

英 語

12 : 30 ~ 14 : 00

解 答 上 の 注 意

1. 試験開始の合図があるまで、この問題紙を開いてはならない。
2. 問題紙は 15 ページある。
3. 解答用紙は

解答用紙番号
英語 0—1

 と

解答用紙番号
英語 0—2

 の 2 枚である。
4. 解答用紙は 2 枚とも必ず提出せよ。
5. 受験番号および座席番号(上下 2 箇所)は、監督者の指示に従って、すべての解答用紙の指定された箇所に必ず記入せよ。
6. 解答はすべて解答用紙の指定された欄に記入せよ。
7. 必要以外のことを解答用紙に書いてはならない。
8. 問題紙の余白は下書きに使用してもさしつかえない。

I love movies, and one of my favorite movies is the American science fiction movie *The Matrix*. The movie is about a man, Neo, who keeps having the feeling that something is wrong with what he thinks is reality. He eventually meets a mysterious stranger called Morpheus who offers him one of two pills. He explains that the blue pill will cause him to fall asleep and wake up in his bed with no memory of the meeting. However, if he takes the red pill, he will be shown reality for what it really is. Neo, of course, takes the red pill and discovers that what he thought was real life was in fact a simulation designed by aliens to control humans.⁽¹⁾

This movie is a well-known exploration of the idea that we are all living in a simulation, which we can define as the idea that our environment has been artificially created using a computer to look and feel real. We are all familiar with this idea and we have all thought about it at some point in our lives. However, the reason why nobody takes the idea too seriously is because it is impossible to test or find any evidence that it is true.

Nonetheless, this has not stopped philosophers from writing about it. Probably the most influential academic article on this subject was published by Nick Bostrom in 2003 in *The Philosophical Quarterly*. Bostrom, an Oxford University professor, begins by examining how likely it is that an advanced civilization would create a simulation. He examines three possibilities that we can choose: the first being that any advanced civilization would become extinct before they developed the necessary technology to create complex simulations. The second choice is that very advanced civilizations do exist and have the required level of technological capability but choose not to build simulations for ethical or practical reasons. The third choice is that they both exist and have the necessary ability and motivation.

If (ア), then it is logically impossible for us to be living in a

simulation. However, if the third choice turns out to be correct, then it becomes quite (a). The reason for this is that if advanced civilizations exist and have built at least one simulation, it is likely they have built many. Artificially intelligent beings within the simulations could also have built their own programs. If there is only one true reality and numerous different simulated realities in the same universe, the chance that we are not in a simulated reality becomes very small.

There are also some arguments against the first two choices. The massive size of the universe and the huge number of planets that have the potential for life make the first possibility fairly (b). It is unfortunately quite (c) that civilizations (ours included) will destroy themselves or be destroyed, but it is also reasonable to imagine that at least a handful of civilizations somewhere in the universe have survived long enough to develop advanced technologies. Some evidence against the second possibility is that our own civilization so far seems very interested in creating simulations that are gradually becoming more advanced. It is also worth noting that areas such as virtual reality are gaining in popularity. It is not difficult to imagine that, if we don't become extinct, we would continue to be interested in making better and better simulations with smarter AI actors in them. If that is the case, then it is possible that it is the same for other civilizations on other planets.

If you agree with the above arguments, the third choice becomes the most likely, which means that it is possible that we are all in a simulation right now. Of course, all these points are just the work of philosophers, and there is never likely to be any hard evidence supporting them. However, it is interesting to imagine how you would feel if it was true. Would it make any difference to your life and eventual death? Would you want to know? To put it another way: if you meet a stranger tonight who offers you two pills, would you take the blue one or the red one?

問 1 下線部(1)を日本語に訳しなさい。

問 2 Nick Bostrom が 2003 年に発表したのは何についての論文か，日本語で40字以内で簡潔にまとめなさい。

問 3 空欄(ア)に入る最も適切なものを次の(A)~(E)から選び，記号で答えなさい。

- (A) Bostrom's idea is true
- (B) all the choices are possible
- (C) the first or second choice is correct
- (D) neither the first nor second choice is correct
- (E) none of the choices are correct

問 4 空欄(a)~(c)に入る語の組み合わせとして最も適切なものを次の(A)~(E)から1つ選び，記号で答えなさい。

- | | | |
|------------------|--------------|--------------|
| (A) (a) likely | (b) likely | (c) likely |
| (B) (a) likely | (b) unlikely | (c) likely |
| (C) (a) likely | (b) unlikely | (c) unlikely |
| (D) (a) unlikely | (b) likely | (c) unlikely |
| (E) (a) unlikely | (b) unlikely | (c) likely |

