2024年度

一般前期入学試験

英　語

注意：第１問から第４問まではマークシートに解答しなさい。
第５問と第６問は記述用解答用紙に解答しなさい。

マークシートの記入について(注意事項)

1. 解答の作成には、H、F、HBの鉛筆を使用して正しくマークすること。
   よい解答例 ●（正しくマークされている）
   悪い解答例 ◉ ⊖（マークが部分的で解答とみなされない）
2. 解答を修正する場合は、必ず「プラスチック製消しゴム」であとが残らないように完全に消すこと。
   鉛筆の色が残っていたり、「 」のような消し方などをした場合は、修正したことにならないので注意すること。
3. 解答用紙は、折り曲げたりメモやチェック等で汚したりしないよう特に注意すること。
4. 受験番号欄の記入方法《 受験番号記入例(右図)参照 》
   ① 受験番号を数字で記入する
   ② 受験番号の数字を正しくマークする
   正しくマークされていない場合、採点できないことがあります。

－ 受験番号記入例 －
受験番号1001の場合

受験番号欄			
千位	百位	十位	一位
1	0	0	1
⓪	●	●	⓪
●	①	①	●
②	②	②	②
③	③	③	③
④	④	④	④
⑤	⑤	⑤	⑤

注：選択する数字は『0』から順番に並んでいます。

藤田医科大学医学部

空白ページ

第 1 問から第 4 問では、問題文の中の [　　] 内の数字はマークシートの問番号を示している。該当する問番号の解答記入欄に答をマークしなさい。

第 1 問　次の問 1 ～ 6 の空所 [　1　] ～ [　6　] に入れるのに最も適切なものを (1) ～ (4) から 1 つ選び、その番号をマークしなさい。

問 1.　His anger was [　1　] that he hit me in the face.

(1) as　　(2) little　　(3) much　　(4) such

問 2.　His piano performance during the concert was not adequate. I found it [　2　] of a disappointment.

(1) anything　　(2) everything　　(3) something　　(4) thing

問 3.　I suddenly started feeling sick, so I [　3　] it a day.

(1) called　　(2) did　　(3) made　　(4) took

問 4.　I drove carelessly, so I came close to [　4　] someone with my car.

(1) be hit　　(2) being hit　　(3) hit　　(4) hitting

問 5.　The meeting lasted for three hours, during [　5　] time we talked about a new business opportunity.

(1) its　　(2) that　　(3) what　　(4) which

問 6.　[　6　] the reason, we must not resort to violence.

(1) Even though　　(2) If only　　(3) In case　　(4) No matter

第2問 次の問 1 ～ 4 においては、それぞれ日本語の意味に合うように下の(1)～(7)の語句を並べかえて空所を補い、最も適切な文を完成させなさい。解答は[7]～[14]に入れるものの番号のみをマークしなさい。ただし文頭にくる文字も小文字にしてある。

問 1. あなたの助けさえあったらこの計画は成功しただろうに。

Only _____ _____ _____ [7] _____ _____ [8] successful.

(1) been (2) have (3) help (4) the project
(5) with (6) would (7) your

問 2. 彼女が僕だけ扱いを変えるのがすごく嫌なんだが。

I would hate _____ [9] _____ _____ _____ [10] _____ the others.

(1) differently (2) for (3) from (4) her
(5) me (6) to treat (7) very much

問 3. 彼が何事もなく無事に帰宅しますように。

_____ [11] _____ _____ [12] _____ _____.

(1) and sound (2) back (3) get (4) he
(5) home (6) may (7) safe

問 4. ゲストが食べ終わらないうちにホストが料理を食べきってしまわないことを勧めます。

_____ _____ [13] _____ _____ [14] _____ the meal before the guests have.

(1) finished (2) have (3) I (4) not
(5) recommend (6) that (7) the host

第 3 問 Read the article and answer the questions that follow.

