2020

前

入学試験問題

外国語 英 語

注 意 事 項

○問題について

- 1. 試験開始の合図があるまでは、この問題冊子の内容を見てはいけません。
- 2. 問題は **1** から **6** まで、全部で 18 ページです。とじ間違いや、印刷不鮮明の箇所があれば申し出なさい。
- 3. 問題 4 と 5 と 6 はリスニング試験です。音声を聞いてから解答しなさい。リスニング試験は 11 時 00 分に開始し、11 時 20 分頃に終了する予定です。

○解答について

- 1. 解答用紙は6枚です。
- 2. 全ての解答用紙に受験番号を記入しなさい。
- 3. 解答は、解答用紙の指定された欄に枠からはみ出さないように記入しなさい。
- 4. 解答は、黒鉛筆(シャープペンシル可)を使用し、横書きで記入しなさい。
- 5. 解答欄がマス目になっている設問では、1マスに1文字ずつ記入しなさい。句読点・記号も1文字と数えること。ただし、アラビア数字・アルファベットは1マスに2文字ずつ記入しなさい。

○その他

- 1. 質問など、何か用事があるときは、手をあげて知らせなさい。
- 2. 解答が終わっても、途中退出は出来ません。ただし、トイレに行きたい場合や気分が悪くなったときは、手をあげて知らせなさい。
- 3. 不正行為を行った場合や、試験監督の指示に従わない場合には採点しません。
- 4. この問題冊子は持ち帰りなさい。

1 次の文章は "The Digital-Era Brain" という記事からの抜粋です。文章を読み、下の設問に答えなさい。(70点)

A revolutionary new technology was promising unprecedented access to information but was also sounding alarms: "This invention will produce forgetfulness in the minds of those who learn to use it, because they will not practice their memory," warned a leading mind of the era. It was 370 B.C., and the speaker was Socrates. The object of his scorn? The dreaded written word.

It was only the beginning of millennia of handwringing over technology and memory. In the 1400s, the invention of the printing press prompted concern that monks would become lazy without all that copying to do. In the 18th century, the bogeyman was the newspaper, which French statesman Malesherbes argued isolated readers. Now, several centuries later, the internet is memory's latest alleged enemy, with psychologists, neurobiologists and educators warning that our recall and attention spans are being decimated. The digital us, the concern goes, is distracted and superficial, on the road to intellectual ruin.

But is the internet really corrupting our memories — or will our skeptical experts, like Socrates before them, eventually be proven wrong? After all, the brain's attention system and preferences for novel experiences existed long before the digital age, and our ability to remember is nearly inexhaustible — with about a million gigabytes of mental storage capacity. "Your brain — every brain — is a work in progress," said Michael Merzenich, a neuroscientist and brain-plasticity researcher. "It is 'plastic.' From the day we're born to the day we die, it continuously revises and remodels, improving or slowly declining, as a function of how we use it."

Though we don't know exactly how memories are created or retrieved, we know that neurons talk to one another through synapses, which function sort of like bridges. Information crosses those bridges with the help of chemicals called neurotransmitters. The more neurotransmitters we have and the more frequent their signals, the stronger the connections between neurons become — until the process begins to happen even without the help of neurotransmitters. This leads to the formation of strong memories, but it only works when our brains are actively engaged. In short, the brain is like a muscle — the more you use it, the better it functions.

But our brains don't work well when we're distracted, which we are more than ever these days. A 2016 joint study by MIT and Microsoft found that the average employee checks their email 11 times an hour. Another survey, of college students from 26 states, revealed that students spend 20% of their class time texting, playing games and checking social media on digital devices. By constantly interrupting our thought processes, we are interfering with our ability to form both short- and long-term memories, experts say.

Even the fact that many of our online "conversations"—instant messaging on Facebook, for instance—remain unfinished affects our brains' ability to function. This phenomenon is sometimes called "the Waiter Effect," since studies have shown that waiters tend to remember incomplete business with customers better than visits that end normally. "Social interactions are very demanding for the brain," says Erik Fransén, who studies memory at Stockholm's Royal Institute of Technology, "and social media is designed to enable interactions with basically unlimited numbers of people." The mental juggling involved in switching back and forth between platforms and conversations slows down our brains—sometimes for up to half an hour after a switch of topic, Fransén says.

