

## 英 語 (問 題)

(100点・80分)

## 注 意 事 項

1. 試験開始の合図があるまで、この問題冊子の中を見たり、裏返したりしてはいけません。
2. この問題冊子は17ページあり、解答用紙は1枚（両面）です。  
試験中に問題冊子・解答用紙の印刷不鮮明、ページの落丁などに気付いた場合は、手を挙げて監督者に知らせなさい。
3. 試験開始後、ただちに解答用紙の所定記入欄に、氏名・受験番号・誕生日をそれぞれ正しく記入し、さらに受験番号・誕生日をその下のマーク欄にマークしなさい。
4. 受験番号・誕生日が正しくマークされていない場合は、採点できないことがあります。

5. 解答は、解答用紙の解答欄に各設問で指示された方法で記入しなさい。  
マーク方式は、例えば、



と表示のある問いに対して③と解答する場合は、次の(例)のように解答番号20の解答欄の③にマークしなさい。

(例)

解答番号	解 答 欄
20	① ② ● ④ . . . . .

6. 問題冊子の余白等は、下書きなどに適宜利用してよいが、各設問で指示された解答は、必ず解答用紙の解答欄に指示された方法で記入しなさい。
7. 試験終了後、提出は解答用紙のみとし、問題冊子は持ち帰りなさい。

**Part I** 次の英文を読んで設問に答えなさい。

As long as stories have been around, people have been fascinated by their actions and behaviors within. One example is Aesop's famous story, *The Crow and the Pitcher*. A thirsty crow discovers a pitcher of water but cannot reach the water to drink it. It then cleverly adds stones into the pitcher until the water level rises high enough for it to drink. While just a story, similar observations of crows <sup>(6)</sup> showing similar actions continue to this day. What other actions and behaviors that are similar to humans do animals have?

In the 4th century B.C., the ancient Greek philosopher Aristotle wrote in his work *On Sleep and Sleeplessness* that the majority of animals that he observed sleep whether they lived on the land, in the air, or in the sea. He further went on to claim in *The History of Animals* that many animals such as dogs, horses, and oxen, also appeared to dream in their sleep. Humans are just one of many mammals that have the ability to dream.

How can we know if animals can dream? They can't tell us, so how can we be sure? Scientists have found two ways to answer these questions. One way is to observe animals' physical behaviors as they sleep. The second is to study how animals' brains work during sleep and compare the findings to human data. To explore these issues, we must first understand a little about sleep. There are two main types of sleep: rapid-eye movement (REM) and non-rapid-eye movement (Non-REM). REM is said to be the stage of sleep in which dreaming happens.

Since the 1960s, various studies have looked at animals and their sleeping habits. One example is from 1965. Michel Jouvet and Jean-François Delorme investigated sleeping patterns of cats by removing a section of the brainstem, called the "pons." Removing this section of the brainstem stopped the animals from lying down when asleep. They found that during REM sleep, the cats would get up and move around. They also recorded aggressive behaviors from the cats.

According to David Peña-Guzmán, an associate professor at San Francisco

State University, despite thousands of studies examining the sleeping patterns and habits of animals, “virtually none of them in the 20th century mention the word; dream, dreams, or dreaming.” This is due to the famous concept of “Morgan’s Canon,” which suggests that animal behavior should not be explained with high-level psychological concepts like beliefs, memories, or imagination when lower-level concepts in the psychological scale can be sufficient.

Research conducted in the early 2000s by Matthew Wilson at Massachusetts Institute of Technology found evidence that supported the concept that rats can dream. Research was conducted on rats by examining the section of the brain called the hippocampus. The hippocampus plays an important role in emotional regulation, spatial recognition, and memory formation. In Wilson’s study, first, the rats were trained to run around in circles while researchers followed the actions in the hippocampus. Next, the ways in which the rats showed signs of excitability in the brain and the patterns they showed when <sup>(7)</sup>engaged in the activity were studied. Wilson found that through this research they could “determine the content of rats’ dreams.”

Rats are not the only animals found to dream. Studies conducted on \*zebra finches in 2000 showed similarities in electrical activity in the brain between singing and sleeping. David Peña-Guzmán added that this doesn’t just show evidence of similarity but that we can also infer that zebra finches dream about singing. Another study by Daniela Rößler, an ecologist at the University of Konstanz, discovered that jumping spiders experience a dream-like state of REM like humans, based on their eye movements and leg positioning while sleeping.

Given these results, humans are no longer thought to be unique in regard to dreaming. If animals exhibit signs of REM sleep, based on the results found in various studies throughout history, we can safely conclude that they are dreaming. The next time you have a chance to observe a sleeping animal, take a closer look. Do they show signs of REM, such as moving paws, shaking their bodies, wagging tails, or making a little whimper? They are likely having a dream, perhaps they are

chasing a tennis ball thrown to them by their owner or hunting for the perfect snack. We are unlikely to ever know the details of those dreams because the animals lack the language to tell us all about them when they wake up. However, they are dreaming just like us.

