英　　語

2025年度　一般選抜試験

薬学部　生命創薬科学科・薬学科

受験番号		氏名	

【注　意　事　項】

1. 試験監督による解答始めの指示があるまで，この問題冊子の中を見てはいけません。
2. 試験時間は80分です。
3. この問題冊子は１ページから14ページまであります。
4. 解答は解答用紙（マークシート）の所定欄に記入しなさい。
5. 解答は所定欄に濃くはっきりとマークしなさい。その際，ボールペン・サインペン・万年筆等は使用してはならない。その他マークの仕方に関しては，解答用紙（マークシート）の注意事項をよく読むこと。
6. 試験監督の指示により，解答用紙（マークシート）に**氏名**（**フリガナ**）および**受験番号**を記入し，さらに**受験番号**をマークしなさい。
7. 試験監督の指示により，問題冊子にも**受験番号**および**氏名**を記入しなさい。
8. 解答用紙（マークシート）は折り曲げたり，メモやチェック等で汚したりしないように注意しなさい。
9. 試験中に問題冊子の印刷不鮮明，ページの落丁・乱丁および解答用紙の汚れ等に気づいた場合は，手を高く挙げて試験監督に知らせなさい。
10. 試験終了後，問題冊子と解答用紙（マークシート）はともに机上に置いておくこと。持ち帰ってはいけません。

Ⅰ. 次の英文[A]と[B]を読み，各設問に答えなさい。

[A]

Loango National Park in Gabon recently provided a backdrop for researchers to observe a sight rarely seen in nature: chimpanzees applying insects to their injuries.

The behavior — a unique demonstration of potentially advanced cultural activity — suggests that the primate species may have developed longstanding health-related behaviors that are shared among members of (1) tight-knit groups.

Tobias Deschner, a researcher at the University of Osnabrück in Germany, and his wife, Simone Pika, head of the research group for comparative cognitive biology at the Institute for Cognitive Sciences at the University of Osnabrück, lead the Ozouga Chimpanzee Project in cooperation with Gabon's National Park Authority. I[*1] followed the research group for the purpose of writing this article.

The research team has been collecting behavioral data on the Rekambo chimpanzee community of about 40 primates for five years. They have filmed (2) incredible scenes, such as chimpanzees attacking lowland gorillas, even killing and eating young ones. The team also observed the chimpanzees working together, using branches to dig out honey in underground beehives.

In February 2022, the scientists published their biggest discovery yet: Chimpanzees deliberately (3) treat their own wounds and [6] their group using an unknown species of insect. It was the first time the behavior has been scientifically observed in the great ape.

Alessandra Mascaro, an evolutionary biologist with Ozouga and leader of the February study, first noticed in 2019 that the Rekambo chimpanzees seemed to treat their injuries. She watched a video clip of a female chimpanzee applying a recently caught insect to an open wound on her son. A short time later, the mother carefully removed the remains of the insect. The behavior looked like wound care.

Deep in the forest in Loango, Deschner watched Cesar, a chimpanzee carrying coconuts, being visited by two males. From about 20 feet away, he saw one of the males had a large wound on his left thigh and two open spots on his back. The second of the two males was also wounded, his wrist bleeding.

A violent fight apparently broke out the night before, likely caused by Pandi, the alpha male. After an absence of several days, Pandi rejoined the group, which may have increased tension among the males.

The next morning, I observed the chimpanzees groom each other's fur. When the animals parted, I followed Thea, one of the apes that visited Cesar the day before and was still injured. It seemed from his facial expressions that his injured leg was [7] him — he inspected the wound with his fingers, and his eyes scanned the surrounding vegetation, as if he were looking for something.

With a certain anticipation, I pulled my camera out of my backpack. Deschner also had his video camera ready. And then it happened.

Like a flash, Thea's right hand reached into the bushes. He caught an insect, maybe a fly, sitting on the underside of a leaf. He put the animal in his mouth, lightly crushing it with his lips. He then carefully applied the resulting mush to his flesh wound, stroking it back and forth with his fingertips. He repeated the procedure a few more times before finally cleaning the wound with his fingers.

This pattern of behavior corresponded exactly to (11) Mascaro's first observation. And the whole thing happened so quickly that, [8] before, it would have been almost impossible to (4) discern what was happening.

Three days later, I observed another instance of insect medication. This time it was another male who caught an insect and applied it to one of Thea's wounds on his back. This behavior signaled to the scientists that, even beyond medicating each other, chimpanzees understand [9] of others. It may be considered prosocial behavior, which scientists believe requires more complex cognitive abilities.

