

令和5年度 入学者選抜学力検査問題

英 語

注 意 事 項

- 1 試験開始の合図があるまで、問題冊子及び解答用紙の中を見てはいけません。
- 2 解答用紙は3枚あります。
- 3 試験中に問題冊子の印刷不鮮明、ページの落丁・乱丁及び解答用紙の枚数の過不足や汚れ等に気がついた場合は、手を挙げて監督者に知らせてください。
- 4 試験開始後、すべての解答用紙に受験番号、志望学部及び氏名を記入してください。受験番号の記入欄は各解答用紙に2箇所あります。
- 5 解答はすべて解答用紙の指定された解答欄に記入してください。
- 6 問題冊子の余白は適宜使用してください。
- 7 各問題の配点は200点満点としたときのものです。
- 8 試験終了後、問題冊子は持ち帰ってください。

I Read the following essay and answer the questions. (配点 68)

IN THE 1940s, a Dutch scientist named Niko Tinbergen performed a series of experiments that transformed our understanding of what motivates us. Tinbergen — who eventually won a Nobel Prize for his work — was investigating herring gulls*, the gray and white birds often seen flying along the seashores of North America.

Adult herring gulls have a small red dot on their beak*, and Tinbergen noticed that newly hatched chicks* would peck this spot whenever they wanted food. To begin one experiment, he created a collection of fake cardboard* beaks, just a head without a body. When the parents had flown away, he went over to the nest and offered these dummy beaks to the chicks. The beaks were obvious fakes, and he assumed the baby birds would reject them altogether.

However, when the tiny gulls saw the red spot on the cardboard beak, they pecked away just as if it were attached to their own mother. They had a clear preference for those red spots — as if they had been genetically programmed at birth. Soon Tinbergen discovered that the bigger the red spot, the faster the chicks pecked. Eventually, he created a beak with three large red dots on it. When he placed it over the nest, the baby birds went crazy with delight. They pecked at the little red patches as if it was the greatest beak they had ever seen.

Tinbergen and his colleagues discovered similar behavior in other animals. For example, the greylag goose* is a ground-nesting bird. Occasionally, as the mother moves around on the nest, one of the eggs will roll out and settle on the grass nearby. Whenever this happens, the goose will waddle* over to the egg and use its beak and neck to pull it back into the nest.

Tinbergen discovered that the goose will pull *any* nearby round object, such as a billiard ball or a lightbulb, back into the nest. The bigger the object, the greater their response. One goose even made a tremendous effort to roll a volleyball back and sit on top. Like the baby gulls automatically pecking at red dots, the greylag goose was following an instinctive rule: *When I see a () object nearby, I must () it back into the (). The () the () object, the harder I should try to get it.*

It's like the brain of each animal is preloaded* with certain rules for behavior, and when it comes across an exaggerated version of that rule, it lights up like a Christmas tree. Scientists refer to these exaggerated cues as *supernormal stimuli*. A supernormal stimulus is a heightened* version of reality — like a beak with () or an egg the size of () — and it elicits a stronger response than usual.

Humans are also prone* to fall for exaggerated versions of reality. Junk food, for example, drives our reward systems into a frenzy*. After spending hundreds of thousands of years hunting and foraging* for food in the wild, the human brain has evolved to place a high value on salt, sugar, and fat. Such foods are often calorie-dense and they were quite rare when our ancient ancestors were roaming* the savannah. When you don't know where your next meal is coming from, eating as much as possible is an excellent strategy for

survival.

Today, however, we live in a calorie-rich environment. Food is abundant*, but your brain continues to crave* it like it is scarce*. Placing a high value on salt, sugar, and fat is no longer advantageous to our health, but the craving persists because the brain's reward centers have not changed for approximately fifty thousand years. The modern food industry relies on stretching our Paleolithic* instincts beyond their evolutionary purpose.

A primary goal of food science is to create products that are more attractive to consumers. Nearly every food in a bag, box, or jar has been enhanced in some way, if only with additional flavoring. Companies spend millions of dollars to discover the most satisfying level of crunch in a potato chip or the perfect amount of fizz* in a soda. Entire departments are dedicated to optimizing* how a product feels in your mouth — a quality known as *orosensation*. French fries, for example, are a potent combination — golden brown and crunchy on the outside, light and smooth on the inside.

Other processed foods enhance *dynamic contrast*, which refers to items with a combination of sensations, like crunchy and creamy. Imagine the gooeyness* of melted cheese on top of a crispy pizza crust, or the crunch of an Oreo cookie combined with its smooth center. With natural, unprocessed foods, you tend to experience the same sensations over and over — *how's that seventeenth bite of kale* taste?* After a few minutes, your brain loses interest and you begin to feel full. But foods that are high in dynamic contrast keep the experience novel and interesting, encouraging you to eat more.

