

法学部A方式Ⅰ日程・文学部A方式Ⅱ日程・経営学部A方式Ⅱ日程

1 限 英 語 (90分)

〈注意事項〉

1. 試験開始の合図があるまで、問題冊子を開かないこと。
2. 解答はすべて解答用紙に記入しなさい。
3. マークシート解答方法については以下の注意事項を読みなさい。

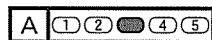
マークシート解答方法についての注意

マークシート解答では、鉛筆でマークしたものを機械が直接読みとって採点する。したがって解答はHBの黒鉛筆でマークすること(万年筆、ボールペン、シャープペンシルなどを使用しないこと)。

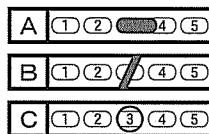
記入上の注意

1. 記入例 解答を3にマークする場合。

(1) 正しいマークの例



(2) 悪いマークの例



枠外にはみださないこと。

○でかこまないこと。

2. 解答を訂正する場合は、消しゴムでよく消してから、あらためてマークすること。
3. 解答用紙をよごしたり、折りまげたりしないこと。
4. 問題に指定された数よりも多くマークしないこと。

4. 問題冊子のページを切り離さないこと。

[I] つぎの英文を読んで、問いに答えよ。

“I have become death, the destroyer of worlds.” So said the physicist Robert Oppenheimer, who helped to invent the atomic bomb. The two bombs (A) on Hiroshima and Nagasaki in 1945 killed around 200,000 Japanese people. No other species has ever created such power, and no other could. The technology behind the atomic bomb only exists because of a cooperative hive mind*1: hundreds of scientists and engineers working together. The same unique intelligence and cooperation also underlies more positive advances, such as modern medicine.

But is that all that defines us? In recent years, many traits once believed to be uniquely human, from morality to culture, have been found in the animal kingdom. “We have similarities with everything else in nature; it would be astonishing if we didn’t. (B) , we’ve got to look at the differences,” says Ian Tattersall, a paleoanthropologist*2 at the American Museum of Natural History. To understand these differences, a good place to start is to look at how we got here.

Humans and chimpanzees are descended from our common ancestor who lived more than six million years ago. Fossil evidence points to the ways which we have gradually changed. We left the trees, started walking and began to live in larger groups. And then our brains got bigger. (C) we don’t know exactly what led to our brains becoming the size they are today, we seem to owe our complex reasoning abilities to it.

Our language-learning abilities were gradually “switched on,” Tattersall argues. In the same way that early birds developed feathers before they could fly, we had the mental tools for complex language before we developed it. It’s not clear exactly when speech was developed. But it seems likely that it was partly driven by another uniquely human trait: our superior social skills.

Comparative studies between humans and chimpanzees show that while both will cooperate, humans will always help more. We know that chimpanzees work together and share food in apparently unselfish ways. However, Michael Tomasello of the Institute for Evolutionary Anthropology in Germany says chimpanzees will only cooperate if there is something in it for them.⁽²⁾ “Humans do that too, but in addition they care about what their partner gets. In some experiments, we have children as young as 14-18 months who seem to expect their partner to collaborate in certain ways and who share in ways chimpanzees don’t.”

Charles Darwin, in his book *The Descent of Man*, wrote that humans and animals only differ in degree, not kind. This still stands true but Thomas Suddendorf, an evolutionary psychologist in Australia, says that it is precisely these gradual changes that make us extraordinary and have led to “radically different possibilities of thinking.” As far as we know, we are the only creatures . We reflect further back in time, and further into the future, than any other animal. What other species would think to ponder the age of the universe, or how it will end? We have an immense capacity for good. At the same time, we risk driving our closest relatives extinction and destroying the only planet we have ever called home.

*1 hive mind: 集団意識

*2 paleoanthropologist: 古人類学者

1. 空所 に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。

a. drop

b. dropped

c. have dropped

d. to drop

2. 空所 に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. For instance b. However c. Moreover d. That is
3. 空所 に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. After b. Although c. Before d. Because
4. 下線部(1) switched on の意味に最も近いものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. activated b. limited c. reversed d. substituted
5. 下線部(2) if there is something in it for them の意味に最も近いものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. if they aim to disguise each other
b. if they benefit from that action
c. if they dislike their partner's attitude
d. if they share the same experience
6. 空所 に入るようにつぎの a～g を並べ替え、3番目と6番目にくる語の記号を解答欄にマークせよ。ただし、同じ選択肢を二度以上使用しないこと。
- a. came b. to c. trying d. from
e. we f. where g. understand
7. 空所 に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. for b. in c. to d. with

8. 本文の内容に合致するものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. For Thomas Suddendorf, it is too old-fashioned to believe what Charles Darwin discusses in *The Descent of Man*.
 - b. It seems that the size of the brains of human beings is related to their skills to think coherently and logically.
 - c. Culture is now considered to be one of the representative characteristics that make human beings unique.
 - d. Not only human beings but also chimpanzees use the power of intelligence and cooperation to hurt each other.