People spend up to 90% of their time indoors, so the question of whether or not to wear shoes in the house is not a trivial one. The matter building up inside your home does not just include dust and dirt from people and pets shedding hair and skin. About a third of it is from outside, either blown in or trodden in on those offensive shoe bottoms. Some of the microorganisms present on shoes and floors are drug-resistant pathogens that are very difficult to treat. Add in cancer-causing toxins, and you might view the filth on your shoes in a new light.

A strong focus of our work has involved assessing levels of potentially toxic metals (such as arsenic, cadmium and lead) inside homes.

As environmental chemists, we have conducted the measurement and assessment of exposure to a range of harmful substances found inside homes. These contaminants — and most importantly the dangerous neurotoxin lead — are odourless and colourless. So (あ) whether the dangers of lead exposure are only in your soils or your water pipes, or if they are also on your living room floor.

The science suggests a very strong connection between the lead inside your home and that in your yard soil. The most likely reason for this connection is dirt blown in from your yard or trodden in on your shoes, and on the furry paws of your adorable pets. This connection speaks to the priority of making sure matter from your outdoor environment stays exactly there.

A recent *Wall Street Journal* article argued shoes in the home aren't so bad. The author made the point that *E. coli* — a dangerous type of bacteria that develops in the intestines of many mammals, including humans — is so widely distributed that it's pretty much everywhere. So it should be no surprise it can be swabbed on shoe bottoms (96% of shoe bottoms, as the article pointed out). But let's be clear. Although it's nice to be scientific and stick with the term *E. coli*, this stuff is, put more simply, the bacteria associated with excrement. Whether it is ours or our pets', it has the potential to make us very sick if we are exposed at high levels. And let's face it — it is just plain gross.

From an environmental health standpoint there aren't many downsides to having a shoe-free house. Leaving your shoes at the entry mat also leaves potentially harmful pathogens there as well. We all know prevention is far better than treatment and taking shoes off at the door is a basic and easy prevention activity for many of us. Need shoes for foot support? Easy — just have some "indoor shoes" that never get worn outside. There remains the issue of the "sterile house syndrome," which refers to increased rates of allergies among children. Some argue it's related to overly sterile households. Indeed, some dirt is probably (い) as studies have indicated it helps develop your immune system and reduce allergy risk.

But there are better and less gross ways to do that than walking around inside with your filthy shoes on. Get outside, enjoy the great outdoors. Just don't bring the muckier parts of it inside to build up and contaminate our homes.

注 trodden: 踏みつけられた　pathogen: 病原体　filth: 汚物
intestine: 腸　swab: ～を採取する　excrement: 糞便

downside: 欠点　　mucky: 汚れた

問 1. Based on the context of the article, which phrase best fits (あ)? Write the number of your answer in [15].

(1) it is a matter of convenience　　(2) it is simple for us to check
(3) there is never any doubt　　(4) there is no way of knowing

問 2. Based on the context of the article, which word best fits (い)? Write the number of your answer in [16].

(1) beneficial　　(2) decomposable
(3) fatal　　(4) sterile

問 3. Which statement is closest to what is mentioned in the article about substances? Write the number of your answer in [17].

(1) Further research is needed to determine which substances are found on shoe bottoms.
(2) It has been scientifically proven that *E. coli* is much more harmful to humans than lead.
(3) Substances found outside homes are not as dangerous as those found inside homes.
(4) The origin of lead that is found inside homes is likely to be from outdoor environments.

問 4. Which statement is closest to what is mentioned in the article about shoes? Write the number of your answer in [18].

(1) Bacteria on the bottom of shoes may seem gross, but they do not pose any health risks.
(2) Failing to take off outdoor shoes when inside of homes may expose people to pathogens.
(3) People should have the bottom of their shoes tested periodically for bacteria.
(4) Wiping shoes thoroughly when entering a home is nearly as effective as taking off shoes.

第 4 問 Read the article and answer the questions that follow.

Two years ago, Paul's teacher noticed that the 10-year-old boy could no longer see anything clearly on the board at the front of the class. An ophthalmologist confirmed that Paul was one of the soaring number of children worldwide with myopia, also known as nearsightedness, an eye condition projected to affect half of the world's population by 2050.