Ultimately, such strategies enable food scientists to find the “bliss* point” for each product — the precise combination of salt, sugar, and fat that excites your brain and keeps you coming back for more. The result, of course, is that you overeat because hyperpalatable* foods are more attractive to the human brain. As Stephan Guyenet, a neuroscientist* who specializes in eating behavior and obesity*, says, “We’ve gotten too good at pushing our own buttons.”

(Adapted from James Clear, *Atomic Habits: An Easy & Proven Way to Build Good Habits & Break Bad Ones*, Penguin Random House, 2019)

*注

herring gull: セグロカモメ	beak: くちばし
chick: ひよこ	cardboard: 段ボール
greylag goose: ハイイロガン	waddle: よちよち歩く
preload: 前もってインストールする	heightened: 高められた
prone: ~しがちな	frenzy: 興奮状態
forage: 探し回る	roam: 歩き回る
abundant: 豊富な	crave: 切望する
scarce: 乏しい	Paleolithic: 石器時代の
fizz: 炭酸 (の泡)	optimize: 最適化する
gooseyness: ねっとりしていること	kale: ケール (野菜)
bliss: 無上の幸福	hyperpalatable: 過度に美味しい
neuroscientist: 神経科学者	obesity: 肥満

Questions:

1. Fill in the blanks to summarize the first three paragraphs. Use a maximum of four words for ① and ④. Use one word for the other blanks.

Tinbergen conducted (①) to find out that (②) herring gulls were (③) with a tendency to (④) on the beak of their parents whenever they were in need of (⑤). This behavior was observed even if the beak was (⑥), and the speed was (⑦) when the spot was (⑧).

2. The following sentences explain the underlined “instinctive rule” in Paragraph 5. Fill in the blanks ① to ④ according to the context of the passage. Put just one word for each blank.

When I see a (①) object nearby, I must (②) it back into the (③). The (④) the (①) object, the harder I should try to get it.

3. The following is the explanation of “*supernormal stimuli*” taken from Paragraph 6. Complete the following sentence with words from the passage. Use a maximum of four words for the blanks ① and ②. Give examples from the case of herring gulls and greylag geese.

A supernormal stimulus is a heightened version of reality — like a beak with (①) or an egg the size of (②) — and it elicits a stronger response than usual.

4. Fill in the blanks to best summarize the second paragraph from the last. Use one word for the blanks ① to ③.

Food with high dynamic contrast can produce (①) and exciting sensations so that it can keep our (②) to (③) for a longer time.

5. When Stephan Guyenet says in the last line of this essay “We’ve gotten too good at pushing our own buttons,” which statement does he imply? Write the letter (a, b, c, or d) on your answer sheet.
- The most successful combination food scientists have found is ironically making us crave for more calories than needed to be healthy.
 - Food scientists have worked hard to find the best way to genetically improve food taste and helped us consume more energy-rich food.
 - Food scientists have objectively found the perfect balance of quality and quantity.
 - Repeated experience of the same food would humorously encourage food consumption.
6. Circle T if the statement is True, F if the statement is False according to the text.
- Before starting the experiment, Niko Tinbergen had predicted that the herring gulls could tell whether the beak was real.
 - Enhanced food is designed to maximize the nutrition and calorie-value of such food.
 - Niko Tinbergen won a Nobel Prize in 1940.
 - Humans still seek fatty food just like our ancestors in prehistoric ages.
 - Graylag geese move their eggs in and out of the nest as a daily habit.

II 以下の文章を読み、設問に答えなさい。(配点 54)

When I arrived at my hotel in New Delhi, I was hot and, more important, hungry. Although I would spend that week conducting classes for a group of Indian executives at the swank* five-star Oberoi hotel, the Indian business school hosting me put me up in a more modest and much smaller residence several miles away.⁽¹⁾ Though quiet and clean, it looked like a big concrete box with windows, set back from the road and surrounded by a wall with a locked gate. This will be fine, I thought as I dropped my bag off in my room. Staying in a simple hotel just steps from the bustle* of workaday* New Delhi will make it that much easier for me to get the flavor of the city.⁽²⁾

Lunch was at the top of my agenda. The very friendly young man behind the concierge* desk jumped to attention when he saw me approaching. I asked about a good place to eat. “There is a great restaurant just to the left of the hotel. I recommend it highly,” he told me. “It is called Swagat. You can’t miss it.”

It sounded perfect. I walked out to the road and looked to the left. The street was a whirlwind* of colors, smells, and activities. I saw a grocery store, a cloth vendor, a family of five all piled onto one motor scooter, and a bunch of brown-speckled* chickens pecking in the dust next to the sidewalk. No restaurant.