The contemporary onslaught of information affects our ability to remember too. Though our brains are designed to seek new data, too much of it may be causing this evolutionary instinct to run amok. The compulsion to constantly consume information means we often check Instagram when we should be doing what Fransén calls "memory housekeeping" by giving our brains some downtime. "My greatest concern today concerns our use of social media at time points of the day when our brains need to rest," notes Fransén. "The pauses that once occurred whenever we weren't explicitly focused and active now often get filled with social media."

Another issue: the passive nature of obtaining information online. Trying to actively recall data is a good workout for the brain, but today we Google instead — more than 5.5 billion times daily, compared with 3.3 billion times per day in 2012, according to the most recent estimates. As a result, our attention spans have shrunk from 12 seconds in 2000 to eight seconds — one second less than a goldfish's. This leads to what scientists call digital amnesia: we tend to forget information if we think it can be retrieved from a digital device.

Consider a 2018 study published in the Journal of Experimental Social Psychology. Researchers instructed 129 subjects to take self-guided tours of the Stanford Memorial Church on the Stanford University campus. Participants were supposed to take note of details such as "the cruciform shape of the church." Some had camera phones and were told to take pictures so they could post images on Facebook, while others toured without cameras. A week later, the tourers were given a quiz about what they had seen and learned. Those without a camera got seven out of 10 questions right on average, while those who had a camera got six right. "It could just be that we're using these devices, distracting ourselves from the experience, and because of that distraction, we don't remember the thing we're supposed to be paying attention to," Emma Templeton, a Dartmouth psychological researcher who was a co-author of the study, told Vox.

But the internet may be changing merely what we remember, not our capacity to do so, suggests Columbia University psychology professor and researcher Betsy Sparrow. In 2011, Sparrow led a study in which participants were asked to record 40 facts in a computer ("an ostrich's eye is bigger than

its brain," for example). Half of the participants were told the information would be erased, while the other half were told it would be saved. Guess what? The latter group made no effort to recall the information when quizzed on it later, because they knew they could find it on their computers. In the same study, a group was asked to remember both the information and the folders it was stored in. They didn't remember the information, but they remembered how to find the folders. In other words, human memory is not deteriorating but "adapting to new communications technology," Sparrow says.

In a very practical way, the internet is becoming an external hard drive for our memories, a process known as "cognitive offloading." Traditionally, this role was fulfilled by data banks, libraries and other humans. Your father may never remember birthdays because your mother does, for instance. Some worry that this is having a destructive effect on society, but Sparrow sees an upside. Perhaps, she suggests, the trend will change our approach to learning from a focus on individual facts and memorization to an emphasis on more conceptual thinking—something that is not available on the internet. "I personally have never seen all that much intellectual value in memorizing things," Sparrow says, adding that we haven't lost our ability to do it. Still other experts say it's too soon to understand how the internet affects our brains.

[注] Vox 米国のニュース・サイトの1つ。

下の1~6の設問に答えなさい。解答は解答欄に書きなさい。

- 1. 下線部①はどういうことか, 歴史的経緯を踏まえて80字以内の日本語で説明しなさい。
- 2. 下線部②はどういうことか、40字以内の日本語で説明しなさい。
- 3. 下線部③はどういうことか、40字以内の日本語で説明しなさい。
- 4. 下線部④を妨げている状況は何か、40字以内の日本語で説明しなさい。
- 5. 下線部⑤とは何か、40字以内の日本語で説明しなさい。
- 6. 下線部⑥はどういうことか, Sparrow 氏の主張を 80 字以内の日本語で説明 しなさい。

2 次の文章は "Scientists Find High Levels of Plastics in Arctic Snow" という記事です。文章を読み、下の設問に答えなさい。(40点)

Scientists say they have found high levels of small plastic particles in Arctic snow. Their findings provide more evidence that plastic is entering Earth's atmosphere and traveling great distances around the planet.

