令和6年度学力検査問題

英 語〔学校選択問題〕

(14 時 40 分~15 時 30 分) 〈50 分間〉

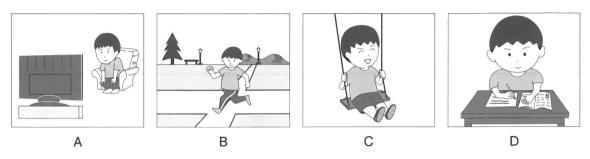
注 意

- 1 解答用紙について
- (1) 解答用紙は1枚で、問題用紙にはさんであります。
- (2) 係の先生の指示に従って、所定の欄2か所に受検番号を書きなさい。
- (3) 答えはすべて解答用紙のきめられたところに、はっきりと書きなさい。
- (4) 解答用紙は切りはなしてはいけません。
- (5) 解答用紙の*印は集計のためのもので、解答には関係ありません。
- 2 問題用紙について
- (1) 表紙の所定の欄に受検番号を書きなさい。
- (2) 問題は全部で4問あり、表紙を除いて9ページです。
- 最初に「放送を聞いて答える問題」を行います。
- 印刷のはっきりしないところは、手をあげて係の先生に聞きなさい。

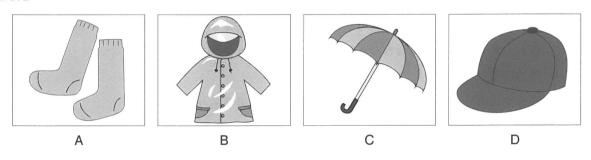
1 放送を聞いて答える問題(28点)

問題は、No. $1 \sim \text{No. }7$ の全部で 7 題あり、放送はすべて英語で行われます。放送される内容についての質問にそれぞれ答えなさい。No. $1 \sim \text{No. }6$ は、質問に対する答えとして最も適切なものを、 $\mathbf{A} \sim \mathbf{D}$ の中から一つずつ選び、その記号を書きなさい。No. 7 は、それぞれの質問に英語で答えなさい。放送中メモを取ってもかまいません。各問題について英語は 2 回ずつ放送されます。 【No. $1 \sim \text{No. }3$ 】(各 2 点)

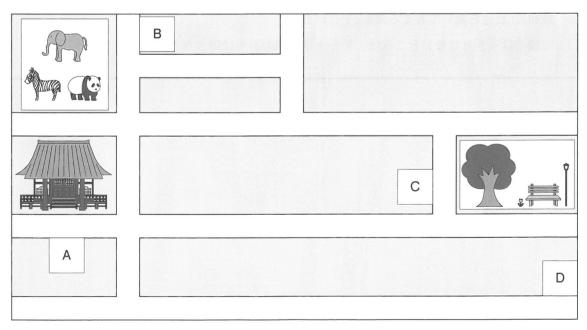
No. 1



No.2



No. 3



	.4, o.4	No.5】(各	2 点)							
110	Α	Do not eat	or drink	В	Please stand up.					
	С	Take off y		D	Do not enter.					
					20 not circu.					
No	5.5									
	Α	OK. It's re	ed.	В	Do you know what color it is?					
	С	Do you ha	ve a bigger one?	D	What a big T-shirt!					
	-									
		(各3点)								
(1) Question 1										
	A Because the students try to be quiet in English class.									
		B Because today is the last day of English class with the students.								
	С	Because the students have tried to talk to Mr. Jones in English.								
	D	Because he can still remember his first class.								
	(2)	Question 2								
A She asked Chika to carry the bag.										
B She asked Chika to use English.										
	С									
	D		Chika to take a picture.	50013.						
	(3)	Question 3								
	A Mr. Jones uses an example to talk about Kyoto.									
	B English will help the students in the future.									
	C It's important to talk with people about language.									
D Mr. Jones wants the students to think about his Japanese friend.										
7 3.T	- 1	(to E)								
(No	.71	(各3点)								
	(1)	uestion 1:	When did Kenta leave Aichi?							
	A	Answer:	He left Aichi ().					
	(2)	Question 2:	What did Emily ask Kenta abo	out his						
		Answer:	She asked him () have been friends.					
		Question 3:		nevt S						
'		Answer:	Because the (
	F	7112MCI .	DECOUSE THE /) to buy are not sold in her city.					

- **2** 次の1~4は、中学生の Kento、Mandy と Jiro の会話です。これらを読んで、問1~問7に答えなさい。*印のついている語句には、本文のあとに(注)があります。(28 点)
 - 1 \(\rangle The students are trying to decide the topic for their presentation.\)

Kento: We have a presentation in class next week. What topic do you want to talk about?