After the two male chimpanzees had moved on, Mascaro searched the forest floor where they were just a moment ago. She — and all the scientists — would love to know which insect species the chimpanzees were using in hopes of analyzing its chemistry. But the chimpanzees left no insects behind.

It is hard to know how conscious some animals are about the links between certain behaviors and pharmacological*2 effects.

What is more, scientists can never be certain whether a behavior, even if intentional, produced a desired effect hours or even days later. There are also often (5) alternative explanations, particularly in the wild, for why an animal is sick or becomes well. Knowing for certain would require before-and-after examinations, which are often impossible with wild animals.

The observations of Mascaro and her colleagues with the Ozouga research team are unique because they documented the behavior firsthand, a lucky observation, she says. Rekambo chimpanzees only seem to use the insect method when injured, which limits the opportunities to see it in practice.

Whether these findings hold deep scientific meaning or are instead a mere behavioral [10] remains to be seen. Humans, of course, are also known to do strange things — (14) some proven, but many not — to pursue optimal health and wellness. Chimpanzees behaving the same way would be another thing we have in common with our closest living relatives.

注: *1I この記事の著者のことを指す

*2pharmacological「薬理学の，薬理的な」

問１　本文中の下線部(1)～(5)の語に最も意味が近いものを，それぞれ ①～⑤ の中から一つずつ選びなさい。

1　(1) tight-knit

① randomly selected　② highly pressed　③ closely connected
④ compactly packed　⑤ surprisingly organized

2　(2) incredible

① expectable　② astonishing　③ accessible
④ threatening　⑤ trustable

3　(3) treat

① regard to　② pay for　③ gift to
④ care for　⑤ scratch with

4　(4) discern

① displace　② understand　③ develop
④ record　⑤ stop

5　(5) alternative

① different　② detailed　③ intelligible
④ debatable　⑤ incomprehensive

問２　本文中の空欄 **6** ～ **10** に最もよく当てはまる語(句)を，それぞれ ①～⑤ の中から一つずつ選びなさい。

6　① that in　② those of　③ those which
④ them in　⑤ themselves for

7　① pleasing　② healing　③ wondering
④ covering　⑤ bothering

8　① had it not been observed　② once it had been observed
③ it were not been observed　④ should it not be observed
⑤ because it was been observed

9　① the hunger　② the politeness　③ the well-being
④ the writing　⑤ the hostility

10　① imagination　② adventure　③ sign
④ check　⑤ coincidence

問３　次の 11 ～ 14 の各問いの答えとして最も適切なものを，それぞれ ①～④ の中から一つずつ選びなさい。

11 What was (11) Mascaro's first observation?

① A male chimpanzee attacked a lowland gorilla to protect his babies.
② A male chimpanzee killed a young lowland gorilla to feed his children.
③ A female chimpanzee put a branch into ground to get honey from underground.
④ A female chimpanzee used a bug to medicate her son.

12 Judging from the passage, which of the following is true?

① The scientists observed that a male chimpanzee, Cesar, helped two other male chimpanzees, Thea and Pandi, recover from their surgical wound.
② The scientists video-recorded a male chimpanzee, Thea, applying an insect paste to his cuts.
③ The scientists documented three-day mutual medication in male chimpanzees.
④ The scientists discovered male chimpanzees made secret agreements to defeat an alpha male.

13 Judging from the passage, which of the following is true?

① Scientists have not successfully achieved before-and-after observations of the animals treating their own and each other's medical problems.
② Scientists proved that the chemical composition of the paste chimpanzees used was for wound care.
③ Scientists understand that chimpanzees recognize the pharmacological effect of the insect method.
④ Scientists believe that no primate species other than humans can show highly cognitive health-care behaviors.

14 What does (14) some proven, but many not mean?

① Some human activities look strange because they are necessary for our optimal health, but many others do not.
② Some strange human activities are confirmed to be good for our health, but many others are not.
③ Some humans show strange behaviors to keep them healthy, but many others do not.
④ Some chimpanzees share health-related knowledge with humans, but many others do not.

[B]

15 , a new study has found.

While most animals consume foods with medicinal properties as part of their routine diet, few species have been shown to engage in self-medication in a way that suggests they have basic awareness of the healing properties of the plants they are feeding on.

Until now, the challenge has been to distinguish between normal consumption of food that has medicinal value, on the one hand, and eating such foods for the purpose of treating a condition, on the other.

"Self-medication has been studied for years, but it has been historically difficult to push the field forward, as the burden of proof is very high when attempting to prove that a resource is used as a medicine," Elodie Freymann, a scientist at the University of Oxford in the U.K. and lead author of the study, wrote in an email.