A new report (①) the discovery was published in *Science Advances*.

A German-Swiss research team collected snow samples from the Arctic and other areas. They included northern Germany, the Bavarian and Swiss Alps, and the North Sea island of Heligoland.

When the researchers examined the samples in a laboratory, they were surprised to find very high levels of microplastics.

Microplastics are very small pieces of plastic. These plastic particles are generally smaller than 5 millimeters in length. Other studies have found microplastics in the environment. They come from the disposal and breakdown of man-made plastic products and industrial waste.

Melanie Bergmann co-wrote the report on the new study. She told The Associated Press that while her team did (②) to find some microplastics in the samples, they were surprised by the very large amounts.

Bergmann is a researcher at the Alfred Wegener Institute in the German city of Bremerhaven.

The study found the highest levels of microplastics came from the Bavarian Alps. One snow sample from the area had 154,000 microplastic particles per liter. Samples collected from the Arctic had much lower levels. However, even samples from the Arctic (③) up to 14,000 particles per liter, the study found.

Earlier studies found signs of plastic in Arctic areas. Those microplastics were found in coastal areas, sea ice, the seafloor and the seawater's surface.

The new study attempted to explore how some of the material could have

been carried in the atmosphere. A (④) number of earlier studies did find microplastics in the air of some cities, including Paris, Tehran and Dongguan, China.

Bergmann said in a statement she believes the new study clearly shows that "the majority of the microplastic in the snow comes from the air." She said this idea is supported by research that studied the atmospheric movement of pollen from plants. In those studies, scientists confirmed pollen had traveled great distances to (⑤) the Arctic.

Other studies found that dust particles — which are similar to microplastics — (⑥) more than 3,500 kilometers from the Sahara Desert to the northeast Atlantic.

Bergmann said the new study suggests that much of the microplastic found in Europe and the Arctic comes from the atmosphere and snow. "This additional transport route could also explain the high amounts of microplastic that we've found in the Arctic sea ice and the deep sea in previous studies," she said.

The research team discovered many kinds of microplastics. Some were from paints commonly (⑦) to coat the surface of automobiles and ships. A rubber-like substance was also found that could have come from vehicle or boat parts or packaging materials, the report said.

While there is (**®**) concern about the effect of microplastics on the environment, scientists are still studying their possible harmful effects on humans and animals.

Bergmann said she hopes the new study will (⑨) to more research on this issue. She also said she believes that microscopic plastic particles should be included in worldwide observations of air pollution levels.

"We really need to know what effects microplastics have on humans, especially if (10) with the air that we breathe," Bergmann said.

空所①~⑩に入れるのにもっともふさわしい単語を下から1つずつ選んで、必要であれば適切な形に変えて、解答欄に書きなさい。それぞれの単語は1回だけ使うものとします。

arrive	contain	describe	expect
grow	inhale	lead	limit
reach	travel	use	

3 次の文章は、バービー人形誕生 60 周年に書かれた "Barbie at 60: instrument of female oppression or positive influence?" という記事からの抜粋です。文章を読み、下の設問に答えなさい。(40 点)

Barbie Millicent Roberts, from Wisconsin US, is celebrating her 60th birthday. She is a toy. A doll. Yet she has grown into a phenomenon. An iconic figure, recognised by millions of children and adults worldwide,

— a somewhat unprecedented feat for a doll in the toy industry.

She is also, arguably, the original "influencer" of young girls, pushing an image and lifestyle that can shape what they aspire to be like. So, at 60, how is the iconic Barbie stepping up to support her fellow women and girls?

When Barbie was born many toys for young girls were of the baby doll variety; encouraging nurturing and motherhood and perpetuating the idea that a girl's future role would be one of homemaker and mother. Thus Barbie was born out of a desire to give girls something more.

The idea that girls could play with her and imagine their future selves, whatever that may be, was central to the Barbie brand.