Mandy: Hmm, how about the Olympics? The next one will be held in *Paris this summer.

I hope to be there to watch the games.

Jiro: That's nice. Paris showed the next Olympics' *pictograms to the world.

Mandy: Sorry. What are pictograms?

Jiro: Pictograms are *simple pictures that tell people information. They are used in many public places, such as stations.

Kento: Ah, I know. I have seen pictograms for the Paris Olympics on the Internet. They look cool. Some people say the athletes will feel proud of their sports when they see those pictograms.

Jiro: New ones are made for every Olympics. The designs are different from city to city.

Mandy: What were the pictograms in the 2020 Tokyo Olympics like?

Jiro: Here they are. They are different from those in Paris, aren't they?

Kento: Yes, they are simple.

Mandy: Why did Japanese people make simple pictograms?

Kento: I don't know why. I'm going to look for some books and websites to answer your question.

〔注〕 Paris パリ simple 簡素な pictogram ピクトグラム

- 問 1 本文 $\boxed{1}$ の内容と合うものを、次の \mathbf{r} ~ \mathbf{r} の中から一つ選び、その記号を書きなさい。 $(3 \, \mathrm{L})$
 - Pictograms were created for the first time in the Paris Olympics.
 - 1 The students are going to give a presentation on the topic they choose.
 - フ Tokyo created pictograms that look like those for the Paris Olympics in 2020.
 - I The students are going to take part in the pictogram contest for the Olympics.

2 (The next day, the students are talking about the pictograms for the 1964 Tokyo Olympics.)

Kento: Let me tell you about the 1964 Tokyo Olympics. Tokyo is the first city that used pictograms for the Olympics.

Mandy: Why were pictograms used in the 1964 Tokyo Olympics?

Kento: In the 1964 Tokyo Olympics, Japanese people needed to communicate with visitors from all over the world, but it was difficult to support visitors in their languages. So, Tokyo () of another way to communicate with everyone. That was the pictogram.

Jiro: I think many visitors from other countries could not understand Japanese.

Kento: Right. For that reason, Tokyo decided to tell people important information through pictograms.

Mandy: I see. Then, do you know who created the pictograms for the 1964 Tokyo Olympics?

Kento: Yes, a group of designers started creating the pictograms. Katsumi Masaru, an *art critic, was one of them. The designers worked in small groups. One team was *working on sports pictograms. Another was working on pictograms for public places. Each group worked hard *based on Mr. Katsumi's idea. He thought the pictograms would *play an important role in big events such as the Olympics.

[注] art critic 美術評論家 work on ~ ~に取り組むbased on ~ ~に基づいて play an important role 重要な役割を果たす

問 2 下線部が「それで、東京は全ての人と意思疎通をするための別の方法について考えなければなりませんでした。」という意味になるように、()に適切な3語の英語を書きなさい。 (4点)

3 (The students continue talking.)

Jiro: What were the pictograms for public places like?

Kento: Here is an example. Have you ever seen this?

Mandy: Yes, it means a restaurant.

Kento: That's right. This was used in Haneda Airport in 1964. Haneda Airport was an entrance to Japan for visitors from other countries at that time. Before that, there were *notices on the wall, but because most of them were written in Japanese, it was hard for many foreign visitors to understand what the notices *said. So, pictograms were [to / for / making / useful / easier for / the information / foreign visitors] understand.

Jiro: We often see such pictograms at the airports in Japan now.

Kento: There were pictograms in public places before 1964. But each country had different pictograms. Mr. Katsumi and other designers tried to make simpler pictograms that everyone in the world could understand when they started getting ready for the 1964 Tokyo Olympics. Simple pictograms created by Japanese designers many years ago are still used around the world.

〔注〕 notice 揭示

say~ ~と書いてある

問 3 []内のすべての語句を、本文の流れに合うように、正しい順序に並べかえて書きなさい。 (4点)

4 (Kento shows another pictogram.)

Kento: Now, many kinds of pictograms are used in public places. Have you seen this pictogram?

Mandy: Yes, I have seen it in school. It shows a door that is used to leave the building when there is a fire or an earthquake.

Kento: That's right. It was created by Japanese designers and became an *international standard in 1987. There is another example. Have you seen a *magnifying glass icon on websites?

Jiro: Of course. It means "search."