問 5 本文の内容と一致しないものを、次の(A)~(F)から 2 つ選び、記号で答えなさい。

- (A) If Neo had chosen the blue pill, he would even have forgotten that he met Morpheus.
- (B) The author guesses that we have all imagined at least once that we are living in a simulation.
- (C) Nick Bostrom presents evidence for the fact that we are living in a simulated world.
- (D) Bostrom explains that even simulated beings could develop simulations of their own.
- (E) The author thinks that Bostrom's third choice is inevitable.
- (F) Those who are eager to know the truth would take the red pill.

問 6 この文章のタイトルとして最もふさわしいものを、次の(A)~(E)から 1 つ選び、記号で答えなさい。

- (A) Are We in a Simulation?
- (B) *The Matrix*: An Exciting Movie
- (C) Why Are Philosophers Interested in Simulating the World?
- (D) Newly Found Evidence for a Simulated Life
- (E) How Are We Attracted to a Thought Experiment?

Should the government have more control over people's lives? Most people who are advocates of democracy believe emphatically that the government should not. Such people believe that everyone should be free to make their own choices and live their lives as they please and do so uninhibited by higher authorities. Recently, (ア), some economists have argued that the government should play a greater role in people's lives. These economists believe that governments can intervene in ways that greatly benefit society and still protect basic democratic values.

In 2017, economist Richard Thaler received the Nobel Prize in Economics for his work in the field of "behavioral economics." ⁽¹⁾ Thaler and his collaborators argued that traditional economic theories of how people behave are not fully accurate because they fail to account for how people actually behave. They explain that traditional economic theories are based on the belief that people act "rationally" and make all of their decisions on the basis of what is best for them economically. On the contrary, Thaler's research has shown that people do not, in fact, act "rationally" and instead make many choices that are not the best in some aspects of life. For example, despite hundreds of scientific studies showing that smoking cigarettes is unhealthy and dangerous, millions of people continue to smoke. The reason people continue to smoke despite the harmful consequences is because the effects of smoking are far away in the future. People may become sick or die from smoking, but it will happen many years later. The effects are so distant that smokers cannot perceive them now. Thaler's work has shown that if the effects were more immediate, people would be more likely to avoid smoking.

Many behavioral economists like Thaler believe in an approach called "libertarian paternalism." This means that governments and authorities should allow people to live their lives as they please but that they should also give

them incentives to do what is in their best interest. In other words, governments should “nudge” people to make better choices. In fact, Thaler⁽²⁾ and his colleague Cass Sunstein published a book titled *Nudge: Improving Decisions about Health, Wealth, and Happiness*. In this book, they provide many examples of how governments, universities, and other institutions can “nudge” their members to act in different (i.e. better) ways. For example, one study revealed that people eat different foods depending on the order in which food is displayed to them. If a cafeteria manager places unhealthy food before healthy food, people are more likely to consume the unhealthy food. However, if he or she does the opposite,⁽³⁾ diners will choose the healthier options. Therefore, it is in the best interest of diners, cafeteria managers, and institutions to place healthy food before unhealthy food.

Thaler and Sunstein argue that governments and other institutions should be required to adopt these policies in the best interest of society. They advocated for policies based on “libertarian paternalism” to achieve this.

The organization of food in a cafeteria is not a controversial issue. However, some people have challenged other aspects of “libertarian paternalism” by suggesting that it violates democratic principles of people’s rights to choose what is best for themselves. These critics argue that⁽⁴⁾ requiring “libertarian paternalism” is unfair because it forces people to do things they would not otherwise do. The fact that such policies would be “paternalistic,” meaning that they would require something, violates the “libertarian” aspect. For example, New York City politicians proposed a law that would prohibit the sale of soda larger than 0.47 liters. Since soda is unhealthy (it causes tooth problems, is linked to weight gain, and can cause diabetes, among many other problems), politicians believed prohibiting the sale of large quantities of soda would help make their city population healthier. However, critics proclaimed that this went against democratic principles that declare people should have freedom to buy what they want. They argued, “If I

want to buy a big soda, I should have the right to buy a big soda!" The soda policy was ultimately abandoned, but its effect on politics still remains pertinent today.

