

## 令和 4 年度 入学試験問題

### 英 語

#### 注 意 事 項

1. この問題冊子は、試験開始の合図があるまで開いてはいけません。
2. 解答用紙は問題冊子とは別になっています。解答は解答用紙の指定されたところに記入しなさい。それ以外の場所に記入された解答は、採点の対象となりません。解答用紙は4枚あります。
3. 本学の受験番号をすべての解答用紙の指定されたところへ正しく記入しなさい。氏名を書いてはいけません。
4. この問題冊子は、表紙を含めて20ページあります。問題は4ページから16ページにあります。ページの落丁・乱丁及び解答用紙の汚れ等に気付いた場合は、監督者に申し出なさい。
5. 問題冊子の余白等は適宜利用しても構いませんが、どのページも切り離してはいけません。
6. この問題冊子は持ち帰りなさい。

1

次の英文を読んで以下の問に答えなさい。

The underlying nature of acoustic experience continues to be misunderstood by most people. Evidence of this was seen when, after a lecture to a general audience, one of the authors asked what is probably the world's oldest and most basic question involving consciousness: "If a tree falls in a forest, and no person or animal is present to hear it, does it make a sound?"

The audience was asked to vote yes or no by a simple show of hands. Some three-quarters of the lecture hall voted yes: by consensus opinion, the tree does make a sound even if no sentient being is nearby.

(1) This is the wrong answer. But it nicely illustrates the public's widespread confusion about sound—and indeed about consciousness in general.

When a tree falls, the physical fact of the massive trunk and countless limbs striking the ground produces disturbances in the air that envelops the scene. Rapid, complex pulsations in air pressure radiate in all directions, diminishing with distance. In events involving weighty enough objects (like falling trees) or great enough force (like an explosion), these air pressure changes can actually be felt on the skin as quick puffs of wind, which is why 耳 [ can, have, hearing-impaired, no, people, sensory experience, small ] if seated in front of the main stage speakers at a rock concert.

These air puffs are the physical occurrence that results from a tree falling. In and of themselves, they are silent.

But when they encounter the eardrums or tympanic membranes of humans or animals, they physically impart motion to this thin layer of tissue. Attached neurons respond to the resulting vibrations in these membranes by sending electrical signals to the brain, where many billions of cells are triggered to produce what we humans or animals experience as specific sounds.

Thus, (2) the sound is coming from inside the house. Noises are produced by our own neurons, which manifest their conscious experience. The noise of a tree falling is the end result of air pressure variations that push on tympanic membranes designed to wiggle in response,

but obviously none of this—save the (itself silent) air disturbance—happens if nobody is in the woods that day. This isn't a philosophy lesson, but a straightforward fact of physics and nature: the falling tree, in and of itself, cannot [ I ], because a sound is by definition a conscious experience.

What each conscious organism does with a given set of vibration-producing wind puffs is another matter. Humans are sensitive to sounds at frequencies from 20 to 20,000 Hz; the perception of a sound by organisms sensitive to a wider or different range may be quite unlike our own. There is no way to know whether what we experience as the deep, low rumble of distant thunder is perceived by a cat as a high-pitched whine. The inarguability of the subjective nature of conscious experience is further proof that it is a symbiotic phenomenon, an amalgam of “external” nature and ourselves. Of course, to be strictly accurate, even the “external” world of stimuli has no definite and independent existence outside of ( A ). People and animals likewise have no existence independent of a conscious observer, even if they may be that observer themselves.

(Source: Robert Lanza, Matej Pavšič, & Bob Berman, *The Grand Biocentric Design—How Life Creates Reality*)

問1 下線部(1)が示す音についての考えはどのようなものか。30字以内の日本語で説明しなさい。

問2 文中ア[ ]の中の語(句)を文意に沿うように正しく並べかえなさい。

問3 下線部(2)が表しているのはどのようなことか。40字以内の日本語で具体的に説明しなさい。

問4 論旨を踏まえて、空欄[ I ]に入れるのもっとも適切な3語からなる表現を本文中より抜き出しなさい。

問5 論旨を踏まえて、空欄( A )に入れるのもっとも適切な1語を次の①～⑤から選び、その番号を書きなさい。

- ① comprehension    ② consciousness    ③ expression  
④ impression        ⑤ knowledge

2

次の英文を読んで以下の間に答えなさい。

When we say that something is big—be it the visible universe or a human brain—we have to ask: Compared with what? The natural point of reference is the scope of everyday human life. This is the context of our first world-models, which we construct as children. The scope of the physical world, as revealed by ( a ), is something we discover when we allow ourselves to be born again.