However, the "something more" that was given fell short of empowering girls, by today's standards. And Barbie has been described as "an agent of female oppression". The focus on play that imagined being grown up, with perfect hair, a perfect body, a plethora of outfits, a sexualised physique, and a perfect first love (in the equally perfect Ken) has been criticised over the years for perpetuating a different kind of ideal—one centred around body image, with dangerous consequences for girls' mental and physical health.

Toys have a significant influence on the development of children, far beyond innocent play. Through play, _______, and stereotypes can be transmitted by seemingly ubiquitous toys. Early studies in the 1930s by Kenneth and Mamie Clark showed how young black girls would more often

choose to play with a white doll rather than a black doll, as the white doll was considered more beautiful—a reflection of internalised feelings as a result of racism.

The same supposition — that girls playing with Barbie may internalise the unrealistic body that she innocently promotes — has been the subject of research and what is clear is that ______.

A group of UK researchers in 2006 found that young girls aged between five-and-a-half and seven-and-a-half years old who were exposed to a story book with Barbie doll images had greater body dissatisfaction and lower body esteem at the end of the study compared to young girls who were shown the same story with an Emme doll (a fashion doll with a more average body shape) or a story with no images.

More worrying, there were no differences between groups of girls aged five-and-a-half and eight-and-a-half years of age, with all girls showing heightened body dissatisfaction. Another study ten years later found that exposure to Barbie dolls led to a higher thin-ideal internalisation, supporting findings that girls exposed to thin dolls eat less in subsequent tests.

Exposure to unhealthy, unrealistic and unattainable body images is associated with eating disorder risk. Indeed, _______. Barbie's original proportions gave her a body mass index (BMI) so low that she would be unlikely to menstruate and the probability of this body shape is less than one in 100,000 women.

With growing awareness of body image disturbances and cultural pressures on young girls, _______. Barbie's manufacturer, Mattel, has been listening, possibly prompted by falling sales, and in 2016 a new range of Barbies was launched that celebrated different body shapes, sizes, hair types and skin tones.

These have not been without criticism; the naming of the dolls based on their significant body part (curvy, tall, petite) is questionable and again draws

atten	tion	to	the	bod	у,	while	"curv	y"	Barbie	wit	h her	wider	hips	and	larger
thigh	ıs, r	ema	ains	very	r t]	hin. D	espite	th	nis,				·		
]	If Ba	rbie	e wa	as ab	ou	t emp	owerii	ng	girls to	be a	nythii	ng that	they	wan	t to be

then the Barbie brand has tried to move with the times by providing powerful role playing tools for girls. No longer is Barbie portrayed in roles such as the

air hostess — or, when promoted to pilot, still dressed in a feminine and pink version of the uniform.

下線の空所 \mathbb{I} ~ \mathbb{S} にもっともよくあてはまるものを \mathbb{A} ~ \mathbb{I} の中から \mathbb{I} つずつ選んで、その記号を解答欄に書きなさい。ただし、文の先頭にくる場合でも固有名詞以外はすべて小文字にしてあります。

- A. Barbie was a fashion model with her own career
- B. children mimic social norms and subtle messages regarding gender roles
- C. letting children "be" boys or girls implies that there is a natural set of likes and dislikes for each gender that are unaffected by the culture in which we live
- D. many parents have begun to look for more empowering toys for their daughters
- E. modern pilot Barbie is more appropriately dressed, with a male air steward as a sidekick
- F. parents are often unaware of the potential effects on body image when approving toys for their children
- G. she has remained a popular choice for more than six decades
- H. the increasing prevalence of eating disorder symptoms in non-Western cultures has been linked to exposure to Western ideals of beauty
- I. these additions are a welcome step in the right direction in allowing girls to play with Barbie dolls that provide more diversity

- これから英国(UK)のテストについての Richard と Jackie の対話を聞きます。 その内容に合うように、1~10の文を完成させるのにもっともよくあてはまる 選択肢をそれぞれ a ~ c の中から1つずつ選んで、その記号を解答欄に書きなさ い。放送は1回流れます。(40点)
 - 1. To earn Portuguese citizenship, Jackie had to
 - a. pass a language exam

 - b. pay 250 poundsc. work in Portugal for six years
 - 2. The Life in the UK Test must be taken by people who want to
 - a. become a citizen
 b. study in the UK.

