問題冊子ならびに解答用紙の全ページの所定の欄に 受験番号と氏名を記入すること。
- 4. 解答はかならず定められた解答用紙を用い、はっきり読みやすく記入すること。 また解答欄以外には何も書かないこと。
- 5. 試験開始60分以内および試験終了前10分間は、途中退場を認めない。
- 6. 途中退場、質問、トイレ、体調不良等で用件がある場合は、挙手のうえ監督者の指示に従うこと。
- 7. 問題冊子に、落丁や乱丁があるときは、挙手のうえ交換を求めること。
- 8. 試験終了の合図 [チャイム] があったときは、ただちに筆記用具を置くこと。
- 9. 試験終了の合図 [チャイム] の後は、解答用紙は裏返しにして、通路側に置くこと。 なお、途中退場の場合は解答用紙を裏返しにして、問題冊子の上に置くこと。
- 10. 問題冊子は持ち帰ること。なお、途中退場する場合は問題冊子を持ち帰れない。
- 11. その他、監督者の指示に従うこと。

名
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Alone in a small, padded room, Sascha Frühholz took a deep breath and let out an ear-splitting scream. He was there, in part, because of The Beatles. Frühholz, a cognitive neuroscientist at the University of Oslo in Norway, couldn't get videos of the band's 1960s concerts out of his mind. As the music begins to bop, the audience reacts with intense joy, shouting and screaming. There was even a name for this: Beatlemania. "These people don't have any other way to express this overwhelming happiness," he says.

While the observation may seem obvious, scientific studies on human screams have focused almost exclusively on vocalizations of agony, such as pain and fear—and Frühholz was bothered by the fact that researchers had not paid attention to other types of screams.

(A) Motivated by the gap in research, Frühholz and his colleagues conducted a study to characterize the screams we utter for a range of emotions, negative and positive.

Katarzyna Pisanski, a voice researcher at the University of Lyon, who was not part of the study, notes that the study of non-verbal vocalizations in humans is relatively new. Most early research focused on speech and language, unique to humans. However, growing interest in non-verbal sounds like screams and laughs corresponds to studies of similar sounds in other animals. These diverse expressions may provide insights into human evolution. "(B)We need to study what makes us the same to understand how we are different," Pisanski says.

The research team initially recorded their own screams while they attempted to identify the typical range of emotions that cause these intense utterances. They came up with various scenarios, like thinking of how you'd scream if your favorite soccer team won the championship or if you were being attacked by a stranger in a dark alley, and then attempted to recreate them. They eventually decided on six different screams they wanted to evaluate: pain, anger, fear, joy, passion, and sadness. They recruited 12 volunteers to scream with each emotion. The volunteer was provided with a description of an emotion-evoking scenario for each scream type. Each person would also record a "neutral scream" for comparison, which is just an intense utterance of "ahh." They then instructed the participant to let loose in the soundproof room.

Pisanski comments that one challenge with this type of study is that it must be done

in a lab setting since it is not morally acceptable to cause pain or fear in study participants. So, the options to study screams are limited: they can either be acted or pulled from previous recordings like those found on YouTube. Acted screams are often more uniform than natural ones, but they remain fairly accurate, she notes. "(c)Considering the difficulty in obtaining genuine vocalizations, it's the best we can do."

The team analyzed recordings of each scream by looking at 88 acoustic features, such as measurements characterizing pitch and intensity. They trained a computer algorithm on the various features that differed between screams and found it could correctly categorize screams nearly 80 percent of the time. The most accurate classification was for joy, with 89.7 percent correct classifications.

(D) The team then studied another group of participants who listened to the recorded screams. The team measured how quickly they could categorize the emotion that triggered the scream by clicking an option on a computer screen. In one set of trials, they tested people's ability to select the scream type from all six emotions or neutral, and in another, the listeners only had the option of picking one of two scream types. The team also created maps of brain activity for people listening to playbacks of the screams using functional magnetic resonance imaging (fMRI). Here, they were interested in three specific brain systems and regions—the auditory system, the limbic system, and the frontal cortex in the fMRI scans.

The researchers unexpectedly found that listeners could most quickly recognize the non-alert screams, and in particular, joy. They more slowly recognized screams from negative emotions, including pain, fear, and anger. Similar patterns also held for fMRI analysis, which showed non-alert screams sparked greater activity in listeners' brains compared to the alert screams. Exactly why, however, remains uncertain.

