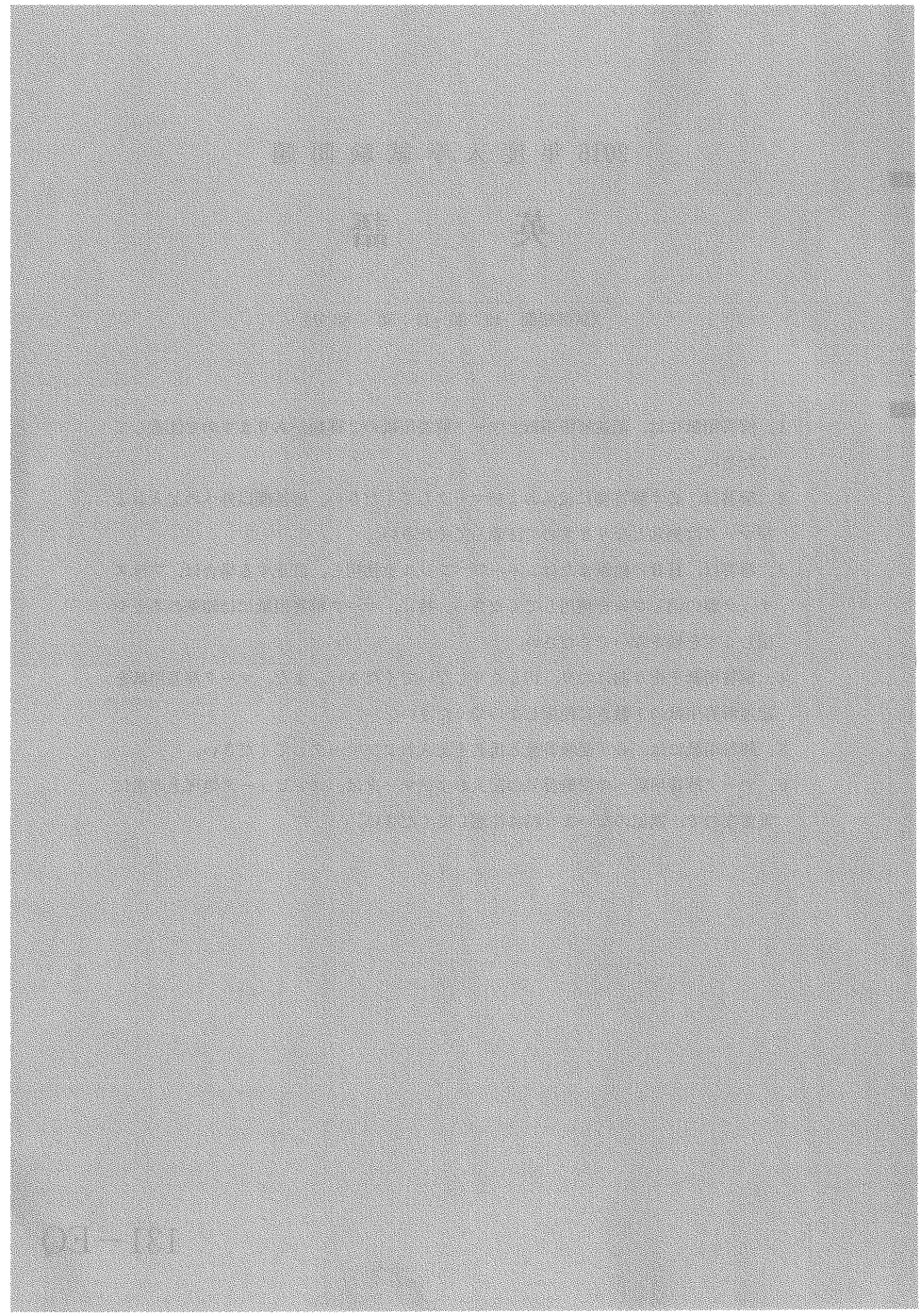


2016 年度 入学 試験 問題

英 語

(試験時間 10:30~11:50 80分)

1. 解答用紙には、記述解答用紙とマーク解答用紙の2種類がありますので注意してください。
2. 解答は、必ず解答欄に記入およびマークしてください。解答欄以外への記入およびマークは無効となりますので注意してください。
3. 解答は、HBの鉛筆またはシャープペンシルを使用し、訂正する場合は、プラスチック製の消しゴムを使用してください。特に、マーク解答用紙には鉛筆のあとや消しくずを残さないでください。
4. 解答用紙を折り曲げたり、汚したりしないでください。また、マーク解答用紙を記述解答用紙の下敷きには使用しないでください。
5. 解答用紙には、必ず受験番号と氏名を記入およびマークしてください。
6. マーク解答用紙への受験番号の記入およびマークは、コンピュータ処理上非常に重要なので、誤記のないよう特に注意してください。



(設問は次ページより始まる。)

I 次の英文を読み、設問に答えなさい。(50点)

Occasionally cities in history have found that they have a problem that is so big that they need to find a very big solution for it. In the middle of the nineteenth century, Chicago was in a situation like this. The city was not much higher than the shore of Lake Michigan, so when it rained, the water would not drain away into the lake. The roads filled with wet mud, and in the standing water*, terrible diseases would develop. The city became a very dangerous place to live; in just one outbreak of disease, in 1854, 6% of the city's population was killed.