To deal with (16) the challenge, the study adopted a multidisciplinary approach, combining behavioral data, health monitoring, and pharmacological testing of a variety of plant materials chimpanzees feed on.

According to the study, pharmacological data interpreted on its own is important for establishing the presence of medicinal resources in chimpanzee diets. However, this study also relied on observational information and health monitoring to determine whether chimpanzees were deliberately self-medicating.

Over a period of eight months, the scientists monitored the feeding behaviors of two communities of chimpanzees familiar with humans around them in Budongo Forest in Uganda.

They collected samples from plant parts associated with chimpanzee behaviors that previous research had flagged up as possibly linked to self-medication. They also collected samples from 13 plant species known to be consumed at least occasionally by the Budongo chimpanzees, testing the samples for their ability to suppress bacterial growth and inflammation*1.

The researchers also tracked the health of individual chimpanzees. They observed that individuals with injuries or other diseases such as parasite invasion, difficulty with breathing, or abnormal waste matter ate plants or parts of plants that laboratory testing found to have healing properties.

"We describe cases where chimpanzees with possible bacterial infections or wounds selected bioactive*2 plants," Freymann said. "We also describe cases where wounded individuals selected rarely consumed plants with demonstrated anti-inflammatory*3 properties — suggesting they could be eating plants to aid in wound-healing, a novel finding."

In addition, unlike previous studies that focused on single plant resources, this one identified 13 species with medicinal potential. According to Freymann, identifying plants that could have medicinal value for chimpanzees is important for the conservation of the species. "If we know

which plants chimpanzees need to stay healthy in the wild, we can better protect these resources to ensure chimpanzees have access to their wild medicine cabinets," she said. "If these plants disappear, it could leave our primate cousins susceptible to diseases they could previously defend against." This is also important, Freymann said, because "we could learn from the chimpanzees which plants may have medicinal value which could lead to the discovery of novel human drugs."

注：*1 inflammation「炎症」

*2 bioactive「生理活性のある（生体に影響を与える化学物質を含む）」

*3 anti-inflammatory「抗炎症の」

問４　以下の 15 と 16 の各問いの答えとして最も適切なものを，それぞれ ①～⑤ の中から一つずつ選びなさい。

15　Which of the following sentence is the best to fill in the blank 15 in the passage?

① Wild chimpanzees wisely select their habitat to protect themselves from hunters

② Wild chimpanzees intentionally hide the information about plants with medicinal value to keep the resources for their own good

③ Wild chimpanzees actively seek out plants with medicinal properties to treat themselves for specific diseases

④ Wild chimpanzees carefully establish their health-care insurance systems to prevent their extinction

⑤ Wild chimpanzees willingly help researchers investigating their eating habits to gain rewards necessary for their survival

16　Judging from the passage, what was (16) the challenge the study took on?

① to separate out healthy and unhealthy plants

② to confirm that wild chimpanzees eat a particular plant on purpose, being aware of the plant's medical effect on their bodies

③ to identify an individual chimpanzee in the communities and keep track of its diet

④ to get close to wild chimpanzees without being attacked to check their health conditions

⑤ to collect wild plants that chimpanzees are likely to eat

問５　上記の英文[A]と[B]の２つの内容を比較した以下の表を完成させるため，(ア)～(オ)の各項目の内容として正しいものを，それぞれ 1 ～ 4 の中から一つずつ選びなさい。
ただし，同じ選択肢が２度使われる場合もあります。

		The research reported in [A]	The research reported in [B]
(ア)	Subject animal species	*17*	*18*
(イ)	The subject species' behavior that researchers focused on	*19*	*20*
(ウ)	The number of species researchers suggested as possibly having a medicinal value for their subject(s)	*21*	*22*
(エ)	The observation method	*23*	*24*
(オ)	The new findings the researchers obtained	*25*	*26*

17　*18*

(ア)

1 chimpanzees in captivity
2 chimpanzees in every country
3 wild chimpanzees
4 chimpanzees fed with chemical products

19　*20*

(イ)

1 the use of a small animal for wound care
2 the creation of new biological compounds for healthcare supplements
3 the eating of specific vegetation for medical care
4 the application of medical equipment for nature conservation

21　*22*

(ウ)

1 thirteen
2 forty
3 twenty to thirty
4 one to three

23 24

(エ)

1 the researchers put a small device on each chimpanzee's body to supply a medicine when the individual got sick

2 the researchers kept a distance from a wild chimpanzee community and mainly video-recorded their behaviors and analyzed the records later