\*zebra finches キンカチョウ (縞模様のある鳥の一種)

1 から 7 の質問の答えとして最も適切なものを選び、その番号をマークしなさい。

1 What animal behavior does Aesop's famous story, *The Crow and the Pitcher* describe?

- ① The crow finds an innovative method to access water.
- ② The crow puts stones in the pitcher to prevent others from drinking.
- ③ The crow tries, but cannot reach the river's water level.
- ④ The crow is making a pitcher of stones to drink water.

2 According to the passage, how can scientists discover whether animals can dream?

- ① by comparing animal sleep patterns to humans' daytime activities
- ② by directly monitoring the sounds of animals when they are awake
- ③ by observing animals' physical behaviors and brain activity during sleep
- ④ by training animals to make sounds when they are sleeping

3 What did Michel Jouvet and Jean-François Delorme discover about cats during REM sleep when the pons were removed?

- ① They exhibited aggressive behaviors.
- ② They had no brain activity.
- ③ They remained completely still.
- ④ They woke up and ate.

4

Why did many 20th-century studies avoid mentioning dreams in relation to animals?

- ① They believed animals rarely have dreams while sleeping.
- ② They followed “Morgan’s Canon” by using low-level psychological concepts.
- ③ They lacked the technology to study animal brains.
- ④ They thought animals’ dreams were too different from humans’ dreams.

5

What was found about zebra finches’ brain activities when they were awake and asleep?

- ① They were more active when awake.
- ② Their brain activities were similar when singing and sleeping.
- ③ They showed no brain activity when asleep.
- ④ They experienced a dream-like state of REM while sleeping.

6

What does the underlined word (6) refer to?

- ① crow
- ② level
- ③ pitcher
- ④ water

7

Which is the closest in meaning to the underlined word (7)?

- ① concerned with
- ② experienced in
- ③ involved in
- ④ satisfied with

8

下の表は、この文章のメインポイントを段落ごとに順番に並べたものです。本文の流れに沿って、空欄に適する選択肢をひとつ選び、その番号をマークしなさい。ただし、同じ選択肢は一度しか使えません。

Animal behavior and cleverness

Aristotle's observations on animal sleep and dreams

8-1

Research to explore the relationship between animal brains and sleep

8-2

Evidence supporting the notion that rats dream

Evidence of dreaming by non-mammals such as insects and birds

8-3

- ① Animal behavior to be interpreted using advanced psychological analysis
- ② Animals unable to discuss their dreams in detail upon awakening
- ③ Future observation of animal sleep behavior
- ④ Importance of a deeper understanding of sleep
- ⑤ Limitations of animal dream research in the past
- ⑥ Exploring how animals dream
- ⑦ Data analysis of animal sleep patterns and habits
- ⑧ Realization that animals can indeed dream

9

最後の段落には下記の質問の答えがあります。その答えを日本語で要点を押さえて述べなさい。解答は解答欄に書きなさい。

9-1

According to the passage, why is it that humans are no longer considered the only beings who can dream?

9-2

According to the passage, what are some signs that sleeping animals are dreaming?