- 3. As a way to prepare for the Life in the UK Test,

- 4. To pass the test, people must get a minimum of
 - a. 16 correct answers out of 24 questions)
 - b. 18 correct answers out of 20 questionsc. 18 correct answers out of 24 questions
- $5. \ \ Richard \ passed \ the \ test \left\{ \begin{array}{l} a \ . \ once \\ b \ . \ twice \\ c \ . \ three \ times \\ \end{array} \right\}.$

6. People who fail the test can $\left\{ \begin{array}{l} a \,.\, \text{ get a rerund or oo} \,. \\ \\ b \,.\, \text{ pay to take the test again} \\ \\ c \,.\, \text{ retake the test for free} \end{array} \right\}.$ 7. The chapter Richard and Jackie find most difficult is titled $\left\{ \begin{array}{l} a \:. \ \ \text{``A long and illustrious history''} \\ b \:. \ \ \text{``The UK government and your role''} \\ c \:. \ \ \text{``The values and principles of the UK''} \end{array} \right\}.$ 8. Some of the questions are difficult because a. the multiple choices are similarb. they are not in the handbookc. they are not multiple-choice questions 9. Jackie believes the test's questions should focus on British b. history and society
c. law and customs $10. \ \ A \ test \ like \ the \ Life \ in \ the \ UK \ Test \ is \ NOT \ given \ in \ \left\{ \begin{array}{l} a \ . \ \ France \\ b \ . \ \ Portugal \\ c \ . \ \ Spain \end{array} \right\}.$

- 5 これから落し物の財布を使った実験について聞きます。放送を聞いて、以下の $1 \sim 6$ の文を完成させるのにもっともよくあてはまる選択肢をそれぞれ $a \sim c$ の 中から 1 つずつ選んで、その記号を解答欄に書きなさい。放送は 1 回流れます。 (30 点)
 - 1. Researchers in Finland carried out a small experiment to understand
 - a. in which countries wallets are most often returned.
 - b. what factors cause people to drop their wallets.
 - c. what people do when they find a lost wallet.
 - 2. According to surveys conducted before the experiment, most people believe
 - a. people are less likely to return wallets containing larger amounts of money.
 - b. people are more likely to return wallets containing larger amounts of money.
 - c. the amount of money in the wallet has no influence on whether people will return it or not.
 - 3. Researchers conducted an expanded form of the experiment in 40 countries by dropping wallets that
 - a. varied in appearance and contained various amounts of money.
 - b. were similar looking and contained about \$13.
 - c. were similar looking and contained various amounts of money.

- 4. The experiment showed that when more money was in the lost wallet, the likelihood of that wallet being returned
 - a. decreased.
 - b. increased.
 - c. remained unaffected.
- 5. One explanation NOT mentioned for the findings in the experiment is that people
 - a. don't want to cause harm to others.
 - b. don't want to think of themselves as a criminal.
 - c. hope to receive some kind of reward.
- 6. Dan Ariely of Duke University believes that people engage in dishonest behavior when they
 - a. can justify being dishonest.
 - b. have no fear of being caught.
 - c. think they can receive an advantage or benefit.

6 これから外国語学習における文化についての講義を聞きます。以下は、講義中に表示されたスライドです。これを参考に講義を聞き、設問1と2に答えなさい。 放送は2回流れます。(80点)

Two Categories of Culture in Language Learning

- "Big C" (high) culture = traditional culture
 e.g.) literature Shakespeare
 music Bach, Tchaikovsky
- "Little c" (low) culture = everyday culture
 e.g.) In a supermarket: "Paper or plastic?"/"Cash or credit?"
 In a fast food restaurant: "Is that for here or to go?"

- 1. 放送で流れた講義の内容を200語程度の英語で要約し、解答欄に書きなさい。
- 2. 放送で流れた講義を参考にしながら、日本文化もしくは自分が知っている文化における "little c culture" の例を1つ挙げ、外国語学習における文化の役割について、あなたの意見を200語程度の英語で解答欄に書きなさい。