3 the researchers imitated chimpanzees' behaviors in order to monitor each individual's daily activities

4 the researchers did detailed and regular medical observations to investigate the relationship between chimpanzee diet and health

25 26

(オ)

1 chimpanzees changed their routine eating habits depending on their health condition, which suggests that they recognized the medical effect of their diets

2 chimpanzees picked up leaves with high nutritional value to provide researchers with a clue for the invention of new human medicines

3 chimpanzees appeared to live in a community to keep a record of their cousins' strange activities and copy them

4 chimpanzees seemed to share advanced cognitive behavior with humans that they recognize another individual's medical problem and act upon this recognition to provide help

Ⅱ. 次の英文を読み，各設問に答えなさい。

One sunny Sunday in Chicago, several former classmates, who were good friends in school, gathered for lunch, having attended their high school reunion the night before. They wanted to hear more about what was happening in each other's lives. After a good deal of joking, and a good meal, they settled into an interesting conversation.

Angela, who had been one of the most popular people in the class, said, " [27] when we were in school. A lot has changed."

"It certainly has," Nathan echoed. They knew he had gone into his family's business, which had operated pretty much the same and had been a part of the local community for as long as they could remember. So, they were surprised when he seemed concerned. He asked, "But, [28] when things change?"

Carlos said, "I guess we resist changing, because we're afraid of change."

"Carlos, you were Captain of the football team," Jessica said. " [29] !"

They all laughed as they realized that although they had gone in different directions — from working at home to managing companies — they were experiencing similar feelings.

Everyone was trying to cope with the unexpected changes that were happening to them in recent years. And most admitted that they did not know a good way to handle them.

Then Michael said, "I used to be afraid of change. When a big change came along in our business, we didn't know what to do. So we didn't adjust and we almost lost it.

"That is," he continued, " [30] ."

"How so?" Nathan asked.

"Well, the story changed the way I looked at change — [31] — and it showed me how to do it. After that, things quickly improved — at work and in my life.

"At first I was annoyed with the obvious simplicity of the story because it sounded like something we might have been told in school.

"Then I realized [32] and doing what works when things change.

"When I realized the four characters in the story represented the various parts of myself, I decided [33] and I changed.

"Later, I passed the story on to some people in our company and they passed it on to others, and soon our business did much better, because most of us adapted to change better. And like me, many people said it helped them in their personal lives.

"However there were a few people [34] . They either knew the lessons and were already living them, or, more commonly, they thought they already knew everything and didn't want to learn. They couldn't see why so many others were benefitting from it.

"When one of our senior executives, who was having difficulty adapting, said the story was a

waste of time, other people laughed at him saying they knew which character he was in the story — meaning the one who learned nothing new and did not change."

"What's the story?" Angela asked.

" [35] "

The group laughed. "I think I like it already," Carlos said. "Would you tell us the story? Maybe *we* can get something from it."

"Sure," Michael replied. " [36] ." And so he began:

問1　本文中の空欄 [27] ～ [36] に入る最も適切なものを，それぞれ ①～⑩ の中から一つずつ選びなさい。ただし，文頭の語も小文字の書き出しとなっています。また，各選択肢は一度しか使えません。

[27] ～ [36]

① I was really annoyed with myself for not seeing the obvious
② have you noticed how we don't want to change
③ life sure turned out differently than I thought it would
④ it's called, *Who Moved My Cheese?*
⑤ I never thought I'd hear you say anything about being afraid
⑥ until I heard a funny little story that changed everything
⑦ who I wanted to act like
⑧ I'd be happy to — it doesn't take long
⑨ from losing something to gaining something
⑩ who said they got nothing out of it

問2　本文の内容に関する [37] ～ [41] の各問いに対する適切な答えを，それぞれ ①～⑤ の中から一つずつ選びなさい。

[37]　What is the relationship among the five people in the conversation?

① They are a lecturer and an audience.
② They are co-workers at a restaurant.
③ They are old friends from high school.
④ They are members of a student union.
⑤ They are business partners from separate companies.

38 Whose family runs a company?

1 Jessica's 2 Carlos's 3 Nathan's
4 Angela's 5 No member of the group's

39 Who **DIDN'T** experience unexpected change in their lives?

1 Jessica and Carlos
2 Angela and Nathan
3 the two women in the conversation
4 the three men in the conversation
5 none of them

40 How did Michael overcome a big challenge he faced in his business?

1 He learned a lesson from a tale that totally shifted his perspective towards the challenge.
2 He read many articles and put into practice what he learned from them.
3 He shared the challenge with his company's senior executives and successfully persuaded all of them to ignore it.
4 He spoke to a business consultant about the challenge and followed the consultant's advice.
5 He visited many countries to learn about cultural differences among co-workers.