But the ophthalmologist in the western French city of Nantes had some good news: specially designed glasses had just become available that could slow down the progression of Paul's myopia. "After wearing these glasses for a year, the results were (あ) because his eyesight seemed to have stabilized," said Paul's mother Caroline Boudet.

Previous research has suggested that myopia progresses 60% slower in children wearing the "MiYOSMART" glasses compared to normal prescription glasses. A six-year clinical study also found that the disorder did not start speeding up again if the children stopped using the glasses. Developed by Japan's Hoya Corporation, the MiYOSMART lenses, which also function as normal glasses to help the children see clearly, have been available in numerous European countries including France and the U.K. for around two years. Eyewear firm EssilorLuxottica claims its own Essilor Stellest lenses reduce myopia's progression by 67% when worn at least 12 hours a day. The Italian French firm said the glasses could save more than one dioptre — the unit of measurement for optical power — over three years.

Myopia occurs when there is too much distance between the cornea and retina, making far-off objects appear blurry. Both MiYOSMART and Essilor Stellest glasses deploy hundreds of tiny lenses to counteract peripheral hyperopic defocus in which light falls behind the retina, causing the eyeball to get longer and making myopia worse. The MiYOSMART glasses are not available in the United States, however contact lenses that work on a similar principle from the California firm CooperVision have been approved by the U.S. Food and Drug Administration.

Research has suggested that the percentage of people affected by myopia worldwide could surge from 27% in 2010 to 52% by 2050. Children with at least one nearsighted parent are more likely to develop the condition — however no one in Paul's family is myopic. Environmental rather than genetic causes are believed to be behind the explosion of cases. Children spending more time indoors, being exposed to less natural light, and looking at nearby objects such as screens has likely brought about what has been dubbed "the myopia generation," according to researchers.

Claude Speeg-Schatz, head of the French Society of Ophthalmology, said she was "quite amazed" by the new glasses slowing myopia's progression. "We have tried many things to avoid myopia, but this is the first time that we have a system which really works," she said. For recently diagnosed children, she first prescribes normal corrective glasses. "If the myopia increases, then I automatically prescribe" the myopia control glasses, she said. French ophthalmologist Jimmy Chammas said the glasses were "a real gain for children." "The myopia of those who wear these glasses deteriorates half as much as we would have expected — if at all," he said.

One obstacle is that the glasses cost more for parents, with prices depending on the country. Jean-

Michel Lambert, head of Hoya Vision Care France, called for the glasses to be reimbursed by French health services. "Each dioptre lost considerably increases the risk of future pathologies," he said, adding that "if we slow down myopia, it will be one less cost for society." If a prescription reads -2, that indicates two dioptres of nearsightedness. Nearsightedness of -6 dioptres or more is called high myopia, which can increase the risk of serious eye damage such as retinal detachment, glaucoma or early onset cataracts.

注 ophthalmologist: 眼科医
dioptre: (眼鏡の)度数
optical power: 視力
cornea: 角膜
retina: 網膜
counteract: ～を相殺する
dub: ～を…と名付ける
reimburse: ～の費用を負担する
pathology: 病状
glaucoma: 緑内障
early onset: 早発性の
cataract: 白内障

問 1. Fill in the blank for (あ) with the phrase that best fits the context within the article. Write the number of your answer in [19].

(1) completely unavailable
(2) extremely severe
(3) less significant
(4) quite positive

問 2. Choose the meaning of the underlined word "blurry" that best fits the context within the article. Write the number of your answer in [20].

(1) indistinct (2) opposite (3) similar (4) smaller

問 3. Which of the following statements is NOT mentioned in the article regarding the description of the MiYOSMART glasses? Write the number of your answer in [21].

(1) The glasses are not currently sold in the United States.
(2) The glasses can slow myopia's progression compared to ordinary glasses.
(3) The glasses' cost is covered by the government in France.
(4) The glasses have hundreds of tiny lenses placed in them.

問 4. Which of the following is mentioned in the article as a factor in myopia? Write the number of your answer in [22].