By the standards of everyday life, the world “out there” is truly gigantic. That *outer plenty* is what we sense intuitively when, on a clear night, we look up at a starry sky. We feel, with no need for careful analysis, that the universe has distances vastly larger than our human bodies, and larger than any distance we are ever likely to travel. Scientific understanding not only supports but greatly expands that sense of ( b ).

The world’s scale can make people feel overwhelmed. The French mathematician, physicist, and religious philosopher Blaise Pascal (1623-1662) felt that way, and it gnawed at him. He wrote that “the universe grasps me and swallows me up like a speck.”

Sentiments like Pascal’s—roughly, “I’m *very* small, I make no difference in the universe”—are a common theme in literature, philosophy, and theology. They appear in many prayers and psalms. Such sentiments are a natural reaction to the human condition of cosmic ( c ), when measured by size.

The good news is that raw size isn’t everything. Our *inner plenty* is subtler, but at least equally profound. <sup>(1)</sup>We come to see this when we consider things from the other end, bottom up. There’s plenty of room at the bottom. In all the ways that really matter, we’re abundantly large.

In grade school, we learn that the basic structural units of matter are atoms and molecules. In terms of those units, a human body is huge. The number of atoms in a single human body is roughly  $10^{28}$ —one followed by 28 zeros: 10,000,000,000,000,000,000,000,000.

That is a number far beyond what we can visualize. We can name it—ten octillion—and, after some instruction and practice, we can learn to calculate with it. But it overwhelms ordinary ( d ), which is built on everyday experience, when we never have occasion to

count that high. Visualizing that many individual dots far exceeds the holding capacity of our brains.

The number of stars visible to unaided human vision, in clear air on a moonless night, is at best a few thousand. Ten octillion, on the other hand, the number of atoms within us, is about a million times the number of stars in the entire visible universe. In that very concrete sense, a universe dwells within us.

Walt Whitman (1819-1892), the big-spirited American poet, felt our inner largeness instinctively. In his “Song of Myself” he wrote, “I am large, I contain multitudes.” Whitman’s joyful celebration of abundance is just as grounded in objective facts as Pascal’s cosmic ( e ), and it is much more relevant to our actual experience.

The world is large, but we are not small. It is truer to say that there’s plenty of space, whether we scale up or down. One shouldn’t envy the universe just because it’s big. We’re big, too. We’re big enough, specifically, to contain the infinitely vast universe within our finite human minds. Pascal himself took comfort from <sup>(2)</sup>that insight, as he followed his lament that “the universe grasps me and swallows me up like a speck” with the consolation\* “[ I ].”

(Source: Frank Wilczek, *Fundamentals—Ten Keys to Reality*)

\* consolation: 慰め

問1 論旨を踏まえて、空欄( a )～( e )に入れるのもっとも適切な名詞を次の①～⑤から選び、その番号を書きなさい。ただし、同じ番号を繰り返して用いないこと。

① envy    ② insignificance    ③ intuition    ④ science    ⑤ vastness

問2 下線部(1)が意味するのはどのようなことか。thisの内容を明らかにしつつ、40字以内の日本語で説明しなさい。

問3 下線部(2)の内容を適切に言い表している5語からなるひと続きの表現を本文中より抜き出しなさい。

問4 論旨を踏まえて、空欄[ I ]に入れるのもっとも適切な表現を次のA～Dからひとつ選びなさい。

- A. but even within the solar system, all of Earth really is 'swallowed like a speck'
- B. but our solar system is a cozy little den
- C. but stars are much too diverse to serve as standard candles
- D. but through thought I grasp it

3

*Read the following text and answer the questions.*

The marketer's job does not end when the product is bought. After purchasing the product, the consumer will be satisfied or dissatisfied and will engage in postpurchase behavior of interest to the marketer. What determines whether the buyer is satisfied or dissatisfied with a purchase? The answer lies in the relationship between the *consumer's expectations* and the product's *perceived performance*. If the product falls short of expectations, the consumer is disappointed; if it meets expectations, the consumer is satisfied; if it exceeds expectations, the consumer is delighted.