Should the government adopt "libertarian paternalism" as a policy guideline? There is much ongoing debate concerning this proposal. Proponents believe it will make society better at a minimal cost, while opponents believe that it violates the basic principles of (イ). Although the discussion continues, "libertarian paternalism" is definitely worth considering as a possible policy solution to some of today's problems.

問 1 空欄(ア)に入る最も適切な語句を次の(A)~(E)から選び、記号で答えなさい。

- (A) as a result
- (B) besides
- (C) consequently
- (D) however
- (E) therefore

問 2 下線部(1)を日本語に訳しなさい。

問 3 下線部(2)の言い換えとして一番近いものを次の(A)~(E)から 1 つ選び、記号で答えなさい。

- (A) government should lightly influence people to behave in more desirable ways
- (B) government should secretly force people to make choices which will improve their lives
- (C) government should openly let people choose what they want to choose
- (D) government should forbid people to live as they like
- (E) government should gently encourage people to act paternally

問 4 下線部(3)の具体的な内容を日本語で説明しなさい。

問 5 下線部(4)の理由について最も適切なものを次の(A)～(F)から 1 つ選び、記号で答えなさい。

- (A) Without “libertarian paternalism,” democracy could be harmful to people’s right to choose.
- (B) “Libertarian paternalism” lacks medical evidence for its plans to improve people’s health.
- (C) “Libertarian paternalism” does not entirely protect people’s freedom of choice.
- (D) There is too much freedom in democracy. Therefore, “libertarianism” is necessary.
- (E) “Libertarian paternalism” misses the fact that soda is actually unhealthy to some people.
- (F) Democratic principles, which include freedom, contradict the “libertarian” aspect in the notion of “libertarian paternalism”.

問 6 空欄(イ)に入る最も適切な 1 語を文中から選び、英語で答えなさい。

There is an ongoing debate about whether students should be required to study subjects that are considered part of the “liberal arts.” The liberal arts are university subjects that include history, philosophy, foreign languages, music, and so forth. A liberal arts education exposes students to a range of different subjects and seeks to cultivate students’ critical thinking and reasoning skills. These are not the most practical subjects, but by exposing students to different ideas through liberal arts classes, supporters of the liberal arts believe that students will develop a more balanced skillset that will allow them to pursue different careers in the future.

However, in today’s increasingly specialized world, many people question the validity of such an education. A liberal arts education is often compared to more practical majors, such as business, engineering, or computer programming. These specialized and more practical majors explicitly seek to cultivate students’ skills in these fields and prepare them for jobs in industries related to their majors. By majoring in a field such as finance, for example, students can be expected to be best prepared to obtain jobs in the financial industry. This is because they will have specialized and detailed knowledge of finance and will hypothetically not require much time to learn how to perform the duties of their future jobs.

One can expect that in today’s data-driven and technical work environment, a specialized major would be better for most students. However, the evidence is far from conclusive. Many successful people received a liberal arts education and they have been able to translate the skills learned from their liberal arts curriculum into success in many specialized fields. For example, Peter Thiel, co-founder of PayPal and a successful technology entrepreneur, majored in philosophy at Stanford University. Jack Ma, billionaire and founder of Alibaba Group, majored in English. Susan Wojcicki,

CEO of YouTube, majored in history.

It is thus clear that a liberal arts education will definitely not prevent one from entering a more specialized field. But is it truly advantageous? Would it serve students best to avoid a liberal arts education and instead focus on a specialized one? The debate continues, but we should be able to obtain a clearer answer to this question in the near future.

Answer questions A to C **in English**. You may use words and ideas from the text, but you **must not** copy complete sentences.

Question A

Complete the following sentences.

Even though liberal arts subjects are not practical, they are very useful in making a career decision because students can _____
_____ by studying them.

Question B

Answer the following question with reference to the third paragraph.

What makes the author state that specialized majors are not always better than those of liberal arts in today's technical work environment? Complete the following sentence.

There are lots of people _____.

Question C

The text describes two different fields of university subjects: liberal arts subjects and practical majors, such as business, engineering, etc. In your opinion, which field should be considered more important in the near future? Write a 70-100 word paragraph, providing two specific reasons to support your opinion.

4

Read the following transcript [I] of a conversation between friends, Susan and John. Then, read the summary of the transcript [II]. The summary contains 12 blanks. For each blank, choose the most appropriate option from the list. Each option can be used only once. On your answer sheet, write the letter (A, B, C, etc.) that corresponds to your choice.

