

英 語

解答上の注意

1. 解答は、解答用紙の解答欄にマークすること。

例えば、

4

 と表示のある問題に対して、「Mark the **TWO** correct answers on the same line on the answer sheet.」の場合には、次の例に従う。

例：②と⑦と答えたい場合には

解答 番号	解 答 欄									
4	①	●	③	④	⑤	⑥	●	⑧	⑨	⑩

1

後の問い(問1～12)に答えよ。

【A】 問1～9の()に入る語句として最も適切なものを、①～④のうちからそれぞれ1つずつ選べ。

問1 We climbed Mt. Fuji last Sunday. The sunrise (1) from the top of the mountain was magnificent.

- ① seen ② seeing ③ see ④ saw

問2 In order to prevent the spread of influenza, the number of participants in the ceremony (2) for three years in a row.

- ① has been scaled down ② have been scaled down
③ has scaled down ④ have scaled down

問3 We are now caught in a big traffic jam. The meeting will have finished by the time we (3).

- ① will arrive ② will be arriving
③ may arrive ④ arrive

問4 Arizona is (4) nice a place that I would love to stay there forever.

- ① so ② such ③ much ④ very

問5 (5) his help, we could not have finished the work on time.

- ① In time ② But for ③ Not even ④ As if

問6 I got lost while I was walking in the mountains. (6) what to do, I sat still and waited.

- ① Not know ② Not knew
③ Not knowing ④ Not have known

問7 What do you think is the best skill in making yourself (7) in an English conversation?

- ① understand ② understood
③ to understand ④ at understanding

問 8 () you quit smoking or not is the most important choice you have to make for your health.

- ① Unless ② While ③ Whether ④ As

問 9 “The food you cook tastes very good.”

“Thank you, but I am not () cook as you.”

- ① as good a ② a good as ③ as a good ④ good an as

【B】 問 10～12 の(1)と(2)の各英文の空所に共通して入る語として最も適切なものを、①～④のうちからそれぞれ1つずつ選べ。

問10 (1) Your desire for success must be greater than your fear of failure in () to succeed.

(2) The vending machine is out of (), I'm afraid.

- ① order ② date ③ patience ④ light

問11 (1) Do you know when the next meeting will be ()?

(2) Suddenly, someone () me by the arm.

- ① found ② held ③ driven ④ begun

問12 (1) I want you to () what I say in mind.

(2) I cannot () the thought of living without my family.

- ① bear ② lie ③ invest ④ afford

For many Americans, the holiday season is the perfect time to volunteer. Some people prepare or serve Thanksgiving meals at homeless shelters. Some take part in fund-raisers for charity, or collect and donate winter coats for homeless people. But for many students, community service isn't just a holiday activity. An increasing number of middle and high schools now require students to serve a certain number of volunteer hours before they can graduate. And some parents insist that their kids do volunteer work year-round — even if it's not mandatory at school.

Why is there an emphasis on getting teens to volunteer? Volunteering can have important benefits, such as learning new skills, building compassion, and becoming a more responsible citizen. In contrast, some people say (14) when students are forced to volunteer. Also, many teens don't have the time.

While most people agree that it's important for students to volunteer, many teens already have huge demands on their schedules, including homework and after-school programs. Critics of mandatory community service say that many students feel overwhelmed when other activities are added to their plates — and may resent having to volunteer. “Adding community service to high schoolers' already busy schedules is the wrong way to go,” says Ellison O'Grady, age 16, a student from Bay Head, New Jersey. “It makes something as important and rewarding as volunteering feel like a chore.” Other people say many of the benefits of community service come from actually *volunteering* — that is, participating by (15). If your school or your parents *require* you to do something, it's not really voluntary, they note.

Ellison thinks schools should shift their focus. “Instead of forcing students to volunteer,” she says, “schools should create more opportunities for them to serve. The more exciting and diverse the options are, (16) that many students will sign up for them.”

Teens who volunteer tend to do better in school and are less likely to engage in risky behaviors, studies show. They also gain social skills and work experience that can pay off later in life, when they're looking for jobs. Still, given a choice, many busy teens would simply skip it. That's why requiring community service is important, supporters say.

As a high school student in New York, Bellamy Richardson, now age 18, had to do 75 hours of community service before graduation. “At first, I was worried. How can we, as busy students, find that much time?” But, she says, “I joined other teens to make sandwiches and ‘life-packs’ filled with daily necessities. Once a month, we delivered them to homeless shelters and sometimes directly to people living on the streets.” To Bellamy's surprise, she not only met the service requirement sooner than she'd expected, she also learned a lot, strengthened friendships — and found that she loved volunteering.