Kento: Right. It is often difficult to read the *text because of too much information in a limited space on websites. That's why pictograms are used on websites instead of text.

Mandy: One more example. Look, here is a small gift my friend in Australia gave me. You see it on the roads.

Jiro: Oh, it means "Be careful of kangaroos." That's easy. I would like to share it with our classmates. Why don't we talk about the history of pictograms and those found in other countries for the presentation?

Mandy: That's a good idea. In our presentation, I would like to tell everyone that there are many pictograms around us. Let's make the *slides and write a *script.

[注] international standard 国際基準 magnifying glass icon 虫眼鏡のアイコン text テキスト(文字だけのデータ) slide スライド script 台本

問 4 下線部 this pictogram のさすものとして最も適切なものを、次の \mathbf{r} ~ \mathbf{r} の中から一つ選び、その記号を書きなさい。(3点)









問 5 本文 4 の内容に関する次の質問に、英語で答えなさい。(4点) Why is it often difficult to read the text on websites?

- 問 6 本文 $\boxed{1}$ ~ $\boxed{4}$ の内容と合うように、次の(1), (2)の英語に続く最も適切なものを、 \mathbf{P} ~ \mathbf{I} の中から一つずつ選び、その記号を書きなさい。(各 3 点)
 - (1) In the students' discussion,
 - 7 Mandy showed the pictogram which means "restaurant."
 - 1 Kento said that foreign languages helped people find the information they need.
 - ウ Jiro said that pictograms with different designs are made for each Olympics.
 - (2) According to the discussion, Kento explained
 - \mathcal{F} pictograms for the Paris Olympics were created based on those for the 2020 Tokyo Olympics.
 - ✓ pictograms created by Japanese designers spread around the world after the 1964 Tokyo Olympics.
 - ウ pictograms were created in 1964 for Japanese people who didn't use English.
 - I pictograms were created to increase the number of words on websites.
- 問 7 次は、後日の Kento と Mandy の会話です。自然な会話になるように、()に適切な 3 語以上の英語を書きなさい。(4 点)

Kento: The slides you made were very good. The pictogram quiz was also interesting.

Mandy: Thank you. I hope that our classmates will enjoy it. Is there (

do for our presentation?

Kento: Well, I'm writing a script. So, can you check my English?

Mandy: Sure. I'm happy to help.

I read some surprising news last week. According to that news, humans will be able to *hibernate in the near future. It said that some researchers have been studying how to *apply artificial hibernation to humans. It also said that by doing more research on hibernation, we may be able to use it in space or in the *medical field. However, not many animals hibernate, and there are still many things that we don't know. What is hibernation? How can it be applied to humans? I read some books and articles to answer these questions.

First of all, animals that hibernate are some *poikilotherms and some *mammals, such as bears. Poikilotherms, such as frogs or turtles, hibernate during winter because the outside temperature and their body temperatures are almost the same, so they cannot be active. Mammals, on the other hand, are able to keep almost the same body temperature by producing *heat inside their bodies. Hibernation of mammals is a *mysterious phenomenon. The body temperature drops, and the body stops the *metabolism that produces heat. Then, the body saves energy. Some mammals hibernate, but others do not. Some researchers believe that all mammals had the *ability to hibernate, but maybe they have lost this ability because of the environment they live in. Maybe some mammals learned to survive winter without hibernating.

In 2020, the world was surprised by a study from a Japanese research team. It said that the team put *mice into a condition very similar to hibernation, though mice do not hibernate. The team *stimulated a part of the mouse brain A the "*Q neuron." After the Q neurons were stimulated, the mice's *oxygen consumption *decreased and their body temperature dropped, and this hibernation condition continued for more than a day. After that, the mice *spontaneously returned to their original condition without any serious damage. This may be the way to apply artificial hibernation to humans.

Another research team has found a different hibernation *switch. That is "smell." When mice smell a *certain odor, This condition is similar to hibernation. The team also found that the hibernation switch *elicits the ability to survive in a difficult situation, such as in a low-oxygen environment. One of the team members who discovered this hibernation switch says, "For example, we can give a certain odor that elicits hibernation to a person in a serious condition. By doing so, we can use artificial hibernation to help someone in a serious situation survive. As a result, we may be able to save more B. "

If artificial hibernation becomes possible, what situations will it be used in? Sunagawa Genshiro, one of the members of the Q neuron research team, says, "We would like to start with hibernation for short periods of time and then increase the hibernation time. We will start with hibernation of only part of the body, and we would like to continue hibernation for a few hours or a few days. This can be used for medical care. We are also thinking about "voluntary hibernation." In this hibernation, Deveryone will be able to put themselves into artificial hibernation when they suddenly become sick. Each of us will be able to control when to hibernate. This would help many people." Before starting this research, Mr. Sunagawa was a doctor. He took care of sick children at one of the famous children's hospitals in Japan. He saved many children, but 3 He could not forget the children who were not saved. Because of that experience, he started his hibernation research.