[I : Conversation]

Susan: You're looking very tired today. Are you feeling OK?

John: Yes, I'm fine, but I am exhausted. I got up at 4:30 this morning and went for a run, so I've only had five hours of sleep. I also feel a bit strange because I've been on this diet where you only eat meat with no fiber.

Susan: Sounds extreme! What's made you start doing all that?

John: I've been watching this successful businessman's podcast on YouTube. Each week he explains the secret of his success and last week he said we waste thousands of hours by sleeping too much and have no energy because we eat the wrong things. Some of it sounds a little crazy, but he is hugely successful and I'm not, so there must be some truth in it.

Susan: I see... but I have to tell you that I was recently reading an article on the BBC about the fact that many people think like you do, but that they're looking at things in the wrong way.

John: What do you mean?

Susan: If you want to be successful, you should spend more time thinking about the people who don't make it, not just the ones who do.

John: How would that help?

Susan: OK, a famous instance is from a Hungarian mathematician named Abraham Wald, who was hired by the US military during World War II. His job was to figure out how to better protect planes

from being shot down, so he studied the ones that had been shot but successfully made it back to the airfield.

John: OK, I can see where this is going. He looked at the places where the planes had been damaged and recommended that those places should be better protected with stronger materials in the future, right?

Susan: Well, that was his first idea, but then he realized that his focus shouldn't have been the aircraft that made it back, but the aircraft that were shot down. The places where a successfully returned plane had been shot were precisely the places that didn't require extra protection. It was where the surviving planes had never been shot that needed better armor!

John: Oh, I see. The fact that the planes had made it back without crashing meant that they had been shot in places that weren't really serious. But what has this got to do with being successful in life?

Susan: It's the same principle. You shouldn't be focused on what one successful person eats and how many hours they sleep, but on the habits of the thousands of unsuccessful people and all the others in the middle. For example, think about sleep. Scientists have shown in large studies that having as little as five hours of sleep a night will negatively affect your performance. You need to look for connections in the data of large groups of people, not just make one connection between a famous person's success and the amount of sleep he or she has.

John: Hmm... I'm beginning to see your point. So why are we naturally attracted to only focusing on successful people?

Susan: Psychologists don't know for sure, but it probably has something to do with their visibility in society. Think about Abraham Wald's

planes. He could clearly see the places where they had been shot, so naturally his attention was drawn to those spots. It is harder for us to focus on what isn't so visible. This is one of the dangers of celebrities and powerful figures in society. We pay more attention to what they say than we should, and therefore don't pay attention to the more important bigger picture.

John: Well, the good news is that I can now get a good night's sleep! I can also go back to eating natto!

[II : Summary]

Two colleagues, Susan and John, are having a conversation. Susan asks John why he is looking so tired and John replies that he got up early and he has just started a new diet. He goes on to (1) that he is following the secrets for success of a businessman who has his own podcast on YouTube.

Susan is (2) and points out that she has recently read an article that (3) the popular habit of trying to succeed by following the example of well-known successful people. The (4) talks about the need to focus more on the people who don't (5) success and not just on the smaller number of people who are very successful.

She uses the (6) of a scientist in World War II who was studying how best to protect planes from being shot down. At first, he focused on the planes that successfully made it back and the places where they had been damaged. However, he soon (7) that he shouldn't be focusing just on the planes that returned successfully, but also the ones that were hit and hadn't made it back.

John understands Susan's explanation, but is a little confused about its (8) to trying to succeed by following the advice of successful people. Susan points out that it is the same (9) because we shouldn't be looking only at, for example, the number of hours that a small number of famous people sleep. Instead, we should be focusing on the number of hours that most people sleep and the positive or negative (10) it has on their abilities to be successful.

John begins to agree with Susan's point, and then asks why it is that we tend to focus on (11) in our culture. One explanation that Susan offers is that famous people are very visible in our society, so that it is natural that they (12) our attention more than regular people.

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|-----------------|---------------------|------------------|
| (A) achieve | (B) affection | (C) article |
| (D) businessman | (E) celebrities | (F) concerned |
| (G) connection | (H) criticizes | (I) disappointed |
| (J) discuss | (K) disposition | (L) effect |
| (M) example | (N) explain | (O) guessed |
| (P) hold | (Q) idea | (R) invention |
| (S) make it | (T) ordinary people | (U) pay |
| (V) proposes | (W) realized | (X) reflection |