〔Ⅱ〕 つぎの英文を読んで、問いに答えよ。

Cuisine has clearly changed in many parts of the world as a result of trade. The explorers who made contact with the New World brought tomatoes, potatoes, corn, and avocados*¹, as well as herbs such as coriander*², back to Europe. Nowadays we associate chili peppers and coriander (A) Asian cuisine, but in all probability these ingredients only arrived in Asia with the Portuguese explorers, who had encountered them in Latin America, in the 16th century. Before the arrival of the chili, Asian cuisine used black or white pepper as a spice. Chili took over because it had a similar effect and was much easier to grow and therefore cheaper. The same is true of the other food plants that have been adopted outside their native country: if they were easy to grow, nutritious, or otherwise useful in cooking, they were often rapidly (B) .

However, the tomato in Italy is a remarkable counter example. Nowadays, Italian cuisine is famous for its use of the tomato: pasta al pomodoro, pizza Margherita, chicken cacciatore, and ragu alla Bolognese are just a few of the very familiar Italian dishes that include tomatoes. In the 1950s, English writer Elizabeth David criticized Italian cooking (C) containing too much tomato. But, remarkably, this is (D) as the 19th century. As the historian David Gentilcore has documented, there was a delay of more than 300 years between the arrival of the tomato in Italy in 1548, from the New World, via Spain, and its widespread use in cooking. The Italians adopted other New World crops such as corn, beans, chilies, and tobacco, before they accepted tomatoes.

Gentilcore suggests a number of possible reasons for this. The early tomatoes were sour because sweetness had not yet been bred into them. They were identified as belonging to the family of poisonous plants (along with eggplants*³, potatoes, and tobacco) and were therefore treated (E)

(F) . One authority described them as “dangerous and harmful” and their smell alone was said to cause “eye diseases and headaches.” Tomatoes were nevertheless grown as ornamental plants. The Italian name *pomo d'oro* (yellow fruit) may have been adopted as an allusion to the tree that bears golden apples in Greek mythology.

The tomato's acceptance as a food was (G) : in the mid-17th century there are references to its use as a seasoning, to make a salsa sauce with chili peppers, and by the late 18th century recipes in cookbooks were appearing. Methods of preserving tomatoes for use in the winter were also being developed. These included drying halved tomatoes (equivalent to modern sun-dried tomatoes) and making a paste from boiled tomato purée that was then dried in sheets in the sun. But dishes such as pasta with tomato sauce and pizza Margherita were probably 19th-century inventions, the latter formally named (H) the queen of Italy in 1889. The crucial development of canned tomatoes and tomato purée took place in Britain and the USA: in fact, the emigrant Italians influenced the development of tomato-based cuisine in the USA and the breeding of new varieties, which were later reimported into Italy.

*1 avocado: アボカド

*2 coriander: コリアンダー(セリ科の一年草)

*3 eggplant: ナス

1. 空所 (A) に入る最も適切なものを, つぎの a ~ d の中から一つ選び, その記号を解答欄にマークせよ。

a. for

b. in

c. to

d. with

2. 空所 (B) に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. counted out b. kept down c. shut in d. taken up
3. 空所 (C) に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. at b. against c. by d. for
4. 空所 (D) に入るようにつぎの a～f を並べ替え、3番目と5番目にくる語(句)の記号を解答欄にマークせよ。ただし、同じ選択肢を二度以上使用しないこと。
- a. tradition b. only as c. dates back d. far
e. a f. that
5. 下線部(E) this の指す内容として最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. that Italian cuisine tends to contain too much tomato
b. that tomatoes became very popular in Italian cooking
c. that it took time before tomatoes spread widely as food in Italy
d. that the Italians have adopted a lot of New World crops throughout history
6. 空所 (F) に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. at ease b. for pleasure
c. in haste d. with suspicion

7. 空所 に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。

- a. absolute b. gradual c. occasional d. temporary

8. 空所 に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。

- a. after b. as c. at d. to

9. 本文の内容と合致するものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。

- a. In the 16th century, Asian explorers brought a variety of New World crops back to their own countries.
- b. Some people believed that the smell of tomatoes would damage one's health.
- c. Methods of preserving tomatoes have not been a concern for the Italians.
- d. The first edible tomato was invented by the Italian emigrants in the USA and later reimported into Italy.

