

令和 2 年度 入 試
個別学力試験問題(前期日程)

英 語

学 部	問 題
法文学部, 教育学部, 人間科学部, 総合理工学部, 生物資源科学部	1, 2, 4, 5 -A
医学部医学科	1, 2, 3, 4, 5 -B

注 意

1. 問題紙は指示があるまで開いてはいけません。
2. 問題紙は 10 ページ, 解答用紙は法文学部, 教育学部, 人間科学部, 総合理工学部, 生物資源科学部受験生は 1 枚, 医学部医学科受験生は 2 枚です。指示があつてから確認し, 解答用紙の所定の欄に受験番号を記入してください。
3. 法文学部, 教育学部, 人間科学部, 総合理工学部, 生物資源科学部受験生は 1, 2, 4, 5 -A の問題を, 医学部医学科受験生は 1, 2, 3, 4, 5 -B の問題を解答してください。
4. 答えはすべて解答用紙の所定のところに記入してください。
5. 解答用紙は持ち帰ってはいけません。
6. 試験終了後, 問題紙は持ち帰ってください。

1

次の英文を読んで問いに答えなさい。(共通問題)

I sometimes wonder if there has ever been a scientific study into why some people are inclined to laugh at times when it is not appropriate to laugh. It has gotten me into a certain amount of trouble over the years and it would be really helpful if someone could find the cause and, perhaps then, a cure.

The last time ⁽¹⁾it happened to me was in a quiet Tokyo museum. I was viewing a collection of woodblock prints with a friend: pictures of Tokyo from that fascinating period after the Meiji Restoration when new ideas and inventions came in a big rush. Probably, I was trying to look intelligent and show off my limited knowledge of the subject, saying things such as “It’s ⁽²⁾interesting to note how men used to combine Western clothing with Japanese clothing in those years” or “You’ll notice that the Asakusa pagoda used to be on the right side of Sensō-ji in those days.”

Then my friend said something that caused me to burst into noisy and embarrassing laughter. The more people looked at me as if I was strange, the ⁽³⁾worse it got. I tried to prevent the laughter from escaping but that just seemed to force it out of my nose as a strange snorting sound, which made people start to look *away* — the sure sign that people think you are disturbed. And that set me off again. It was quite a while before I recovered my cool. What my friend had said was: “Oh look, it’s *No Pan Pepo*.” It took about half a second for me to see that she was talking about a poster with a picture of the Tokyo Metropolitan Police’s mascot “character.” Then another half second before the rush of laughter took over. Strangely, I was shaking with laughter ⁽⁴⁾before I had time to analyze what it was that I found so funny.

I had known about Pepo for years and like a lot of foreigners in Japan had found him comical. The cute little character always seemed hopelessly unsuitable as the chosen representative of the police. Surely he should be a harder creature; the unrelenting face of the endless war on crime?

Pepo is the classic example of the need for almost every Japanese organization, company, campaign, region and product to be represented by a cute character. Over the years I kept my eyes open for these characters and would snap pictures of the silliest ones. I didn't take much interest in their names but among my favorites were "Clean Elections-kun" (an angry cat-bird? Of course!), the green furry ball that represents a real estate website (because green furry balls have got to live somewhere, right?) and the "Sendai Onigiri-head."

I don't think I was the only foreigner who found this aspect of Japanese culture amusing but what happened the moment my friend mentioned "*No Pan Pepo*" was that my eyes were opened to the fact that Japanese themselves were aware of the oddity of their characters.

(Colin Joyce, *Now How to Japan* より 一部改変)

[注] pagoda (仏教寺院の)多層の塔 unrelenting 不屈の

1. 下線部(1)の具体的内容を, 本文にそって日本語で説明しなさい。
2. 下線部(2)の具体的内容を, 本文にそって日本語で説明しなさい。
3. 下線部(3)を日本語に直しなさい。
4. 下線部(4)を日本語に直しなさい。
5. 下線部(5)の具体的内容を, 本文にそって日本語で説明しなさい。

2

次の英文を読んで問いに答えなさい。(共通問題)

A couple of million years ago our ancient human ancestors created the world's first tools when they broke some rocks into sharp pieces so that they could slice apart game such as gazelles or zebras. These early instruments, called Oldowan tools, are the world's oldest-known cutting devices. The term "Oldowan" is taken from the site of Olduvai Gorge in Tanzania, where the first of these tools were discovered by Louis Leakey in the 1930s.