This unexpected strong recognition of joy challenges our traditional understanding of screams. The finding runs counter to the believed evolutionary function of a scream as a way to readily convey danger to anyone in earshot. It's possible the listeners' environment can affect how each scream is perceived. If listeners imagine standing in a dark alley before hearing a scream, that might influence how a scream is interpreted regardless of the screamer's emotion.

In a perhaps less-surprising result, the study also found that positive screams were the ones most frequently misidentified as alert screams. Such a mistaken identification of the emotion behind a scream, it seems, would be beneficial to humans through time. As Pisanski says, [

(E)

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More research will help scientists further break down the human response to different types of screams. While a scream may seem a far cry from everyday words, studying such nuances in vocalizations and what these non-verbal sounds communicate to others is important to tracing language to its roots, Pisanski says. "To understand the evolution of human vocal communication and ultimately how we came to speak," she says, "we really need to understand all of (F)these differences."

- [1] 下線(A)の the gap が示す内容を明確に説明しなさい。
- [2] 下線(B)で Pisanski が示唆していることは何か最も適切なものを選択肢から 選び、記号で答えなさい。
  - a. Previous studies on differences in screams were fundamentally inadequate.
  - b. Studying human vocal expressions makes researchers clarify the differences in screams.
  - c. The researchers should shift away from studying diverse expressions similar in humans and animals.
  - d. Understanding shared features helps reveal species-specific characteristics.
- [3] 最初の研究協力者を募集する前に、研究チームが行なったことを 100~120 字 以内で説明しなさい。
- [4] 下線(C)の理由を説明しなさい。
- [5] 下線(D) に関して以下を答えなさい。
  - (a) 実験の手順として実施しなかったことを選び、記号で答えなさい。
    - a. Analyzing participants' vocal responses when identifying the emotional content of screams
    - b. Creating brain activity maps while participants listened to screams
    - c. Having participants choose between two different types of screams in some trials
    - d. Measuring reaction times for identifying scream types from multiple options

- (b) 実験結果が示すことは何か50~80字以内で説明しなさい。その際、関連 する結果にも言及すること。
- [6] 空欄(E) に入る最も適切な表現を選択肢から選び、記号で答えなさい。
  - a. "better late than never."
  - b. "better loud than quiet."
  - c. "better fast than slow."
  - d. "better safe than sorry."
- [7] 下線(F)が示す最も適切なものを選択肢から選び、記号で答えなさい。
  - a. the contrasts between nuances among verbal and non-verbal sounds
  - b. the factors influencing the development of language
  - c. the variations in vocalizations and their role in communication
  - d. the types of emotions that humans developed through evolution

Read the following passage and answer the questions. ②の問題文は著作権の都合により 掲載しておりません。

②の問題文は著作権の都合により 掲載しておりません。

- 1. Based on the reading, choose two <u>incorrect</u> statements about the experimental procedure used in the study (the underlined part (I)).
  - (a) Some baby birds heard both road noise and zebra finch songs for 9 nights.
  - (b) The volume of the sounds played was kept about as loud as a conversation in a bar or city traffic.
  - (c) The baby birds were placed in a room, separated from their parents, where they received the sound exposure.
  - (d) The researchers raised the temperature inside the incubator by 5 degrees at night.
  - (e) The parents naturally raised their baby birds in their nests during the day.
- 2. Choose the best place [A], [B], [C], or [D] for the following sentence.

For example, it could be that hearing constant sound without any rhythm—unlike song—is somehow stressful.

- 3. Which of the following is correct regarding the hatching results in the study?
  - (a) Larger eggs and smaller eggs had similar hatching rates in this study, which is different from the usual pattern.
  - (b) Larger eggs had a higher hatching rate than smaller eggs, as expected.
  - (c) Average-size eggs exposed to traffic noise were more likely to hatch than those exposed to the sound of song.
  - (d) The experiment showed that traffic noise had no effect on hatching rates.
- 4. Choose the result that could <u>not</u> be true to fill in the blank.

The birds exposed to noise [ ].