**Part II** 次の英文の空欄 **10** から **18** に入る最も適切な単語を選択肢から選び、その番号をマークしなさい。ただし、同じ選択肢は一度しか使えません。

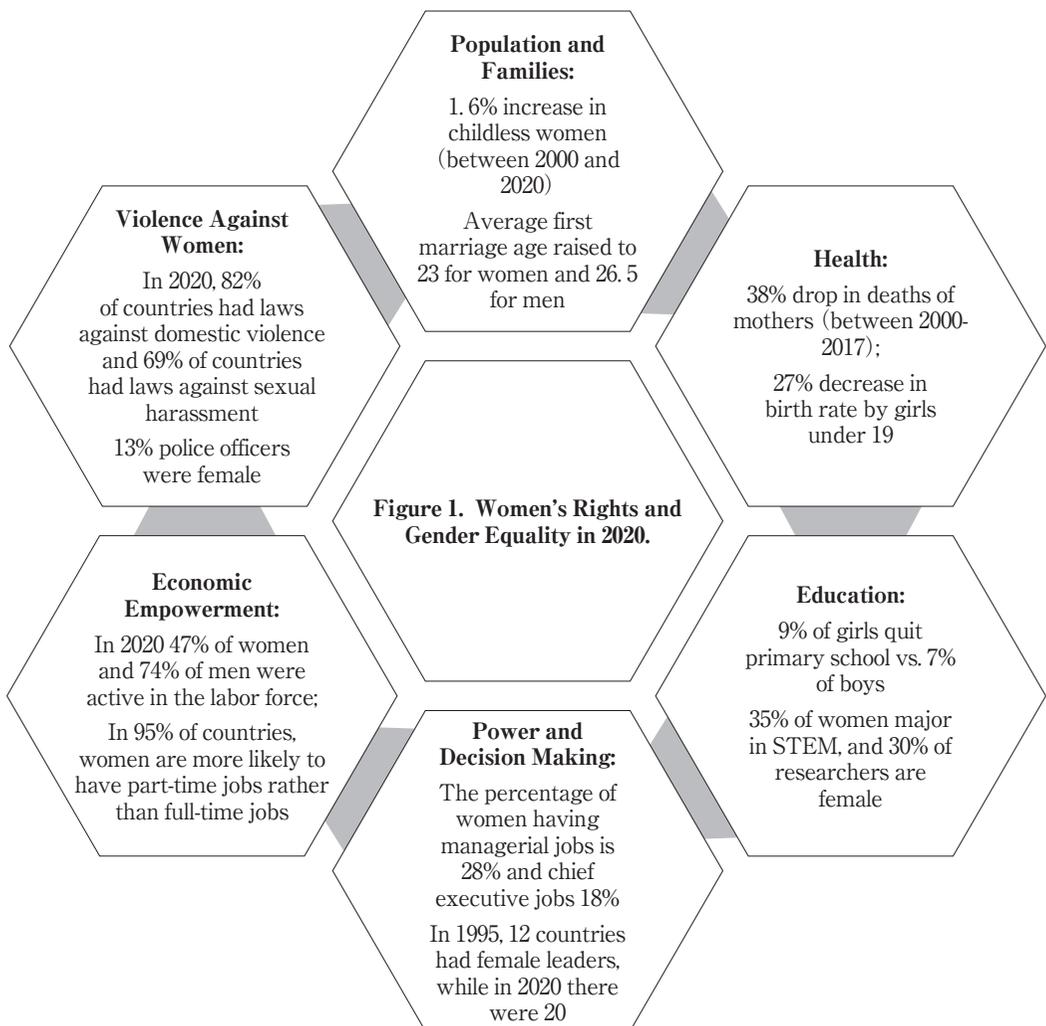
Do you often visit amusement parks? If you answered yes, it is likely because they **10** you to a different world, allowing you to escape temporarily from your busy and stressful lives and recharge your **11** before facing the daily challenges ahead. This **12** of providing relaxation and restoration for individuals of all age groups goes perfectly with their desire to experience thrills, laughter, and wonder. Amusement parks have a rich history with a remarkable evolution that has transformed them from simple, localized attractions into exciting, **13**, and adventurous experiences. In the late 1800s, American people saw the first **14** of popularity for amusement parks. The first roller coaster rides, known to us today, developed in New York. Merry-go-rounds, another traditional form of attraction, were first introduced during the 1800s when many Europeans were emigrating to America. These immigrants, who were struggling to survive in tough conditions, found comfort and relaxation on these amusement rides. Many of these rides have been popular for **15**. Today, amusement parks play a key role in creating and enhancing **16** between people in their families, schools, and communities. There is a growing expectation that up-and-coming amusement parks will **17** the latest technology. AI will bring a heightened sense of excitement to traditional **18**, increasing the wonder of the magical world.

選択肢

- |               |             |               |
|---------------|-------------|---------------|
| ① batteries   | ② bonds     | ③ complex     |
| ④ concept     | ⑤ fantasies | ⑥ generations |
| ⑦ incorporate | ⑧ transport | ⑨ wave        |

**Part III** 次の英文と図表を読んで、19 から 22 の質問の答えとして最も適切なものを選び、その番号をマークしなさい。

In September 1995, at the Fourth World Conference on Women, the Beijing Declaration and Platform for Action was adopted. The Beijing Declaration remains one of the most advanced documents for promoting women's rights globally, and it established six important areas to address. Look at the infographic from 2020 below to learn more about the current situation in each area globally.



Gender equality is a many-sided and complex goal. Achieving this goal requires addressing a number of issues in areas such as education, healthcare, employment, and welfare. While the progress in some of the areas like education has been very noticeable, in other areas, it is still very slow due to the conservative and traditional approach to gender roles.

Source: <https://worlds-women-2020-data-undesa.hub.arcgis.com/>

19

According to the passage, which of the following areas shows the biggest need for better gender representation?

- ① Population and Families
- ② Power and Decision Making
- ③ Education
- ④ Health

20

According to the passage, which of the following areas shows a positive change in women's rights and gender equality?

- ① Economic Empowerment
- ② Health
- ③ Education
- ④ Violence Against Women

21

Which most likely summarizes the data in the infographic in the area of *Economic Empowerment*?