The crisis forced the city to find a solution and in 1856, engineer Ellis S. Chesbrough, created a plan that sounds impossible: to lift the city's buildings, so that drains could be placed underneath to get rid of the water. This process started in January 1858, when they managed to raise a four-story building nearly two meters higher without damaging it at all. After this success, fifty buildings of a similar size were also raised.

The engineers became more confident and in 1860 they managed to lift half a city block — a row of shops and offices almost 100 meters long. Remarkably, the businesses did not close while they were being lifted — people still used the shops and everybody carried on as if nothing was happening. After the lifting was complete, thousands of people came to see it and walk under the buildings. When the huge Tremont House hotel — six stories high — was lifted, again, the hotel operated as normal. They did not even explain to their guests what they were doing and one could not work out why the front steps were becoming steeper every day and the view from the window kept changing.

The opportunity was taken to try to improve central Chicago. Many of its wooden buildings were considered inappropriate for a wealthy, successful city. So, rather than raise them, their owners put them on rollers — sometimes a whole row of them — and pushed them to a less important part of the city. Indeed, this became so common that people would see buildings moving around nearly every

day. Shop owners would keep their shops open while this was happening, even if customers had to climb in through a moving front door. Later, in 1866, they managed to move a brick building in this way and when this succeeded, more followed.

The operation was a huge success, enabling drains to be built under the buildings and making Chicago a safer and more comfortable place to live. In the next few years, the city would face other challenges. In 1871, there was the Great Chicago Fire which destroyed a large part of the center of the city. But Chicago responded in the same positive way, using the opportunity to put up the most modern buildings there were at the time: constructions of steel and stone, including the world's first skyscraper in 1885. Chicago is still one of the tallest cities in the world and the Sears Tower (now called the Willis Tower), built in 1973, was the tallest building in the world for twenty-five years.

Chicago is now the third largest city in the United States, with, among other things, the world's busiest airport and one of the world's greatest universities, the University of Chicago. None of this would have been possible if the city had not taken a very big decision 150 years earlier.

*standing water よどんだ水

問1 本文の内容と一致するように1～10の語句に続く最も適当なものを(A)～(D)から一つずつ選び、その記号をマークしなさい。

1. In the mid-1850s, Chicago was
- (A) at a lower level than Lake Michigan.
 - (B) too high.
 - (C) a rainy city.
 - (D) an unhealthy city.

2. Chesbrough's plan for Chicago was
- (A) to build taller buildings.
 - (B) extremely difficult to achieve.
 - (C) to build drains around the buildings.
 - (D) to raise buildings more than two meters.
3. In 1860 engineers lifted
- (A) a very long building.
 - (B) a row of buildings by nearly 100 meters.
 - (C) more than one building at the same time.
 - (D) shops that had to close for business while they were lifting them.
4. The Tremont Hotel
- (A) had six stories written about it.
 - (B) was raised six stories.
 - (C) kept changing its windows.
 - (D) had steps which changed.
5. Chicago's wooden buildings were
- (A) raised in the same way as its brick buildings.
 - (B) built again outside the center of the city.
 - (C) moved to a different part of the city.
 - (D) moved so that people could see them better.
6. The lifting operation meant that
- (A) drains could be built around buildings.
 - (B) there were fewer accidents in Chicago.
 - (C) Chicago had more comfortable buildings.
 - (D) water could be drained in the city.

7. The Great Fire of 1871

- (A) destroyed the city of Chicago.
- (B) led to building innovation in Chicago.
- (C) changed the spirit of Chicago.
- (D) was dealt with using the same method as Chicago's problem with water.

8. Chicago

- (A) had the world's tallest building for a number of years.
- (B) still has the world's tallest buildings.
- (C) was the first city to build a tall building.
- (D) was the first city to put up buildings of steel and stone.

9. Chicago today

- (A) is similar to the way it was one hundred and fifty years ago.
- (B) is now North America's third largest city.
- (C) could not have developed as it did had its problem with water not been solved.
- (D) is home to the world's greatest universities.

10. The most appropriate title for this article would be

- (A) "Chicago: the city that has never changed."
- (B) "Chicago: the city of terrible crises."
- (C) "Chicago: the city that keeps being destroyed but keeps rising again."
- (D) "Chicago: the city whose appearance has changed, but whose spirit has not."

