

平成 29 年度 入学試験問題

# 外 国 語

英 語

2 月 25 日(土) 10:00—11:45

(全学部共通)

## 注 意 事 項

1. 試験開始の合図があるまで、この冊子と答案紙を開いてはいけない。
2. 問題冊子のページ数は、13 ページである。
3. 問題冊子とは別に答案紙が 6 枚ある。
4. 落丁，乱丁，印刷不鮮明の箇所などがあつたら，ただちに申し出よ。
5. 解答にかかる前に答案紙左端の折り目をていねいに切り離し，答案紙のそれぞれの所定の 2 箇所に受験番号を記入せよ。
6. 解答は答案紙の所定の欄に記入せよ。所定の欄以外に書いた答案は無効である。
7. 答案紙の右寄りに引かれた縦線より右の部分には，受験番号のほかは記入してはいけない。
8. 問題冊子の余白は草稿用として使ってもよい。
9. 試験終了後，退室の許可があるまでは，退室してはいけない。
10. 答案紙は持ち帰ってはいけない。問題冊子は持ち帰ってもよい。

I 次の英文を読み、下記の設問に答えなさい。

In a recent Skype call with a Dutch friend, we discussed her kids and their college experience in the Netherlands. Apparently, there had been protests on campus about costs and payments. “How much are they paying now?” I asked, gritting my teeth ( ア ) preparation for the answer. “Well,” she said, “it’s now about 1,800 euro a year.”

(1) Wow.

My friend’s kids are going to some of the best universities in the world and, in the end, that education will cost them less than \$8,000. Compare that to the U.S., where the average cost of a higher education is more than \$128,000 at a private school, \$96,000 for out-of-state residents attending public universities and about \$40,000 for in-state residents at those same public universities.

These numbers were key data points I held in my mind as I addressed a group of parents and students last week in a talk titled “The Value of a Liberal Arts Education.” While liberal arts is defined to include some of the sciences, sometimes the term is used to contrast an education focusing on the arts and humanities (English, history, philosophy, etc.) with one focusing on technical subjects such as engineering.

In spite of being a scientist, I strongly believe an education that fails to place a heavy emphasis on the humanities is a missed opportunity. Without a  
(2)  
base in humanities, both the students and the democratic society these students  
must enter as informed citizens are denied a full view of the heritage and critical  
habits of mind that make civilization worth the effort.

There is, of course, another way to view the question of whether a liberal arts education has value. It is to question whether college should instead be seen as some kind of higher vocational training: a place to go to for a specific certification for a specific job.

Here, too, I would push back strongly.

For those of us who go to college, the four years spent there are often the sole chance we give ourselves to think deeply and broadly about our place in the world. To turn college into nothing more than job training (emphasizing only those jobs that pay well), represents another missed opportunity for students and the society that needs them.

So, these are my traditional answers to the traditional questions about the value of humanities and arts education vs. science and engineering. From my standpoint as a scholar, I'll stand by them and defend what they represent to the last breath.

But the world has changed and, I believe, <sup>(3)</sup>these answers are no longer enough.

It's not just the high cost of college that alters the equation. It's also vast changes that have swept through society with the advent of a world run on information (i.e., on data). So, with that in mind, here is my updated — ( イ ) the traditional — response to the value of the humanities in education: <sup>(4)</sup>The key is balance.

It is no longer enough for students to focus on *either* science/engineering or the humanities/arts. During the course of their lives, students today can expect to move through multiple career phases requiring a wide range of skills. A kid who wants to write screenplays may find she must learn how to build Web content for a movie-related app. That effort is likely to include getting her hands dirty with the technology of protocols and system architecture. Likewise, a kid who started ( ウ ) in programming may find himself working for a video game company that puts a high value on storytelling. Doing his job well may require him to understand more deeply how Norse mythologies represented the relationship between human and animal realms.

These changes, combined with the ever-spiraling price of college, mean that students — and their parents — must strive for clarity and honesty as they make their choices. They should not fall into the easy traps of educational

consumerism — thinking that only a “status” school will give students the opportunities they hope ( 工 ) to grow. There are many, many excellent schools out there. Students should be very careful about getting into debt and be clear about what the expected outcomes will be for their choices. If you long to become a poet or study Roman history, then, by all means, pursue those passions. But be realistic about what will happen when you graduate. Be prepared. And if the cost of education is an issue, make choices about those costs — and which school is right for you — wisely.