The larger the gap between expectations and performance, the greater the consumer's dissatisfaction. This suggests that sellers should make product claims that faithfully represent the product's performance so that buyers are satisfied. 1 For example, Boeing's salespeople tend to be conservative when they estimate the potential benefits of their aircraft. They almost always underestimate fuel efficiency—they promise a 5 percent savings that turns out to be 8 percent. Customers are delighted with better-than-expected performance; they buy again and tell other potential customers that Boeing lives up to its promises.

Almost all major purchases result in cognitive dissonance, or discomfort caused by postpurchase conflict. After the purchase, consumers are satisfied with the benefits of the chosen brand and are glad to avoid the drawbacks of the brands not bought. However, every purchase involves compromise. Consumers feel uneasy about acquiring the drawbacks of the chosen brand and about losing the benefits of the brands not purchased. 2 Thus, consumers feel at least some postpurchase dissonance for every purchase.

Why is it so important to satisfy the customer? Such satisfaction is important because a company's sales come from two basic groups—*new customers* and *retained customers*. It usually costs more to attract new customers than to retain current ones, and the best way to retain current customers is to keep them satisfied. Customer satisfaction is a key to making lasting connections with consumers—to keeping and growing consumers and reaping their customer lifetime value. Satisfied customers buy a product again, talk favorably to others about the product, pay less attention to competing brands and advertising, and buy other

products from the company. **3** Many marketers go beyond merely *meeting* the expectations of customers—they aim to *delight* the customer. A delighted customer is even more likely to purchase again and to talk favorably about the product and company.

A dissatisfied customer responds differently. Whereas, on average, a satisfied customer tells 3 people about a good product experience, a dissatisfied customer gripes to 11 people. In fact, one study showed that 13 percent of the people who had a problem with an organization complained about the company to more than 20 people. **4** Clearly, bad word of mouth travels farther and faster than good word of mouth and can quickly damage consumer attitudes about a company and its products.

Therefore, a company would be wise to measure customer satisfaction regularly. It cannot simply rely on dissatisfied customers to volunteer their complaints when they are dissatisfied. Some 96 percent of unhappy customers never tell the company about their problem. Companies should set up systems that *encourage* customers to complain. In this way, the company can learn how well it is doing and how it can improve. The 3M Company claims that over two-thirds of its new-product ideas come from listening to customer complaints. But listening is not enough—the company also must respond constructively to the complaints it receives.

(Source: Philip Kotler, Gary Armstrong, John Saunders, & Veronica Wong, *Principles of Marketing*)

**Question 1** What leads to customer satisfaction? Choose the correct answer.

- A. Accurate product performance claims
- B. Benefits of the product not bought
- C. Cognitive dissonance
- D. Customers that live up to their promises
- E. Postpurchase behavior



- Question 2** What does the article NOT suggest? Choose the correct answer.
- A. Companies should avoid listening to customer complaints.
  - B. Companies want to keep customers satisfied.
  - C. Dissatisfied customers rarely complain to the company.
  - D. Satisfied customers are often loyal to the brand.
  - E. Satisfied customers talk favorably about the product.

- Question 3** How can companies best improve? Choose the correct answer.
- A. By advertising product benefits generously
  - B. By creating many more products than are necessary
  - C. By disregarding customer suggestions for improvements
  - D. By seeking out and reacting to complaints faithfully
  - E. By suppressing customer complaints

- Question 4** Look at the sentence below, which has been removed from the text. In what position  –  should it appear? Write the correct number in the box.

**Some sellers might even understate performance levels to boost consumer satisfaction with the product.**

- Question 5** *The text talks about postpurchase behavior.*

Think about some products you have bought that you were satisfied with. Choose one and give two specific reasons why you were satisfied with your purchase. Write your answer in English in the space provided.

4

次の英文を読んで以下の間に答えなさい。

Attractive things certainly should be preferred over ugly ones, but why would they work better? In the early 1990s, Japanese researchers studied different layouts of controls for ATMs, automated teller machines. All versions of the ATMs were identical in function, the number of buttons, and how they operated, but some had the buttons and screens arranged attractively. The Japanese found that the attractive ones were perceived to be easier to use.