“You didn’t find it?” the kind concierge asked in a puzzled tone as I re-entered the hotel. This time the young man explained, “Just walk out of the hotel, cross the street, and the restaurant will be on your left. It’s next to the market. There is a sign. You can’t miss it,” he said again.

Well, apparently I could. I tried to do exactly as instructed, crossing the street immediately in front of the hotel and again looking to the left. As I saw no sign of the restaurant, I turned to the left and walked a while. It was a little confusing, as the street was jam-packed. After a minute or so, I came to a small side street full of people, food stalls, and women selling sandals and saris*. Was this the () the concierge mentioned?⁽³⁾ But after careful examination of what I felt to be all possible interpretations of “on your left,” I began to wonder if I was being filmed as a stunt* for some type of reality TV show*.⁽⁴⁾ I headed back to the hotel.

The concierge smiled kindly at me again, but I could tell he was thinking I really wasn’t very smart. Scratching his head in bewilderment* at my inability to find the obvious, he announced, “I will take you there.” So we left the hotel, crossed the street, turned to the left, and then walked for nearly ten minutes, weaving our way* through traffic on the bustling sidewalk and passing several side streets and countless heads of cattle on the way. At last, just beyond a large bank, perched* quietly over a fruit store on the second floor of a yellow stucco* building, I spotted a small sign that read SWAGAT.

As I thanked the concierge for his extreme kindness, I couldn’t help wondering why he hadn’t told me, “Cross the street, turn (①), walk nine minutes, look for the big (②) on the corner, and, when you see the big (③), look up to the second floor of the yellow stucco building for a sign with the (④) name.”⁽⁵⁾

And as this question floated through my mind, I could tell that the kindly concierge was wondering, “How will this poor, dim-witted woman possibly make it through the week?”⁽⁶⁾

(Adapted from Erin Meyer, *The Culture Map: Decoding How People Think, Lead, and Get Things Done Across Cultures*, PublicAffairs, 2014)

*注

swank: しゃれて高価な	bustle: 大騒ぎ
workaday: 仕事日の	concierge: コンシェルジュ (客の要望に対応する係)
whirlwind: 旋風	brown-speckled: 茶色のまだら模様の
sari: サリー (民族衣装)	stunt: 人目を引く行為
reality TV show: リアリティテレビ番組	
bewilderment: 当惑, うろたえ	weave one's way: 縫うように進む
perch: (高いところなどに) 位置する	stucco: 漆喰 (しっくい)

設 問

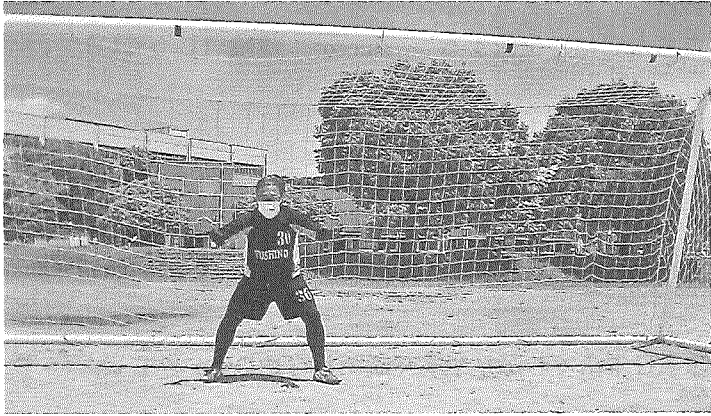
1. 下線部(1)を日本語に訳しなさい。
2. 下線部(2)の意味を日本語でわかりやすく説明しなさい。
3. 私 (I) は下線部(3)のように考えている。そのとき、私 (I) がいた場所が () に入る。
() に入る最も適切なものを以下から選び、その記号を書きなさい。
a. restaurant b. market c. gate d. hotel
4. 下線部(4)について、私 (I) はなぜこんな気持ちになったのか、“as a stunt for some type of reality TV show” の意味が分かるように具体的に日本語で説明しなさい。
5. 下線部(5)の空欄①～④に入れる語句として最も適切な組み合わせを以下から選び、その記号を答えなさい。
a. ① left ② market ③ fruit store ④ restaurant's
b. ① right ② market ③ fruit store ④ hotel's
c. ① left ② bank ③ fruit store ④ restaurant's
d. ① right ② market ③ bank ④ hotel's
e. ① left ② bank ③ fruit store ④ hotel's
f. ① right ② fruit store ③ bank ④ restaurant's
6. 下線部(6)を日本語に訳しなさい。