問2 本文中の下線部を日本語に訳しなさい。解答は記述解答用紙に書きなさい。

II 次の英文を読み、設問に答えなさい。(40点)

It may seem that goldfish do not have much brainpower, but this is not quite true — research has shown that they can do more than most people think. They can distinguish between different shapes, colors and sounds and they can even be trained to perform simple tricks. They can also distinguish between humans and will learn who their owners are, swimming up to them, especially if they are given food when this happens. They can be trained to push a lever for food, and even after the lever is removed, they can remember how it worked for up to three months.

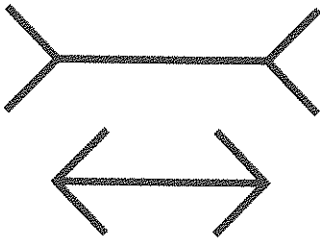
Some experiments on fish can give us hints about humans. In 2012, thirty-two small fish were sent to the International Space Station to see how a weightless environment affected bones. These fish were perfect for this task because you can see (1) them, meaning that scientists could easily tell what happened to their insides without killing them. Unfortunately, most of the fish died fairly quickly, but when their bodies were returned to earth, scientists were able to learn more about bone loss in space.

More interesting research has been done on sharks, which suggests they have some remarkable skills, better, in some ways, than humans. Scientists have conducted research into the gray bamboo shark, which is a kind of carpet shark. (2) may be guessed from the name, they live at the bottom of the sea and have patterns on their body. Like most sharks, they are no danger to humans who leave them alone.

First, the scientists tried to find out if they could train the sharks to recognize and remember shapes. Four sharks were shown different shapes. The sharks were taught to always choose a triangle, and received a small piece of food for pressing their nose on the triangle. Another four sharks were taught to always recognize a square, and were similarly rewarded. Both sets of sharks quickly learned this and were even able to recognize the shapes when they were

incomplete.

Another experiment was more impressive. The sharks were shown lines of different lengths and were given food when they selected the longer line. Once the sharks had learned that, they were tested to see if they could be tricked into making a mistake about which was the longer line using the following test:



Humans usually think the top line is longer (they are both the same length), but the sharks were not fooled. They were almost always able to tell which line was longer, (3)⁽⁷⁾ was done to try to trick them. It was also found some of the sharks could remember their training for a year. This is much longer than most other animals' ability to remember training, placing them with animals that are usually thought to be more intelligent, like monkeys.

In many ways what makes these results most remarkable is that the gray bamboo shark does not need good eyesight. To catch their food, they swim along the ocean floor filling their mouths with sand and hoping to catch fish and other small marine animals. Probably bigger sharks that are more dependent on their eyes for eating, like the frightening great white shark, have even better brains. The difficulty would be trying to test this!

問1 本文の内容と一致するように1～6の語句に続く最も適当なものを(A)～(D)から一つずつ選び、その記号をマークしなさい。

1. Goldfish are able to

- (A) swim for food.
- (B) realize shapes, colors, and sounds.
- (C) understand what their owners are saying.
- (D) remember certain things for several months.

2. The fish sent into space

- (A) were very unhealthy.
- (B) were used in an experiment.
- (C) died because of what happened to their bones.
- (D) proved that a weightless environment destroyed bones.

3. The gray bamboo shark

- (A) is a threat to swimmers.
- (B) behaves like a carpet.
- (C) stays low in the sea.
- (D) is more interesting than the fish sent into space.

4. Scientists found that the sharks

- (A) could distinguish different shapes.
- (B) were confused when images were shown to them.
- (C) always chose the triangle.
- (D) received food every time they pushed a shape.

5. The sharks could recognize the shapes
- (A) only when they were perfectly drawn.
 - (B) even when they were not drawn completely.
 - (C) only after a lot of training.
 - (D) that looked like other shapes.

6. The sharks were
- (A) rewarded when they chose the longer line.
 - (B) shown a long line.
 - (C) shown many different lines at a time.
 - (D) tricked by the scientists.

問2 本文の空所 (1) ~ (3) に入る最も適切な語を、それぞれ(A)~(D)から一つ選び、その記号をマークしなさい。

1. (A) to (B) against (C) through (D) in
2. (A) As (B) Which (C) Since (D) While
3. (A) however (B) whenever (C) whatever (D) wherever

問3 本文中の下線部(ア)~(ウ)が指す、あるいは意味する内容を最もよく表している語を(A)~(D)から一つ選び、その記号をマークしなさい。

- (ア) (A) humans (B) researchers (C) owners (D) goldfish
(イ) (A) station (B) experiment (C) environment (D) science
(ウ) (A) deceived (B) mistaken
(C) scorned (D) misunderstood

問4 この文章の表題として最も適切なものを(A)~(D)から一つ選び、その記号をマークしなさい。

- (A) "Training fish to think"
- (B) "The surprising abilities of fish"
- (C) "Experimenting on fish"
- (D) "Almost as intelligent as humans!"