〔Ⅲ〕 つぎの英文を読んで、問いに答えよ。

As I watched the back part of Olive down a hole, I wasn't extremely worried. should have been. It would take a heart-wrenching eight hours to get her back.

Olive, aged five, is a small Patterdale terrier*¹, a breed once described to me as the Army Special Forces of the dog world. She is also my most trusted companion and a family dog, who is adored by the children and loves them back. But Olive, being no bigger than a domestic cat, is also ready to seek and destroy all living creatures.

And so I blame it on the breeding when on our regular morning walk on Hackney Marshes*², with Olive faithfully at my side, I turned around to realise she wasn't there any more.

It was just , when Olive went absent without leave. I was at a slight loss at first. But after about an hour, I started to properly worry. I lay down on the ground, and put my ear to the hole. Nothing.

I telephoned my wife to bring a spade. Then I sent an email to work to explain I'd be late. Next I googled "terriers missing down a hole" and "Patterdale terrier rescue" and combinations of the two. I read about a fire crew rescuing a lost terrier after three days and gasped at the prospect of camping on Hackney Marshes before dialling the fire service.

"You need the RSPCA*³," explained the fire service operator. I tried the RSPCA, but my luck was : their phones were down.

Two hours passed. When we knelt at the hole and listened in, my wife heard a bark, and I heard what sounded like scratching.

Eventually the RSPCA's phones were back , and I got through to a receptionist.

"Our dog has disappeared down a hole and has been gone for two hours at least," I explained. I was told an inspector would call me back.

By 11 am, fellow dog walkers had arrived with their own wilful Patterdale terrier Sid, a rescue dog. We wondered if Sid might lure Olive out but to no avail.

By around 1 pm, the RSPCA inspector Mariam called to say she was (J) her way, and by 1:30 pm she had arrived at Hackney Marshes. I explained that we had last heard from Olive more than two hours ago. Since then a worrying, alarming, miserable, tears-inducing silence. She had now been gone a good five hours.

“We’ll get her back,” promised Mariam, with a reassuring pat on my arm. “We need the fire service,” she said and dialled up her command centre. “They’ll be here in seven minutes,” she said.

I heard the fire service before I saw them; the sirens blasting as the large truck pulled into Hackney Marshes. One of the firefighters suggested a drains blockage company, Dyno-Rod, and I dialled them up. “We have a lot of experience with this,” said Dyno-Rod and despatched Jamie. Now it was 3 pm, and Olive had been absent for seven hours.

Dyno-Rod’s Jamie proved to be a saint, one who refused payment for his trouble. (K) “We have to dig,” said Jamie.

By 3:50 pm, Mariam had crawled into the trench, lay on the ground and reached a slender arm into the tightest of tunnels. At 4 pm, out came Olive, covered with mud and blood.

Mariam handed the dog to me, and I gave her the biggest hug. I can’t quite explain the happiness I felt; even my kids’ births didn’t delight me that much.

On closer inspection, Olive’s face had been beaten as if going ten rounds with Mike Tyson*⁴. Veterinarians suspect she was attacked by some wild animal and had lay in the hole for hours after the attack, frozen with fear and shock. Part of her lip had been torn and teeth puncture marks were visible on her face.

She's back at home now with a cone of shame*⁵ in place. I'm thinking of keeping it on her. It'll stop her going down holes in the future.

*¹ Patterdale terrier: (犬種)パターデイル・テリア

*² Hackney Marshes: ロンドンにある湿原

*³ RSPCA: Royal Society for the Prevention of Cruelty to Animals の略,
英国動物愛護協会

*⁴ Mike Tyson: アメリカの元プロボクサー

*⁵ cone of shame: 犬猫等の首に装着する円錐形状の保護具

1. 空所 に入る最も適切なものを, つぎの a~d の中から一つ選び,
その記号を解答欄にマークせよ。
a. disappears b. disappeared c. disappear d. to disappear

2. 空所 に入る最も適切なものを, つぎの a~d の中から一つ選び,
その記号を解答欄にマークせよ。
a. I b. Olive
c. A hole d. A heart-wrenching eight hours