Ⅲ-1 以下の記事と会話の内容がつながるように、(1)~(8)の空所を4語以内の適切な英語で埋めなさい。ロンドン出身の Theodore は、ワシントン D. C. の大学に留学中です。アメリカ人の友だち William と会話しています。(配点 48)

SPORTY NEWS

IWC Considering Dropping Soccer from Next Games

Joe Sportsman
April 1



Concerns were raised yesterday by International Worldsport Commission (IWC) members about the sport of soccer. Supporters have declined in recent years, prompting officials to research the causes of the decline. According to studies, former soccer enthusiasts are growing impatient. Sports fans state that they used to go to soccer games to see their favorite teams score goals. However, many games end in a 0-0 tie, causing these impatient sports fans to switch to higher-scoring games such as basketball. Support for soccer has decreased enough for the IWC to seriously consider dropping it from the Worldsport games. The final decision whether to eliminate the sport or not is expected to be announced in September.

Conversation

William: I read some news that the IWC might drop soccer from the Worldsport games!

Theodore: Soccer? Do you mean football?

William: Oh, right. In the USA we (1)_____. Football for us is a completely different sport.

Theodore: Anyway, that's terrible! I'm not much of a football, uh, I mean soccer fan, but my parents are. Do you think it will happen?

William: Well, it said one problem with the sport is the (2) _____.
It's really hard to make a goal. It's not unusual for neither team to score at all. It's hard to keep a Worldsport game that might end in a tie, or no score for either team.

Theodore: Maybe they can make it easier to score goals. Have they tried that?

William: Yeah, years ago the official soccer authority tried to do that by making the goal posts a lot wider. That helped, but the scores are still very low.

Theodore: Maybe they can (3) _____ as two points?

William: That's a good idea, but if nobody scores a goal, the points will still be 0-0 tie.

Theodore: What if the goalkeeper can't (4) _____ like the rest of the players?

William: That's a good idea! Oh, but wait. If someone kicked a ball high into the goal, there's no way to (5) _____ except with the goalkeeper's head. That could be dangerous.

Theodore: I see the problems with that. Let's see. Maybe we should review the basic rules of soccer and see if any of them can be changed. First, players can only touch the ball with their feet, chest, or head. No hands (6) _____, except for the goalkeeper. I can't think of any simple changes for that.

William: Me neither. Also, there are 11 players on one team, one of the 11 players is the goalkeeper, who has to defend the goal. I don't think that could change.

Theodore: Next, there are two teams. Could there be three teams at the same time?

William: If three teams (7) _____, it would make the scores even lower than they are now.

Theodore: That's it!

William: What's "it"? Making the scores lower?

Theodore: No, the "one ball" problem. What if there were still two teams, but also two (8) _____ in play at the same time?

William: Hey! That's an idea that just might work!

Theodore: I could call some friends and we could try that idea out in the park tomorrow!

William: Sounds like fun!

Ⅲ-2 William と Theodore は IWC に新しい提案 (A) を送ったところ、返事 (B) が届きました。以下の(1)~(3)の内容を含んだ英語を解答用紙の所定の欄に記入し手紙を完成させなさい。(配点 30)

- (1) 検討の結果、ルール変更はできないこと
- (2) 新しいルールの作成と周知のための時間が不足すること
- (3) 参加チームが新しいルールに習熟する時間が必要であること

(A)

To the International Worldsport Commission,

We read a news article stating that the IWC is considering dropping soccer from the next Worldsports. The article said that the reason is due to how low the game scores are. We have an idea to fix that. We believe that is because there are many players, but only one soccer ball. Our idea is to play soccer with two soccer balls.

We tried playing it in our local park with friends, and enjoyed playing it this way. Other people saw our new style of soccer and thought it was a good idea also. In the last two months, four new teams have joined ours and we already have a new league. After adding a second ball to the game and adjusting the rules, winning game scores in our league average 63 points.

As soccer fans, we hope the IWC won't drop soccer as a Worldsport sport. We would be happy to send more details about the adjustments we suggest.

Cheers!

William Bhakta

Theodore Kiai

(B)

To William Bhakta and Theodore Kiai,

Thank you both for your very interesting idea. Many of us were fascinated by this suggestion. We believe that your new style of this sport would indeed raise the number of goals as you stated.

However, (1) _____ for several reasons. The main reason is that (2) _____. Besides that, (3) _____ before the next Worldsport games. In addition, we have not made a final decision about the sport yet, so it is too early to think about changing the rules.

If your sports leagues continue to gain popularity, I hope to consider this idea again for future Worldsport games.

Sincerely,

Olliver M. Pique,

International Worldsport Commission Director