- (a) grew slower than those exposed to song
- (b) had a higher number of offspring as adults compared to those exposed to song
- (c) had a lower concentration of red blood cells
- (d) showed signs of cellular stress indicated by damaged tips of chromosomes
- 5. Which choice fits gap (II) the best?
  - (a) of patients with auditory problems or cognitive disabilities
  - (b) in urban areas for elderly people living near highways
  - (c) of young children and families with pet animals at home
  - (d) in hospital environments for pregnant mothers and babies
- 6. What might the study lead to in the future?
  - (a) Exploring ways to increase public awareness of noise pollution
  - (b) Determining appropriate levels and methods for noise reduction
  - (c) Creating technologies to control noise in both natural and urban environments
  - (d) Assessing the danger to the environment in urban areas

3 Answer the following questions.			
I. Read the two short situations below. Choose the most logical sentence for each gap.			
1.			
"Can you buy some batteries on your way home? The TV remote is dead, and I can't change the channel," my brother said on the phone.			
I was having dinner with my friends, so I said I wouldn't be home for a while. He was silent for a bit, and then he hung up the phone, saying, "( A )"			
Two hours later, I had totally forgotten about that phone call and arrived back home. My brother was watching TV in the living room. I went straight to my room and tried to turn on the air conditioner. But the remote didn't work.			
Then, I figured out what happened. I ran to the living room, threw the door open, and yelled, "( B )"			
( A )			
(a) That's a relief.	(b) Tell me about it.		
(c) You owe me one.	, ,		
(c) Tou owe me one.	(d) Never mind then.		
( B )			
(a) The AC remote has been missing sinc	e last night!		
(b) Give me back the batteries for the AC	remote!		
(c) Hey, did you forget to buy what I aske	ed for?		
(d) I wish you'd thrown away those batter	ries!		
2.			
"I can't stop eating these cookies; they're so good had just returned from her business trip to Irela	od," I said while chewing. My friend, Kiyo, nd.		
"I'm glad you enjoy them," said Kiyo.			
"( C ) I really like all the stuff you've given me: the Eiffel Tower mug, organic aroma oil, raspberry chocolates, and the keychain on my bag"			
"Actually, this time, I asked the staff what the r	nost popular souvenir in the store was."		
"Oh well, even so, you decided to buy it. I always carry the souvenir from Hong Kong, th keychain with a little LED light on it. Not only is it convenient, but it's also cute."			
"Oh, that one. ( D ) I guess I always bu	uy things I like."		
"Well then, maybe our tastes are the same." We laughed.			

( C	<ul> <li>(a) You always have good taste in selecting souvenirs.</li> <li>(b) I'm just hoping you won't feed me anymore.</li> <li>(c) How much do you usually spend on souvenirs?</li> <li>(d) I've never been to Paris.</li> </ul>
( E	<ul> <li>(a) It was surprisingly cheap, so I thought it wasn't good for me.</li> <li>(b) I bought the same one for myself as well.</li> <li>(c) I was not going to buy it, but the staff kept recommending it.</li> <li>(d) I know you've been collecting keychains.</li> </ul>
	1
	( A )
	Icome to Our Protected Natural Area! Please help us preserve this beautiful ironment. Before your tour, please read the following.  Stay on Marked Paths  To protect the fragile ecosystem, do not step off marked paths. Straying from the designated trails can damage plant life, disturb wildlife, and contribute to soil erosion. Please respect the natural landscape and ( 1 ).
	( B )
	Preserve the natural beauty by leaving all the plants untouched. Many plant species here are rare and ( 2 ). Removing even a few can have a lasting impact on the environment and disrupt local biodiversity.
>	Prevent Wildfires  Campfires and other open flames are strictly prohibited. Fires can quickly spread and ( 3 ) the natural habitat, endangering plants, animals, and visitors.
>	Respect Wild Animals Feeding wildlife disrupts their natural behavior and can harm the ecosystem. Human food is not suitable for wild animals and ( 4 ), leading to dangerous encounters. Keep a safe distance and observe them without interference.

Thank you for your cooperation! Enjoy your visit responsibly.

(b)	stay here for all the living things			
(c)	have to be pulled out for wild animals			
(d)	take a lot of pictures of the beautiful paths			
(e)	may make them dependent on visitors			
(f)	play a crucial role in maintaining the ecosystem			
(g)	only specific rare plants are suitable for them			
(h)	cause severe damage to			
2. Choose the most appropriate title for gap ( A ).				
(a)	Welcome Message from the Director			
(b)	Simple Rules for a Big Impact			
(c)	Overview of Ecosystem Diversity			
(d)	Guidelines for Visitors' Safety			
3. Choose the most appropriate subtitle for gap ( B ).				
(a)	Keep Off Rare Species			
(b)	Prohibit Biodiversity			

(c) No Bringing in Seeds(d) Do Not Pick Plants

1. Choose the most appropriate phrase for gaps (1)-(4).

(a) remain on approved pathways at all times

以上