41 Why were the four people likely to be interested in the story?

1 Because all of them wanted to understand why the senior executives said it was a waste of time.
2 Because all of them knew Carlos wanted to develop player potential in his football team.
3 Because all of them recognized that some innovative movement was required to improve their country's economy.
4 Because all of them wanted to get advice from it to deal with new situations in their lives.
5 Because all of them noticed that Nathan was resisting change and they wanted to help him.

Ⅲ. 次の英文の空欄(ア)～(ウ)に与えられた語(句)を並べ替え，意味が通るようにしたとき，［ 42 ］～［ 47 ］にあてはまる語(句)を，それぞれ ①～⑥ の中から一つずつ選びなさい。

Plastic production and consumption are out of control. We are being forced to use more plastic than we need and in a way that makes it impossible to responsibly manage. To this point, plastic producers have operated with little accountability and regulation. The absence（ ア ）the price. And we are now facing an accelerating threat that crosses borders and puts everyone in harm's way.

To end the plastic crisis, the UN plastic pollution treaty must introduce new global binding rules to regulate production and consumption. These rules must include measures to ban, phase-out, phase-down, circulate and manage high-risk plastic products.

As a priority, we need a treaty to ban the most harmful and avoidable plastic products. Over 90% of the plastic（ イ ）, such as plastic cutlery, and microplastics, such as those added to cosmetic products. Most of which is too difficult or dangerous to recycle. So, while plastic production continues to skyrocket,（ ウ ）. To end plastic pollution, we need to ban the highest polluting, most harmful and avoidable plastic products and materials, and support all nations as they shift to safe, circular systems.

（ア）（　　）（　　）（ 42 ）（　　）（　　）（ 43 ）

① and responsibility	② of global rules	③ has left
④ the planet	⑤ people and	⑥ to pay

（イ）（　　）（　　）（ 44 ）（　　）（ 45 ）（　　）

① is made	② our planet	③ single-use
④ that pollutes	⑤ plastics	⑥ up of

（ウ）（　　）（　　）（ 46 ）（　　）（ 47 ）（　　）

① asking	② good enough	③ to just
④ simply not	⑤ people	⑥ recycle is

Ⅳ. 次の英文を読み，各設問に答えなさい。

You are in charge of creating the statistics for the swim team. The coach wants to know the four best swimmers to put on the 400m medley relay. In the medley relay, one swimmer swims the 100m backstroke, another person swims the 100m butterfly, a third the 100m breaststroke, and a fourth the 100m freestyle. For that you need to take a good look at the statistics.

Swimmer A has the fastest time in the freestyle, but also has the second fastest time in the butterfly. Swimmer B is the fastest in both the backstroke and the butterfly. Swimmer C is the fastest in the breaststroke. Swimmer D has a tie record with Swimmer A in the freestyle, but has the slowest time in butterfly. Swimmer E is the second fastest in backstroke and breaststroke.

問１　５人のチームメンバーのタイムをまとめた以下の表に関する [48] と [49] の各問いに対する適切な答えを，それぞれ ①～⑤ の中から一つずつ選びなさい。

	Swimmer				
	①	②	③	④	⑤
100m Freestyle (in min:seconds)	0:58.5	0:60.1	0:57.9	0:58.4	0:57.9
100m Backstroke (in min:seconds)	1:07.0	1:05.0	1:05.2	1:04.8	1:08.0
100m Breaststroke (in min:seconds)	1:15.0	1:15.3	1:17.1	1:15.6	1:16.7
100m Butterfly (in min:seconds)	1:00.5	1:01.8	1:00.3	0:59.0	1:02.1

[48] Which is the data for Swimmer A?

[49] Which is the data for Swimmer B?

問２　上記の英文と表に基づき，[50] の問いに対する適切な答えを ①～⑤ の中から一つ選びなさい。

[50] Which is the best team for the 400m medley relay?

	①	②	③	④	⑤
Backstroke	Swimmer B	Swimmer B	Swimmer B	Swimmer E	Swimmer E
Butterfly	Swimmer A	Swimmer E	Swimmer A	Swimmer A	Swimmer B
Breaststroke	Swimmer E	Swimmer C	Swimmer C	Swimmer C	Swimmer D
Freestyle	Swimmer D	Swimmer A	Swimmer D	Swimmer D	Swimmer C

出典追記：The Secret Science of Sports by Jennifer Swanson, Workman Kids