3. 下線部(C) loves them back の意味に最も近いものを, つぎの a~d の中から
一つ選び, その記号を解答欄にマークせよ。
a. loves any human b. loves the author's children
c. loves the dogs d. loves the Army Special Forces

4. 空所 に入る最も適切なものを, つぎの a~d の中から一つ選び,
その記号を解答欄にマークせよ。
a. despite b. in c. since d. with

5. 下線部(E) it の内容に最も近いものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. that the author's dog tended to destroy all living creatures
 - b. that the author and his dog took a morning walk
 - c. that the dog followed the author closely
 - d. that the author's dog disappeared
6. 空所 (F) に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. 6 am
 - b. 7 am
 - c. 8 am
 - d. 9 am
7. 下線部(G) without leave の意味に最も近いものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. without food
 - b. without departure
 - c. without delay
 - d. without permission
8. 空所 (H) に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. in
 - b. down
 - c. off
 - d. out
9. 空所 (I) に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. beyond
 - b. under
 - c. up
 - d. down
10. 空所 (J) に入る最も適切なものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. by
 - b. on
 - c. to
 - d. from

11. 下線部(K) refused payment for his trouble の意味に最も近いものを、つぎの a～d の中から一つ選び、その記号を解答欄にマークせよ。
- a. did not give money for what the author did
 - b. did not take money for what Jamie did
 - c. did not take money for what Mariam did
 - d. did not give money for what the firefighters did
12. つぎの(1)～(3)の英文(ア)(イ)について、正しいものを a～d の中からそれぞれ一つ選び、その記号を解答欄にマークせよ。
- (1) (ア) The author learned that those of his dog's breed were once employed as soldiers.
- (イ) The author's colleagues were informed that he would not come to the office on time.
- a. (ア)は本文の内容に合致しているが、(イ)は本文の内容に合致していない。
 - b. (ア)は本文の内容に合致していないが、(イ)は本文の内容に合致している。
 - c. (ア)と(イ)の両方が本文の内容に合致している。
 - d. (ア)と(イ)の両方が本文の内容に合致していない。
- (2) (ア) The author did not like the idea of spending several nights on Hackney Marshes to find his dog.
- (イ) The author's dog did not make a sound while she was missing.
- a. (ア)は本文の内容に合致しているが、(イ)は本文の内容に合致していない。
 - b. (ア)は本文の内容に合致していないが、(イ)は本文の内容に合致している。
 - c. (ア)と(イ)の両方が本文の内容に合致している。
 - d. (ア)と(イ)の両方が本文の内容に合致していない。

(3) (ア) The author was happier with his dog's rescue than with his kids' births.

(イ) The author's dog bit another animal's face underground while she was missing.

- a. (ア)は本文の内容に合致しているが, (イ)は本文の内容に合致していない。
- b. (ア)は本文の内容に合致していないが, (イ)は本文の内容に合致している。
- c. (ア)と(イ)の両方が本文の内容に合致している。
- d. (ア)と(イ)の両方が本文の内容に合致していない。

[IV] Read the passage below and answer the questions that follow.

For Tim Caro, it was surprisingly easy to dress horses like zebras. Several shops were already selling coats with black-and-white stripes, but they were not serious products. But, as Caro learned, such coverings have an unexpectedly serious effect. “There are enormous benefits to having a striped coat for a horse,” he told me.

Caro, a biologist at the University of California at Davis, has spent years thinking about why zebras are striped, and has even written a book about this mystery. In his latest effort to get clear answers, he and his colleagues traveled to Hill Livery, a stable*¹ (A) southwest England that keeps several captive zebras alongside domestic horses. By comparing these two species, as well as horses that were comically covered in zebra-striped coats, the team found fresh evidence (B) for the striking stripes: they evolved as a defense against bloodsucking flies.

Scientists have been puzzling (C) the role of zebra stripes for more than 150 years. But, one by one, the most commonly proposed explanations have all been refuted. Some researchers have suggested that the stripes act as camouflage—they break up zebras’ outlines or resemble fields of tree trunks. But that can’t be true: Amanda Melin of the University of Calgary recently showed that lions and hyenas*² can’t even (D) make out the stripes unless they get very close. Another hypothesis says that the black stripes heat up faster than the white ones, setting up circulating air currents that cool the zebras. But a recent study showed that water drums covered in zebra skins heat up just as much as those covered in normal horse skins.