“I discovered a new passion for social justice,” she says. “I will never forget the personal impact we made on people.” Bellamy is now glad that her service wasn’t optional. “Requiring community service would give other people the opportunity I had.”

(Adapted from <https://junior.scholastic.com/issues/2019-20/111119/should-you-have-to-do-community-service.html?language=english>)

Bill: Wow, I’m worn out.

Jon: Hey, Bill. What’s up? You don’t look so good. Tough day in Mrs. Wilson’s class?

Bill: No, that’s not my problem at all. It’s more about this new volunteer work I started doing downtown. Every evening, I’ve been delivering food to the homeless who have set up encampments on the north side of Seattle. After a couple of weeks, I’ve started feeling physically and mentally burnt out.

Jon: You do community service? I didn’t know that. When do you have time? You already have a busy after-school schedule with many activities such as the basketball team and the yearbook committee.

Bill: Yeah, you’re right about that! I’m swamped! I’m having trouble managing my time and keeping up with practices and getting the yearbook ready for publication this spring. But our school requires community service for graduation. I got to do it. There is no way out. Didn’t you have to do community service before you graduated last year?

Jon: No, not at all. I guess it’s a new program at our high school.

Bill: You’re lucky. I wouldn’t wish this on anyone, not even my worst enemy. I really wish I could quit.

Jon: Oh, you shouldn’t jump ship yet. Think about it. There are some benefits, right? For example, you can build better social awareness. I heard that volunteering can create a positive impact and foster positive change in people’s lives. You have an active role in improving the community. You know, it’s like you are part of the community.

Bill: Yeah, I guess so, but everything is so demanding with the school community service program.

Jon: I hear you, but I think it will get better. Also, you have the chance to learn and enhance a wide range of abilities such as teamwork, leadership, problem-solving, communication, and organization. These skills can be valuable in different aspects of life, like in education, your future career, or even your personal relationships.

Bill: You seem to know quite a bit about this topic. Why is that?

Jon: I had to write a paper about volunteering for Mrs. Wilson’s class last year. And she was strict about the quality of our work. But, in the end, you know, I really learned a lot researching about the topic.

Bill: Well, after our talk, I feel a bit more motivated. Maybe tomorrow will be a better day.

問 1 According to the first paragraph of the passage, which of the following is true?

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- ① Some Americans are enjoying their volunteer time, visiting the homeless in large cities.
- ② Some Americans are struggling to volunteer at their local high school graduation ceremony.
- ③ Some American middle and high schoolers need to volunteer as a school requirement.
- ④ Some American volunteers are eating holiday foods instead of feeding the homeless.

問 2 Which of the following is the most appropriate for (14) in the passage?

- ① there are more benefits
- ② those advantages are lost
- ③ they discover satisfaction
- ④ these kinds of stress decrease

問 3 Which of the following is the most appropriate for (15) in the passage?

- ① accident ② law ③ choice ④ energy

問 4 Which of the following is the most appropriate for (16) in the passage?

- ① a chance the greater ② the greater the chance
- ③ a great chance ④ the chance great

問 5 Which of the following is the closest meaning of pay off in the passage? 17

- ① to give back money you have owed to a friend
- ② to offer praise to someone after they have done something dishonest
- ③ to yield a good result or to give you some kind of reward
- ④ to retire a coworker and give him or her a final payment

問 6 According to the passage, which of the following is mentioned by both Ellison and Bellamy? 18

- ① High school students have busy schedules.
- ② There are few volunteering opportunities for students.
- ③ They enjoyed volunteering because they could learn to be a part of the community.
- ④ They had a negative experience volunteering in their community when they were in school.

問 7 According to the dialogue, why is Bill feeling tired? 19

- ① Bill has to deliver food in the morning to the homeless living in a shelter in the north part of the city.
- ② Bill has many things to do after school including sports and committee work, and he has to help feed the homeless as well.
- ③ Bill's basketball team needs to practice during the week, and he has no time to join his team's evening practice.
- ④ Bill's teacher is very strict about research assignments, so he needs to spend more time writing them.

問 8 Which of the following is the closest meaning of swamped in the dialogue? 20

- ① extremely busy
- ② covered in water
- ③ thirsty or dehydrated
- ④ relaxed during free time

問 9 According to the dialogue, which of the following is true about Jon? 21

- ① Jon has to do community service next school year and is looking forward to it.
- ② Jon thinks Bill is not doing a good job with community service and that Bill should quit.
- ③ Jon knows a lot about community service because he was a community service leader.
- ④ Jon doesn't want Bill to quit doing community service because there is something to learn from it.