- ① Men work harder than women, as women prefer to have part-time jobs in 95% of countries.
- ② 53% of women are less active in the labor force than men because women prefer to stay at home.
- ③ 27% more men are active in the labor market, and it is harder for women in 95% of countries to get full-time jobs.
- ④ More men than women work globally because 95% of women do not like full-time jobs.

22

Which of the following is NOT true about the information in the infographic?

- ① While the situation in the areas of Health and Population and Families has improved, gender inequality remains a serious issue, especially, in the areas of Education, and Economic Empowerment.
- ② There has been a great improvement in the area of women's Health and a lot of countries nowadays have legislation against domestic violence and sexual harassment.
- ③ Over the past several decades, the number of female leaders has increased, and so did the number of childless women globally.
- ④ Overall, about 20% of women pursue manager and researcher positions, and this is because, in 95% of countries, women can only have part-time jobs.

**Part IV** 次の 23 から 26 の会話の空欄に入る最も適切な表現を選び、その番号をマークしなさい。

23

Susie : Katie, can you help me? The deadline is getting closer. What should I do?

Katie : What happened, Susie? The deadline? For what?

Susie : I won't be able to make the deadline for my political science class paper. It's due tomorrow.

Katie : That's too bad. What are you going to do about it?

Susie : You know what I mean, Katie. I couldn't thank you enough for helping me with my class assignment last month.

Katie : Yes, I sure do. But how many times do you expect me to do the same thing, Susie? Are you thinking (       )?

- ① you can't take back what you said
- ② you should not have done it for me
- ③ whatever happens once will happen again
- ④ whatever it takes, you can do it yourself

Clerk : Good afternoon. May I help you?

Customer : Yes, I'm looking for a Tony's headset. The model number is 30055. I think it's the new model.

Clerk : I got it. Let me make a quick check for it.

Customer : Thank you.

Clerk : Sorry, ( ). But there is stock at another store.

Customer : You mean I can order now and pick it up later?

Clerk : Yes. You'll probably get it by next Sunday.

- ① I've never received the order for this model
- ② this model has been sold out, and is no longer available
- ③ this model is currently out of stock in our store
- ④ I'd say you should ask other shops for this model

Tomo : What do you like learning the most, Hiro?

Hiro : I like learning about many things from the past, such as politics, religions, and wars but I like learning about how people lived in the past the most.

Tomo : Wow, I did not expect that answer. Tell me more.

Hiro : It's just amazing to see how our lives have changed so much from the past up until now.

Tomo : Yes, that is very true.

Hiro : In some ways, our lives have become much easier now, but in other ways, the simplicity of life in the past made people much happier. Learning all (        ).

- ① our history is simple
- ② our happiness is easier now
- ③ that is ever changing
- ④ that is fascinating

Edie : You look so frustrated, Emi. What happened?

Emi : Listen, Edie. I'm so mad at the waiter who served me lunch at Meal Heaven today. He made an error in taking my order. He brought me something different from what I wanted.

Edie : That sometimes happens. (       )?

Emi : The thing is that he neither apologized for his mistake nor said anything about bringing me the right meal immediately. It was so shocking and made me furious.

Edie : I understand your feelings. That should have never happened.

Emi : I feel better after sharing my feelings with you.

- ① How did you know he made such a mistake
- ② What made you so upset about it
- ③ When did he notice you made a wrong order
- ④ Why did he refuse to serve you at the moment

**Part V** 次の各英文を読み、その内容を理解した上でカッコ内の語句をすべて使って、**27** および **28** の下線部を正しく並べ換えなさい。ただし、他の語句を加えてはいけません。解答は作成した部分のみを解答欄に記入すること。

**27**

Many people know you should avoid going shopping at grocery stores when hungry. Everything you see looks delicious and tempting. You pick up food products you want to eat at the moment due to your growing appetite. Your shopping list for food purchase, which you prepared before leaving home, is often useless. You end up buying a lot more food than you planned. Even worse, compared to less hungry buyers, hungry shoppers are more likely to spend more money on non-food goods. This demonstrates ( control / to / for / powerless shoppers / are / their desire / unplanned purchases / how ) due to hunger.

**28**

Have you ever experienced power failure? I know nobody can tell when or where it will happen nor imagine how much damage we face from it. But the one I had yesterday, which lasted through the night, assured me of the importance of electricity. My smartphone went dead while I was trying to find the flashlight. I had forgotten to charge it. I quickly found myself unable to turn on the TV or PC for the local news about the blackout in my neighborhood. After falling into the world of darkness, I felt I had completely lost everything I needed for a safe and comfortable life. This unexpected event ( take / how much / I / granted / me of / electricity / for / reminded ) in my daily life. Now I am always careful when using electricity.