This means students must find a balance between the real pressure to find a <sup>(5)</sup>job and the understanding that they will not get this chance to grow intellectually, morally and spiritually again. In dealing with this dilemma, I would argue that everyone should have a second plan. One path toward a viable alternative plan is a double major (or at least a minor) that spans the divide between what C.P. Snow called the “Two Cultures.”

【出典：Adam Frank, “What is the value of an education in the humanities?”  
13.7: *Cosmos & Culture*, February 2, 2016. 出題の都合上、原文の一部に変更を加えている。】

#### 設 問

- 1 下線部(1)が示す驚きは何に対するものか、日本語で説明しなさい。20 字以上 30 字以内(句読点を含む)で答えること。
- 2 下線部(2)を日本語に訳しなさい。

- 3 下線部(3)の“these answers”の内容として、適切なものを以下の(A)~(F)より2つ選び、記号で答えなさい。
- (A) 将来の夢を実現するのに適した大学を選ぶべきである
  - (B) 大学教育において、理科系科目よりも文系科目の割合を増やすべきである
  - (C) 理科系の学生は文系科目の学問を副専攻とすべきである
  - (D) 大学を職業訓練の場とみなすべきではない
  - (E) 大学におけるリベラル・アーツ教育は専門教育への橋渡しとなるべきである
  - (F) 人文学の教育を軽視すべきではない
- 4 下線部(4)の“balance”の内容として、もっとも適切なものを以下の(A)~(E)より1つ選び、記号で答えなさい。
- (A) a balance between the cost of tuition and the university's excellence
  - (B) a balance between the school's prestige and career preparation
  - (C) a balance between the university's status and the opportunities it gives to the student
  - (D) a balance between knowledge and skills gained in science/engineering and those gained in humanities/arts
  - (E) a balance between the speed of information flow and the development of a liberal arts education
- 5 下線部(5)を日本語に訳しなさい。
- 6 空欄(ア)~(エ)に入るもっとも適切な単語を以下の(A)~(H)より選び、記号で答えなさい。各記号は一回のみ使用することができる。
- (A) among                      (B) between                      (C) beyond                      (D) by
  - (E) for                      (F) in                      (G) out                      (H) without

## II 次の英文を読み、下記の設問に答えなさい。

(\*の付いた単語は注を参照すること)

The firefly is one of nature's most extraordinary creatures. On warm summer evenings, as the sun dips below the horizon, these small winged insects <sup>(1)</sup> take to the air and transform the landscape into a silent symphony of blinking lights, a sight that has captivated human audiences for centuries.

Charming though it may be, the firefly's light serves a serious purpose. It is a form of communication and the cornerstone of an elaborate courting\* ritual in which potential mates beckon to one another.

( ア )

"Just as birds have their songs and colorful plumage, fireflies have their light, which they create by combining oxygen with a chemical called luciferin in their abdomens," said Kathrin Stanger-Hall, an associate professor of plant biology at the University of Georgia (UGA) who has spent several years studying the evolution of light signals in North American fireflies. "Their flashes are like a visual Morse code, and I want to understand how they use this code to communicate."

( イ )

Along with graduate student Sarah Sander, Stanger-Hall has made a number of discoveries about fireflies that help explain how their unique physical characteristics allow them to speak a language of light.

( ウ )

"The fundamental drive behind all this work is to better understand how <sup>(2)</sup> animals communicate and what evolutionary forces made them favor one method over another," Stanger-Hall said. "We've already learned so much from studying fireflies and their robust visual language."

( エ )

It may sound counterintuitive, but some fireflies do not produce light at all,

preferring instead to communicate through pheromones detected through their antennae. Stanger-Hall conducted a study in which she compared the eyes of these lightless fireflies with those that do produce light.

( オ )

“If you look out in your yard in the evening, most of the fireflies you see in the air are males; females typically remain sedentary\* on pieces of vegetation,” Stanger-Hall said. “Lighted fireflies — the males in particular — need good eyesight to find the right mate because they may be sharing a habitat with 10 or more different species, each with their own unique flash patterns.”