These primitive tools became quite popular throughout the ancient world. Because nearly everyone wanted these tools, our early ancestors had to come up with an effective way to communicate with and teach others how to make and use the tools. This means our ancient ancestors had to develop advanced verbal skills, including language.⁽¹⁾

An international group of researchers suggests that the methods of communicating among some of our most ancient ancestors might have been much more complex than had been thought. So much so that earliest concepts of teaching and perhaps even the development of some kind of a fundamental proto-language took place about 1.8 million years ago.⁽²⁾

"Our findings suggest that stone tools weren't just a product of human evolution, but actually drove it as well, creating the evolutionary advantage necessary for the development of modern human communication and teaching," said Thomas Morgan, lead author of the study and a researcher in psychology at the University of California, Berkeley. Morgan said his team's research shows that even our earliest ancestors were able to more effectively learn how to create and use these ancient tools if they had a teacher, especially one who was able to use language.⁽³⁾

To arrive at their findings Morgan's group recruited 184 students from Scotland's University of Saint Andrews so that they could teach them how to make the ancient Oldowan tools. The researchers split the participants into five different groups, and the leader of each group was shown how to make a⁽⁴⁾

simple stone tool sharp enough to slice apart an animal.

In one group, students were simply handed a stone, a “hammer” and sample tools and instructed to try and make their own stone tools. In a second group, members could watch the first person in an attempt to understand the process, but no interaction was allowed. In the third group, the “teacher” could actively show other group members the process, but without accompanying gestures. In the fourth group, the “teacher” could point and gesture but not talk, and in the final group, “teachers” could talk to “learners,” saying anything required to help.

Once all the participants were “taught” how to make the tools, they were then tested to see how much skill they had acquired.

⁽⁵⁾ The results were surprising, the researchers said. Participants sitting by themselves and attempting to create stone tools simply by looking at their cores, hammers and sample tools achieved only limited success — as expected — but the success rate improved very little among participants who could watch others make the tools. Only students in the groups where teaching by gesture or speaking were allowed had a significant success rate in creating the stone tools. Teaching by way of gestures doubled the likelihood of a successful attempt, while verbal teaching yielded a success rate four times higher.

Morgan said that human evolution is “not just a story of our ancestors⁽⁶⁾ evolving in response to environmental conditions, but is actually the case that we made those conditions ourselves.” According to him, the process of humans guiding their own evolution is sometimes called “gene-culture co-evolution.” He said that’s when our genes and our culture are evolving in response to each other in one single process.

(VOA 他より 一部改変)

[注] proto-language 祖語(互いに親縁関係にある諸言語の源になる言語)
gene 遺伝子

1. 下線部(1)の具体的内容を，本文にそって日本語で説明しなさい。
2. 下線部(2)の具体的内容を，本文にそって日本語で説明しなさい。
3. 下線部(3)を日本語に直しなさい。
4. 下線部(4)に関して，第2グループと第3グループの類似点と相違点を本文にそって日本語で説明しなさい。
5. 下線部(5)の具体的内容を，本文にそって日本語で説明しなさい。
6. 下線部(6)を日本語に直しなさい。

3

次の英文を読んで問いに答えなさい。(医学部医学科用問題)

Modern drug therapy began with “salvarsan,” developed by Dr. Paul Ehrlich as a treatment for syphilis. Salvarsan, introduced in 1911, was the first drug to attack the root cause of the disease it treated. Its astonishing effectiveness earned it the nickname “Dr. Ehrlich’s Magic Bullet” — a reflection of the public’s perception of it as a modern miracle. Two mid-twentieth-century pharmaceutical triumphs solidified the public’s belief in “miracle drugs.” The first was penicillin and, by extension, the many other antibiotics that followed it. Antibiotics reduced a bacterial infection from a life-threatening crisis to a brief unpleasantness, ending a long era in which any injury or surgery that broke the skin carried a substantial risk of death from secondary infection. The second was the Salk polio vaccine, and by extension the vaccines that followed it for measles, mumps, and other childhood diseases. These vaccines, administered through massive vaccination campaigns tied to public school attendance, had spectacular results. Diseases that had once killed infants and young children by the thousands all but vanished from the industrialized world within a generation.

Penicillin and the polio vaccine raised public expectations of what drugs in general could do. Their rapid, highly publicized successes and their lack of obvious, significant demerits furthered a belief in drug therapies as a kind of modern-day magic, capable of eliminating any disease, no matter how terrible, in a single stroke. The rapid introduction of new drugs and equally rapid control of old diseases created another expectation, that science could develop drugs to prevent or cure *any* disease. Popular culture strongly reflects both expectations.

Medical dramas routinely use doctors as heroes, and why-is-this-patient-sick puzzles as the focus of their plots. The climax of such plots comes when the hero solves the puzzle and (as a result) realizes how to cure the patient.

The cure and the recovery that follows are brief epilogues to the main plot, less dramatically interesting, because they only involve the hero a little or not at all. Both realistic medical stories like the TV series *ER* and fanciful ones like the movie *Outbreak* routinely cut, therefore, from the administration of a drug to evidence that the patient is recovering. Adventure stories where the dramatic focus is on getting the drug to the patient (as in Tom Godwin's famous 1942 science fiction story "The Cold Equations") work in similar ways. Once the obstacles are overcome and the patients *have* the drug, their quick recovery is assumed or shown in a brief closing scene. The cumulative effect of both kinds of stories is to emphasize the speed and effectiveness with which the drugs work, enhancing their "miraculous" image.