(1) Children born to myopic parents are more likely to be myopic than those born to non-myopic parents.
(2) Most people diagnosed with myopia in today's society have parents or ancestors who are myopic.
(3) Playing outside increases the likelihood of myopia because of the effects of sunlight on children's eyesight.
(4) The less time a child spends playing video games, the lower the probability that the child will become farsighted.

この後の第5問と第6問は記述用解答用紙に解答しなさい。

第5問 次の英文を読み、後の問いに答えなさい。

Every human infant is born into a world with two distinct sound systems. The first is linguistic and includes the vowels, consonants, and pitch contrasts of the native language. The second is musical and includes the timbres and pitches of the culture's music. Even without explicit instruction, most infants develop into adults who are proficient in their native language and who enjoy their culture's music. 【あ】 Why is this so? The simple answer is that our native sound system leaves an imprint on our minds. That is, learning a sound system leads to a mental framework of sound categories for our native language or music. This framework helps us extract distinctive units from physical signals rich in acoustic variation. Such frameworks are highly adaptive in our native sonic milieu, but can be liabilities when hearing another culture's language or music, because we "hear with an accent" based on our native sound system.

Of course, music and speech have one very obvious difference in their sound category systems. Although pitch is the primary basis for sound categories in music (such as intervals and chords), timbre is the primary basis for sound categories of speech (e.g., vowels and consonants). If, however, one focuses on cognitive processes of sound categorization, then similarities begin to emerge. In fact, there is growing evidence that speech and music share mechanisms for sound category learning, even though the two domains build their primary categories from different features of sound. 【い】 The implication of this research is that although the end products of sound category learning in music and speech are quite different (e.g., mental representations of pitch intervals vs. consonants), the processes that create sound categories have an important degree of overlap.

Before comparing speech and music, it is worth viewing these sound systems in a broader biological perspective. What, if anything, distinguishes them from the great diversity of acoustic communication systems used by other animals? It is often noted that speech and music are 《A》"particulate" systems, in which a set of discrete elements of little inherent meaning (such as tones or phonemes) are combined to form structures with a great diversity of meanings. 【う】 This property distinguishes speech and music from 《B》the holistic sound systems used by many animals, in which each sound is associated with a particular meaning but sounds are not recombined to form new meanings.

One might nevertheless argue that 《C》particulate sound systems are not unique to humans. Male humpback whales, for example, sing complex songs consisting of discrete elements organized into phrases and themes. Crucially, however, there is no evidence for a rich relationship between the order of elements and the meaning of the song. Instead, the songs always seem to mean the same thing, in other words, a combination of a sexual advertisement to females and an intermale dominance display. 【え】

Thus the particulate nature of speech and music is unique among biological sound systems. 【お】 This fact alone, however, cannot be taken as evidence for some deep commonality between speech and music in terms of cognitive processing. Rather, both could have independently become particulate systems because such a system is a good solution to a certain kind of problem: namely, how to communicate a wide range of meanings in an economical way. For example, DNA, which is

certainly not a product of the human mind, is a particulate system that transmits a great diversity of meanings (genetic information) using a finite set of discrete elements: the four chemical bases adenine, cytosine, guanine, and thymine. Thus, whether any significant cognitive similarities exist between spoken and musical sound systems is a question that requires empirical investigation.

One reason to suspect that there may be such similarities concerns ⟪D⟫ an important difference between speech and music on the one hand and the particulate system of DNA on the other. Each chemical base in a DNA strand has an invariant physical structure. In contrast, any given building block of a spoken or musical sound system (such as a particular vowel or musical pitch interval) may vary in physical structure from token to token and as function of context. 【か】 The mind must find some way to cope with this variability, separating variation within a category from variation that constitutes a change in category. Furthermore, the mapping between sounds and categories depends on the native language or music. One well-known example from language concerns the English phonemes /l/ and /r/. Although it may seem obvious that these are two distinct sound categories to an English speaker, to a Japanese speaker these sounds are merely two versions of the same speech sound and can be quite difficult to discriminate acoustically. Analogously in music, the distinction between melodic pitch intervals of a major and minor third in Western European music may be irrelevant for the music of some cultures from New Guinea, where these are treated as variants of a single sound category.