( カ )

The differences between these flashes are often subtle, but weekend naturalists can spot them with a little practice. Males belonging to the most common species in North America, for example, drop quickly in altitude and then climb sharply back up, forming the letter J as they flash. This unusual behavior<sup>(3)</sup> has earned them the name “big dipper firefly.”

( キ )

You may also have noticed that fireflies produce different hues of light, with some appearing yellow and others a deeper green color. Stanger-Hall and a team of UGA researchers wanted to know the reasons for these differences,<sup>(4)</sup> so they catalogued more than 7,500 individual firefly flashes from 24 species.

( ク )

What they found is that the variations in color allow different firefly species to stand out in their respective environments, depending on what time of day they are most active.

( ケ )

“Fireflies that are active earlier in the evening will produce a yellower light to maximize contrast against green vegetation,” said Stanger-Hall. “In comparison, fireflies that are active in darker habitats will produce greener light, which is more visible at night.”

( コ )

Stanger-Hall is also leading a study that will sequence the genes involved in light production to better understand how fireflies evolved their distinct flashes.

【出典：“The language of light,” *University of Georgia Research*, Volume 46, No. 1, 2016. 出題の都合上、原文の一部に変更を加えている。】

注

court : try to attract (a mate)

sedentary : staying in the same place

設 問

- 1 下線部(1)を日本語に訳しなさい。
- 2 下線部(2)を日本語に訳しなさい。
- 3 下線部(3)はどのような振る舞いか、日本語で説明しなさい。20 字以上 30 字以内(句読点を含む)で答えること。
- 4 下線部(4)を日本語で具体的に説明しなさい。30 字以上 40 字以内(句読点を含む)で答えること。
- 5 以下の英文は、文脈に即して考えると、本文のどの位置に置くのが最適か、(ア)~(コ)の記号で答えなさい。

What she found is that lighted species possess considerably larger eyes than their unlighted counterparts, and males generally possess larger eyes than females.





III Read the conversation, then answer the questions below.

Avie : Hi, Vikram. How was your weekend?

Vikram : Well, yesterday I did absolutely nothing, but on Saturday I went to an art exhibition.

Avie : That sounds fun. How was it?

Vikram : It was excellent. The main artist was Hokusai. I was surprised by his different styles and themes.

Avie : Sounds great. To be honest, I haven't been to a big art exhibition in a long time.

Vikram : I'm surprised. You seem to have an interest in that sort of thing. You know, when I'm walking along the street with you, we see gardens and buildings and things. You always notice the way they look, their design and so on. I always find your comments insightful. You have a kind of aesthetic sensibility. You notice things that I completely ( ア ).

Avie : Oh, really. Well, it's nice to hear that, and I guess I do tend to look at things that way. But I don't often go to exhibitions.

Vikram : Why's that?

Avie : Well, for one, I don't like queuing, and for most ( イ ) exhibitions you have to queue to get in.

Vikram : Oh, right. I know what you mean. Actually, we had to wait for about forty minutes to get in yesterday.

Avie : How many pictures were there?

Vikram : I think there were more than a hundred.

Avie : How long did you spend looking at them?

Vikram : I don't know, maybe an hour.

Avie : So you probably looked at one picture every 30 seconds or so, and you have to keep up the same pace pretty much all the time to keep

the queue moving. That's the other problem I have with the big exhibitions. Sometimes, I want to examine a painting for half an hour.

Vikram : You can just drop out of the queue in that case.

Avie : But if you do that you can't see the picture very well. You've got a row of people moving along in front of you blocking the picture. Then you've got to try to ( ウ ) the queue, without seeming like you're jumping the queue or generally annoying people.

Vikram : It's worth the bother, though, to see the original artworks. It's different to looking at the pictures in a book or on the Internet.

Avie : You're definitely right about that. If it's a painting, for example, you can probably see brushstrokes. If it's a sculpture, you might be able to walk around it and see it from different angles.

Vikram : What kind of art do you like?

Avie : That's difficult to say. I have varied taste.

Vikram : Me too, up to a point, but I prefer figurative art, on the whole. I like to see images that I can recognize and relate to the real world. You're the opposite, I think. Are you more interested in abstract art?

Avie : Well, I don't need to recognize anything in a picture, so I don't have any trouble enjoying works of abstract art. Even with those, though, if I have to look at a lot of them one after another, I just get a headache trying to absorb it all.