Ⅲ 次の対話を読み、空所（ 1 ）～（ 10 ）に入る最も適切な語句をそれぞれ(A)～(D)から一つずつ選び、その記号をマークしなさい。(20点)

Kana: Hi Birgitta. How is Esa (1) with his writing?

Birgitta: He's not going to be learning handwriting. (2) stopped teaching it in schools in Finland.

Kana: That's (3)! Why have they done that? What happens if the children want to write something?

Birgitta: Well, the school is going to give them all tablets and they have to do their writing on them. They say that in the (4), typing on devices will be so much more important for children than writing by hand.

Kana: But we all need to write by hand (5). What will they do then?

Birgitta: I don't know! I think I'm going to teach Esa handwriting at home — I want him to be able to write properly. I still think it's an important (6). How about in Japan? Do they still teach handwriting there?

Kana: Yes they do — Haruki (7) to learn how to write new characters every week. Children spend a lot of time on them at school. If they didn't, they (8) learn them — Japanese is a hard language to write.

Birgitta: I (9) if they'll ever stop teaching them to write by hand in Japan.

Kana: I hope not — I think I'd teach Haruki to do it (10) if they did. I still think it's important to have good handwriting, however much we use computers.

1. (A) going (B) feeling (C) succeeding (D) trying
2. (A) They'll (B) They're (C) They've (D) They'd
3. (A) good (B) great (C) wonderful (D) amazing
4. (A) education (B) profession (C) future (D) job
5. (A) rarely (B) occasionally (C) possibly (D) seldom
6. (A) skill (B) talent (C) power (D) technique
7. (A) must (B) can't fail (C) ought (D) has
8. (A) won't (B) wouldn't (C) can't (D) could
9. (A) consider (B) think (C) wonder (D) imagine
10. (A) by myself (B) on my own (C) in myself (D) myself

IV 次の英文 1～6 の () に入る最も適切な語句を(A)～(D)から一つずつ選び、その記号をマークしなさい。(12点)

1. When you travel in the US, you need to be able to understand such () of measurement as miles, pounds, and gallons.

- (A) marks (B) units (C) digits (D) tools

2. Carry your () with you — money, jewelry, cameras, and so on.

- (A) gifts (B) baggage (C) importance (D) valuables

3. *The Pillow Book* by Sei Shonagon is an ancient () work with which Japanese people have been fascinated for a long period of time.

- (A) literal (B) literate (C) literary (D) illiterate

4. The doctor wrote a () for some painkillers for Nick to take while his arm was healing.

- (A) depiction (B) description (C) prescription (D) subscription

5. I'm willing to () extra responsibility if you offer me a higher salary.

- (A) take on (B) put out (C) give in (D) make up

6. Borrowing more money to pay off a loan creates a vicious () of increasing debt.

- (A) square (B) triangle (C) circle (D) line

V 次の1～6の日本語に合うように、それぞれ下にある(A)～(F)の語句を並べ替えて、空所を補い、英文を完成させなさい。ただし、解答は(1)～(6)に入るべき語の記号のみをマークしなさい。なお、文頭の語も小文字で記してある。(18点)

1. あなたは自分が正しいと思うことをするべきだ。

You should _____ (1) _____
_____ (2) _____.

(A) do (B) is (C) think (D) right (E) what (F) you

2. この記事によると、カリフォルニア州では釈放された受刑者のうち三分の二もの人が犯罪を繰り返すという。

This article says that _____ (3) _____ (4) _____
_____ return to crime in California.

(A) as (B) as many (C) released prisoners (D) of (E) thirds
(F) two

3. あなたは彼を覚えていないかも知れないが、この写真を見れば誰なのかを思い出さだろう。

Probably you don't remember him, but _____ (5) _____
_____ who _____ (6) _____.

(A) he (B) you (C) this picture (D) of (E) will remind (F) is

4. 再生可能エネルギーが原子力の代わりになり得るかどうかは、私にはよく分からない。

I am not sure (7) _____ (8) _____

- (A) if (B) nuclear power (C) renewable energy (D) replace
(E) we can (F) with

5. 私が現在のようになったのは野球のコーチのおかげだ。

_____ (9) _____ (10) _____
today.

- (A) me (B) I (C) my baseball coach (D) made (E) am (F) what

6. 自分の子供に何を言うべきでないか、ということはその本にはっきり書いてある。

The book clearly (11) _____ (12) _____
_____ to your child.

- (A) what (B) to (C) tells (D) say (E) you (F) not

VI あなたにとって一番印象に残っているまち(街/町)はどこですか。また、それはなぜですか。80 語以上の英語で書きなさい。解答は記述解答用紙に書きなさい。(10 点)