注 vowel: 母音　consonant: 子音　timbre: 音色
imprint: 痕跡　acoustic: 音響上の　sonic milieu: 音の環境
(pitch) interval: 音程、2 つの音の高さの隔たり　discrete: 不連続の
phoneme: 音素、ある言語において区別される音の最小単位。通例、/ / に挟んで表記される。
humpback whale: ザトウクジラ　base: 塩基　DNA strand: DNA 鎖
mapping: 対応付け　major/minor third: 長/短 3 度、それぞれ半音 4 つ/3 つ分の音程

問 1. 下線部 ⟪A⟫ と下線部 ⟪B⟫ の 2 つのシステムはどのように異なるか、本文の内容に即して日本語で答えなさい。

問 2. 本文の内容に即し、下線部 ⟪C⟫ についての次の問いに日本語で答えなさい。
(i) 下線部 ⟪C⟫ のように考える根拠となりうる事例を挙げなさい。
(ii) (i)にもかかわらず下線部 ⟪C⟫ が正しくないと考えられる根拠を述べなさい。

問 3　本文の内容に即し、下線部《D》に関する次の問いに日本語で答えなさい。

(i)　下線部《D》の重要な相違とはどんなものか述べなさい。

(ii)　(i)の相違から、人間が母語を身に着ける上でどのような課題が生じるか、本文から具体例を引きつつ述べなさい。

問 4.　次の文は本文のどの位置に置くのが最も適切か、【あ】～【か】の記号で答えなさい。

These traits come at a price, however; skill in one language can result in difficulty in hearing or producing certain sound distinctions in another, and a music lover from one culture may find another culture's music out of tune and annoying.

空白ページ

第 6 問　次の英文を読み、下線部 (1) ～ (3) の日本語の内容を英語にしなさい。

Although progress is being made, mental illness still carries a stigma in Japan, making it harder for many people to seek the help they need. It's especially a problem among the older generation, but when the bulk of the population is elderly, it becomes everyone's problem.

Luckily, one potential solution has arrived in a test kit developed by Cellspect, a medical equipment supplier in Morioka City, Iwate Prefecture. From late August, these kits will be made available online and at drug stores in the six prefectures of the Tohoku region (Akita, Aomori, Fukushima, Iwate, Miyagi, and Yamagata) for between 3,000 and 4,000 yen each.

Those who purchase the test must first collect a urine sample and then submit it either by mail or directly at participating drug stores. (1)その尿はうつ病などの精神疾患の危険因子を評価するために分析される。 The results can be sent directly to their smartphone.

It's important to note that these tests do not diagnose mental illness but instead gauge a person's potential for developing one. (2)危険性が高い場合は、その病気に将来かからないようどんな対策を取ればよいかを知るために、専門家の診断を求めるべきである。

Urine tests to detect mental illness signs themselves are not new and are somewhat controversial as to their effectiveness. However, as a discreet way for people to take that first step in examining their own mental health, these self-screen kits could make a significant difference in Japan.

Some readers of the news were also tempted to try one, despite being confused about how it works.

"Why don't they do that with the urine test at my annual physical?"

"I kind of want to try this…"

"Companies should just install these kits directly in their toilets."

"Huh, this could be good."

"They can do that with urine?"

"Isn't it just a test for anti-depressant drugs?"

"Is depression such a thing? I didn't think you could detect mental things with urine, but if a medical supply company can do it, I guess it is possible."

Some of the confusion displayed in the comments shows how mental illness is often misunderstood as not even being a medical problem, making proper treatment that much more difficult. (3)恥だと思っているうえによくわからないので、人々は多くの場合オンラインでの自己診断に頼ってしまう。

This new kit gives that same sense of privacy and can also help people get on the right track to proper mental health. It may not change the world, but every little bit counts.

注　stigma: 不名誉

空白ページ

空白ページ