If we can hibernate for longer periods of time, this technology will be used in other fields. Mr. Sunagawa said, "In the future, hibernation will be used for space travel. If you are in hibernation while you travel in space, by saving water and food, it will be possible to travel beyond the stars." Hibernation may be a technology that gives us more chances for space travel.

I thought that hibernation was a mysterious phenomenon found only in some animals, but recent research in science and technology shows that there is a chance of applying hibernation to humans. After researching hibernation, I became interested in hibernation in the medical field. If humans can use artificial hibernation, more people will be saved in the future. I look forward to future research on hibernation as [can / help / sick / that / people / or injured / a technology].

〔注〕 hibernate 冬眠する apply ~ ~を適用する medical field 医療分野 poikilotherm 変温動物(周囲の温度が変化すると体温も変化する動物) mammal 哺乳類 heat 熱 mysterious phenomenon 不思議な現象 metabolism 代謝(生物の体の中で起こる化学反応) mice 「複数の]ネズミ ability 能力 stimulate ~ ~を刺激する Q neuron Q 神経 decrease 低下する oxygen consumption 酸素消費 switch スイッチ spontaneously 自発的に elicit ~ ~を引き出す certain odor 特定の匂い voluntary 任意の にあてはまる最も適切なものを、次の中から一つずつ選び. 必 間 1 空欄 Α В 要に応じて、それぞれ正しい形にかえて書きなさい。(各3点) health produce call light life like put stand ─ にあてはまる最も適切な文を、次の**ア~カ**の中から一つずつ選 間 2 空欄 (3) び、その記号を書きなさい。なお、同じ記号を2度以上使うことはありません。(各3点) P he also had a hard time. 1 the outside temperature drops and they cannot be active. っ some of them asked the government to let this technology be used. people control when to start hibernation. 工 オ a few doctors tried to apply hibernation to humans.

問3 下線部 doing so は、どのようなことをさしていますか。日本語で書きなさい。(3点)

their body temperature drops and metabolism decreases.

use artificial hibernation?

- 問 4 本文の内容に関する次の質問に、英語で答えなさい。(4点) According to Mr. Sunagawa, why will space travel beyond the stars become possible if we
- 問 5 []内のすべての語句を、本文の流れに合うように、正しい順序に並べかえて書きなさい。(3点)
- 問 6 次の英文は、本文の内容をまとめたものです。次の(1)~(3)に適切な英語を、それぞれ 2 語で書きなさい。(43.5)

Nana read the news about hibernation. She learned what hibernation is and was (1) know that hibernation might be applied to humans. She read books and articles about hibernation. Some people believe all mammals had the ability to hibernate, but most of them lost it. Maybe hibernation is (2) for them now because the environment is not hard. She learned that the research teams found two switches for artificial hibernation. One is the "Q neuron," and the other is "smell." However, it is still (3) the researchers to control when and how to start hibernation. She hopes that hibernation will be applied to humans and this technology will be used in space travel or the medical field.

4 次の英文を読んで、下線部の質問に対するあなたの考えを、その理由が伝わるように、〔記入上 の注意]に従って40語以上50語程度の英語で書きなさい。*印のついている語句には、本文のあ とに[注]があります。(10点)

Some people buy things with money. However, these days, many people use *cashless payments, such as *credit cards or *electronic money. Cashless payments include IC cards and *prepaid cards. Do you think people should use that way to pay more often?

〔注〕 cashless payment キャッシュレス決済 credit card クレジットカード electronic money 電子マネー

prepaid card プリペイドカード

〔記入上の注意〕

- ① 【記入例】にならって、解答欄の下線 の上に1語ずつ書きなさい。
 - ・符号(..?!など)は語数に含めません。
 - ・50 語を超える場合は、解答欄の破線 で示された行におさまるように書きなさい。
- ② 英文の数は問いません。
- ③ 【下書き欄】は、必要に応じて使ってかまいません。

【記入例】

Hi!	I'm	Nancy.	I'm	from
Canada.	Where	are	you	from?
			~~~~	~~~~
			2008.	

(以上で問題は終わりです。)