Vikram : Maybe you're trying too hard. It would be best, don't you think, if you could just sit somewhere drinking tea or coffee and look at a single painting for an hour.

Avie : Oh, that's an excellent idea. It'd be hard to manage with really famous, expensive art, but you're right, that would be a great way to experience art. By the way, apart from Hokusai, what other

artists were in the exhibition?

Vikram : Did you know that Hokusai's daughter was an artist too? Some of her works were on display. I'd never seen them before. She did some amazing work. Of course, she was similar to her father in some ways, but she had her ( 丱 ) style too.

Avie : I vaguely remember reading something about her in an art catalogue. I'd really like to see her work.

Vikram : Then you should go to the exhibition before it closes. Maybe go on a weekday, if you can, so you can ( 才 ) a big crowd.

#### Questions

- 1 Based on the dialogue, explain what the underlined expression "aesthetic sensibility" means. Complete the following sentence by adding about 10 words in English.

"Aesthetic sensibility" means \_\_\_\_\_.

- 2 Which two reasons does Avie give for rarely going to big art exhibitions?
  - (A) She doesn't like some aspects of abstract art.
  - (B) She would rather not wait in a line.
  - (C) She prefers drinking tea or coffee at a café.
  - (D) There are often annoying people at exhibitions.
  - (E) She likes to take her time when she looks at art.

3 Based on the dialogue, which of the following can we most reasonably infer about Vikram?

- (A) He is wealthy enough to have an art collection.
- (B) He has experience in making art.
- (C) He learned more about Hokusai from the exhibition.
- (D) His daughter is similar to him in some ways.
- (E) He will go to the exhibition on a weekday.

4 Fill in each space ( ア ) to ( オ ) using the number of the most appropriate word from the list below. Do not use any word more than once.

- |              |             |                 |             |
|--------------|-------------|-----------------|-------------|
| (1) avoid    | (2) dislike | (3) experience  | (4) minor   |
| (5) overlook | (6) own     | (7) picturesque | (8) popular |
| (9) re-enter | (10) start  |                 |             |

5 Many people across cultures consider art to be important. Give two reasons why you think people of various cultures value art. For each reason write a complete sentence of about 10-20 words in English.

Ⅳ 次の文章を読み、下線部(1)～(3)を英語に訳しなさい。

- 1 地球の表面の 70 % を覆い、人類の生活に欠かせない海の環境が、今のまま  
(1)では危機的な状況を迎える。貴重な栄養源である海の魚は乱獲によって減少  
し、プラスチックごみなどの海洋汚染が深刻だ。大気中の二酸化炭素(CO<sub>2</sub>)  
濃度の上昇は、海水温度だけでなく、海水の酸性度が高くなる「海洋酸性化」を  
招くと懸念されている。

【出典：「海の日/環境保全の努力強化を」『山陰中央新報』2016 年 7 月 19 日】

- 2 人はコミュニケーションによってさまざまな恩恵を受けている。他者に何か  
を知らせる、必要なものを入手する、新しい知識を得るというだけではない。  
誰かに気持ちを話すことで心の安らぎが得られることもある。また、ことばに  
よって協力しあい、助けあうこともできる。テレビ、ラジオや新聞などのマス  
コミも多くのことを伝えてくれる。近年はさらにインターネットによる多様な  
(2)情報の発信、受信なども加わり、コミュニケーションの恩恵は計り知れないも  
のになっている。

【出典：岡本真一郎『悪意の心理学』中央公論新社，2016 年】

- 3 「折々のことば」 鷺田清一

「これもいい」「あれもいい」という発想のほうがおいしい料理を作れる。

小林カツ代

すぐに作れるおいしい料理を紹介し、忙しい親たちに支持されていた料理家  
は、自然派とか安全派、「食育」などと肩ひじはらずに、おいしい料理を食べさ  
せるほうが子育てにはいいと言う。実際、おいしいものを作って喜ばせてあげ  
(3)ようと腕を鳴らす人が輪の中心にいと、その集団は華やぐ。ほんとうはそれ  
がいちばんいいのかも。「学びの場.com」の取材に答えて。

【出典：鷺田清一「折々のことば」『朝日新聞』2016 年 2 月 5 日】