Drug manufacturers — now able, because of deregulation, to advertise prescription medications in the mass media — play on the same kinds of expectation. Their advertisements typically show beautiful people enjoying life to the fullest amid beautiful settings, implying that this is possible (effects / a / them / because / has / from / drug / the / freed / new) of an unpleasant medical condition. The seniors can play with their grandchildren because the pain of their arthritis decreases; the young woman can walk through fields of flowers because her allergies are controlled. Viewers are (to / the / their / ask / urged / doctor / right / is / whether / drug) for treating *their* condition. If it is, the advertisements imply, their lives too can be miraculously improved.

Dozens of diseases remain unconquered or uncontrolled; popular culture and public expectation hold, however, that they soon will be, if only enough time and resources are devoted to research. Dozens of charities raise money for research on specific diseases, from Parkinson's disease and muscular dystrophy to AIDS, by appealing to donors' faith that a cure can be found if we only look hard enough. Drug companies, lobbying against price-control legislation in the late 1990s, argued that reducing their profits would shrink their research budgets and slow development of new "miracle drugs." The

public's faith that a "magic bullet" exists (or can be found) for every disease is also evident in two common expressions. " [A] ," runs the first, " [B] ?" The disease invoked is typically cancer or, less often, AIDS. " [C] ," laments the second expression, " [D] ." Both statements imply that our lack of will is responsible for the lack of a cure. The evolution of drug-resistant bacteria and the vaccine-defeating, ever-changing varieties of the cold virus suggest another possibility: that our microscopic enemies may have us outsmarted.

(Van Riper, *Science in Popular Culture* より 一部改変)

[注] syphilis 梅毒 deregulation 規制緩和

1. 下線部(1)を日本語に直しなさい。
2. 下線部(2)の具体的内容を, 本文にそって日本語で説明しなさい。
3. 下線部(3)を日本語に直しなさい。
4. 下線部(4)の具体的内容を, 本文にそって日本語で説明しなさい。
5. 下線部(5), (6)の()内の語を意味が通じるように並べ替えなさい。
6. [A] ~ [D] に入れるのに最も適切なものを, 以下のア~カから1つずつ選び, 記号で答えなさい。ただし, 文頭にくる単語も小文字にしてあります。
 - ア but there is no money for cold medicine
 - イ but we can't cure the common cold
 - ウ how dare we spend money on an allegedly frivolous government program
 - エ we can achieve a great technological breakthrough
 - オ when we still don't have a cure for a well-known disease
 - カ why should we spend money on unnecessary research
7. 下線部(7)を日本語に直しなさい。

- 4 次の英語の指示に従って、60語程度の英語で答えなさい。なお、解答用紙の指定した()欄に、使用した語数を記入すること。ただし、コンマやピリオドなどの記号は語数には入れない。(共通問題)

At what age should Japanese people begin studying English at school?
Give reasons and examples to explain your answer.

- 5 法文学部、教育学部、人間科学部、総合理工学部、生物資源科学部受験生はAの問題に、医学部医学科受験生はBの問題に答えなさい。

A. 次の日本語の下線部(1)、(2)を英語に直しなさい。

人と比べることをやめると、ずいぶん自由になる。限りなく自然に伸び伸びと自分を育てることができるようになる。つまり、人と比べることをやめると、自分の得手とするものが見つかるのである。⁽¹⁾

自分が楽しいことも楽に見つけられるようになる。日曜日に料理をすることが、男としてみっともない、などと思わなくなる。みっともない、と思う感情は観客がいることをみみっちく意識している証拠である。自分で味をつけたものが、実は自分の舌に一番合うことは当然のことで、自分こそ、自分に対して最高の料理人なのである。⁽²⁾

(曾野綾子『ただ一人の個性を創るために』より 一部改変)

B. 次の日本文の下線部(1), (2)を英語に直しなさい。

自然界の現象であれ、人間が作り出した機械や社会であれ、その働きやしくみを理解しようと思うならば、その現象が起きている舞台、興味の構造を知ることが大事である。同様に、脳が果たしている働きやそれを支えるしくみ、あ⁽¹⁾るいは、つくられ方について理解を進めようとする際には、脳のかたちを知ることが大きなたがかりになり、時に必須の前提となる。脳に関する近代的な研究が始まった19世紀後半以来、脳の研究者たちは常に脳の構造に魅了され、その美しさと複雑さのため息をつき、脳を前に「一体どうなっているんだ」と捻^{うな}り続けてきた。

脳の構造は複雑だが無秩序ではない。想像することさえ難しい大きな数の要素からなる迷宮のところどころに、見事なまでに規則的な構造が埋め込まれている。私には、これらの構造が、研究者の挑戦をこぼんでいる脳がふと見せたほほえみのように思える。そのような構造が示す規則性は、脳の働き、しくみ、なりたちを理解する上でのヒントを提供している。

(藤田一郎『脳の風景』より 一部改変)

[注] 迷宮 labyrinth