That leaves the fly idea. When it comes to biting insects, zebras are (E). For one, a variety of diseases spread by horseflies tend to be fatal to zebras. They’re also very vulnerable to insect attacks: compared

with other grass-eating animals, the hairs on their coat are unusually short, allowing flies to more easily find blood vessels with their piercing mouthparts.

Stripes, for some reason, seem to help. In 2014, Caro and his colleagues showed that striped horses — three zebra species and some other animals with stripes — tend to live in regions with lots of horseflies. And several researchers, over the years, have shown that these flies find it hard to land on striped surfaces. No one, however, had watched the insects trying to bite actual zebras. That's why Caro's team went to Hill Livery.

By watching and filming the stable's horses and zebras, the team confirmed that horseflies were much worse at landing on the latter. The flies had no problem finding the zebras or approaching them, but couldn't land well. "You get a quarter as many landings," Caro said. "The flies just can't probe for a blood meal with the zebras."

The team found the same trend when they put striped coats on the horses. Covered in stripes, the very same animals suddenly became more (F) to flies, except on their uncovered heads. And uniformly colored coats had no effect; the stripes, specifically, troubled the flies.

"When we looked at the videos, we found that the flies simply aren't slowing down when they come in to the stripes," Caro said. Either they miss and overshoot the zebras, or they bump into the animals and bounce off. Something's clearly throwing them off, but the details are still a mystery. Caro said that they might treat the black stripes like a pair of ^(G) trees, try to fly between them, and end up colliding with the white stripes. Alternatively, the stripes might mess with their optic flow — their sense of objects moving across their visual field.

Paloma Gonzalez-Bellido of the University of Minnesota, who studies insect vision, favors the latter idea. These insects use optic flow to gauge their own speed and their distance from nearby objects. "I think that the

key is that the stripes' thickness and orientation is not consistent, either within a stripe or across them," she says. "This is probably what makes it difficult for the flies to control their landing."

If Gonzalez-Bellido is right, a more evenly striped coat should offer less protection. Caro's team is now planning to test this hypothesis and others. "Now that we know striped coats work just as well as stripes on real zebras, we can really play around with them," he said. "We can put on coats with very wide ^(H)stripes, or different orientations, or gray stripes. We can see how those affect fly behavior."

In the meantime, he is wary of making firm recommendations to the horse industry. "I wouldn't want to suggest that horse-wear companies sell striped uniforms for their riders yet," he said. "We need to do the work first."

More important, I ask him, would a striped shirt protect me from biting flies? "I've been very cautious about saying that until we got these results, but now I'm not so sure," he said. "I think that a striped T-shirt might work very nicely."

*1 stable: 馬小屋

*2 hyena: ハイエナ

1. Choose the word that best fills , and mark the letter on your answer sheet.

a. about

b. at

c. in

d. on

2. Rearrange the following words and phrases to best fill , and mark the letters of the **second** and **fourth** words or phrases on your answer sheet.
- a. Caro thinks b. explanation c. for d. is
e. only plausible f. the g. what
3. Choose the word that best fills , and mark the letter on your answer sheet.
- a. at b. for c. in d. over
4. Choose the phrase that is most similar in meaning to can't even make out as it is used in the passage, and mark the letter on your answer sheet.
- a. have difficulty perceiving b. have issues clarifying
c. have problems removing d. have trouble creating
5. Choose the phrase that best fills , and mark the letter on your answer sheet.
- a. doubly cursed b. mostly immune
c. seemingly uninterested d. typically protected
6. Choose the word that best fills , and mark the letter on your answer sheet.
- a. appealing b. fascinating c. resistant d. transparent
7. Choose the phrase that is most similar in meaning to throwing them off as it is used in the passage, and mark the letter on your answer sheet.
- a. exciting them b. confusing them
c. influencing their interests d. supplementing their senses

8. Choose the word that is most similar in meaning to play around with as it is used in the passage, and mark the letter on your answer sheet.
(H)
- a. fit b. increase c. layer d. manipulate
9. Choose the phrase that is most similar in meaning to wary of making as it is used in the passage, and mark the letter on your answer sheet.
(I)
- a. careful to question b. hesitant to provide
c. intent to state d. likely to explain
10. Which one of the following is true according to the passage? Mark the letter on your answer sheet.
- a. The research team investigated wild zebras and horses in Africa.
b. Stripes play an important role in maintaining the correct body temperature for zebras.
c. The flies approached too slowly when attacking the horses and zebras.
d. Flies use visual cues to judge speed and distance.
e. The researchers found that evenly spaced stripes offer better protection than random stripes.