In the early 1900s, Herbert Read, who wrote numerous books on art and aesthetics, stated that “it requires a somewhat mystical theory of aesthetics to find any necessary connection between ( I ) and ( II ),” and that belief is still common today. How could aesthetics affect how easy something is to use? Emotions change the way the human mind solves problems. So, if aesthetics would change our emotional state, that would explain the mystery.

Until recently, emotion was an ill-explored part of human psychology. Some people thought it an evolutionary leftover from our animal origins. Most thought of emotions as a problem to be overcome by rational, logical thinking. And most of the research focused upon negative emotions such as stress, fear, anxiety, and anger. Modern work has completely reversed <sup>(1)</sup>this view. Science now knows that evolutionarily more advanced animals are more emotional than primitive ones, the human being the most emotional of all. ( ア ), emotions play a critical role in daily lives, helping assess situations as good or bad, safe or dangerous. Emotions aid in decision making. Positive emotions are as important as negative ones—positive emotions are critical to learning, curiosity, and creative thought, and today research is turning toward this dimension. One finding particularly intrigued me: The psychologist Alice Isen and her colleagues have shown that being happy ( a ) the thought processes and facilitates creative thinking. Isen discovered that when people were asked to solve difficult problems, ones that required unusual “out of the box” thinking, they did much better when they had just been given a small gift—not much of a gift, but enough to make them feel good. When you feel good, Isen discovered, you are better at brainstorming, at examining multiple alternatives. And it doesn’t take much to make people feel good. All Isen

had to do was ask people to watch a few minutes of a comedy film or receive a small bag of candy.

When people are anxious they tend to ( b ) their thought processes, concentrating upon aspects directly relevant to a problem. This is a useful strategy in ( c ) from danger, but not in thinking of imaginative new approaches to a problem. Isen's results show that when people are relaxed and happy, their thought processes expand, becoming more creative, more imaginative.

These and related findings suggest the role of aesthetics in product design: Attractive things make people feel good, which ( ㄠ ) makes them think more creatively. With most products, if the first thing you try fails to produce the desired result, the most natural response is to try again, only with more effort. In today's world of computer-controlled products, doing the same operation over again is very unlikely to yield better results. The correct response is to look around and see what alternatives exist. The tendency to repeat the same operation over again is especially likely for those who are anxious or tense. This state of negative affect ( d ) people to focus upon the problematic details, and if this strategy fails to provide a solution, they get even more tense, more anxious, and increase their concentration upon those troublesome details.

Contrast this behavior with those who are in a positive emotional state, but encountering the same problem. These people are apt to look around for alternative approaches, which is very likely to lead to a satisfying end. Afterward, the tense and anxious people will complain about the difficulties whereas the relaxed, happy ones will probably not even remember them. ( ㄡ ), happy people are more effective in finding alternative solutions and, as a result, are tolerant of minor difficulties. Herbert Read thought we would need a mystical theory to connect ( I ) and ( II ). Well, it took one hundred years, but today we have that theory, one ( e ) in biology, neuroscience, and psychology, not mysticism.

(Source: Donald A. Norman, *Emotional Design—Why We Love (or Hate) Everyday Things*)

問1 空欄( ア )～( ウ )に入れるのもっとも適切な接続表現を次の①～③から選び、その番号を書きなさい。ただし、同じ番号を繰り返して用いないこと。なお、選択肢はすべて小文字で記載してある。

- ① in other words    ② in turn    ③ moreover

問2 空欄( a )～( e )に入れるのもっとも適切な動詞を下から選び、文法的に正しい形で記入しなさい。ただし、同じ動詞を繰り返して用いないこと。

- base    broaden    escape    lead    narrow

問3 下線部(1)が示唆している感情についての見方を次のA～Eからすべて選びなさい。

- A. Emotion changes how the cognitive system operates.
- B. Emotion has remained unchanged in the process of human evolution.
- C. Emotion is both useful and offers insights when making decisions.
- D. Emotion is inferior to rationality.
- E. Emotion triggered the evolution of mankind.

問4 論旨を踏まえて、空欄( I )と( II )に入れるのもっとも適切な語の組み合わせを次の①～⑤から選び、その番号を書きなさい。

- ① I : beauty — II : function
- ② I : biology — II : psychology
- ③ I : cause — II : effect
- ④ I : emotion — II : reason
- ⑤ I : problem — II : solution