問10 What is the main topic of the dialogue? 22

- ① They are discussing the best ways to manage Bill's busy schedule.
- ② They are talking about the good and bad points of the school community service program.
- ③ They are debating about the increase of homeless people in the US.
- ④ They are sharing information about Mrs. Wilson's research assignments and her difficult class.

Gender Bias in Medicine and Medical Research

Mentally, physically and biologically, men and women are simply not built the same way. It sounds obvious, but we have only really begun to understand why. These differences have not been reflected accurately in the field of medicine. Women's health has too often been considered a niche area — even though it involves roughly 50% of the world's population.

(23) is that being female puts women at higher risk of some of the most challenging conditions. ^{*1}Autoimmune diseases, for example, affect approximately 8% of the global population, but 78% of those affected are women. Females are three times more likely than males to develop ^{*2}rheumatoid arthritis and four times more likely to be diagnosed with ^{*3}multiple sclerosis, an autoimmune disease that attacks the central nervous system.

Women make up two-thirds of people with ^{*4}Alzheimer's disease, and are three times more likely to have a fatal ^{*5}heart attack than men. Women are at least twice as likely to suffer chronic pain conditions. As author Maya Dusenbery made clear in her book "Doing Harm," these conditions are under-researched and often go undiagnosed and untreated.

Heart disease is another example where sex — or perhaps sexism — still plays a huge determining factor. Women are less likely to experience the 'classic' symptoms of a heart attack — symptoms that were discovered in research led by men, in which most of the participants were men. Women's most common heart attack symptom, as with men, is chest pain or discomfort. But women are more likely than men to experience some of the other common symptoms, particularly ^{*6}shortness of breath, ^{*7}nausea, ^{*8}vomiting and back or jaw pain. But because the diagnosis method still favours male biology, many women experience (27) diagnosis or a misdiagnosis. On average, women are diagnosed with heart disease seven to ten years later than men. This often results in other chronic diseases being prevalent by the time of the diagnosis.

The reason for women being this over-represented in some conditions is not clear. But genetic and hormonal factors are likely to be involved. Historically, however, medical research has often excluded women. In 1977 the US Food and Drug Administration (FDA) recommended women of (28) be excluded from clinical research studies. This was to protect the most 'vulnerable' populations — unborn children — following the ^{*9}thalidomide scandal. Another reason given for excluding women in clinical studies is that, depending on where a woman is in her ^{*10}menstrual cycle, the variation of her hormones 'complicates' the results. This variability would mean more subjects were needed in clinical trials, thereby increasing costs.

Male-only studies were justified by a belief that what would work for men would also work for women. This erroneous assumption has had catastrophic results. Every cell in a person's body has a sex. This means diseases and medications used to treat them will affect women differently — as we have learned, often at a cost to their health. Eight out of ten of the drugs removed from the US market between 1997 and 2000 were withdrawn because of side effects that occurred mainly or exclusively in women. Between 2004 and 2013, US women suffered more than 2 million drug-related ^{*11}adverse events, compared with 1.3 million for men.

The lack of recognition of sex differences in biology and medicine is a huge issue research has only recently begun to address. In 1997, the FDA published a rule requiring manufacturers to show evidence of how their drug is safe and affected by age, sex and race. When last measured in depth in 2016, it was clear there had been significant progress, with women accounting for roughly half of the participants in some clinical trials funded by the US National Institutes of Health (NIH).

(Adapted from <https://theconversation.com/gender-bias-in-medicine-and-medical-research-is-still-putting-womens-health-at-risk-156495>)

注) ^{*1}autoimmune disease(s) : 自己免疫疾患, ^{*2}rheumatoid arthritis : 関節リウマチ, ^{*3}multiple sclerosis : 多発性硬化症, ^{*4}Alzheimer's disease : アルツハイマー病, ^{*5}heart attack : 心臓発作, ^{*6}shortness of breath : 息切れ, ^{*7}nausea : 吐き気, ^{*8}vomiting : おう吐, ^{*9}thalidomide scandal : サリドマイド事件(サリドマイドという薬によって, 世界で多数の胎児が被害を受けた薬害事件), ^{*10}menstrual cycle : 月経周期, ^{*11}adverse event(s) : 有害事象

問 1 23 に入る最も適切な語句を, 次の①～④のうちから 1 つ選べ。

- | | |
|-------------------|-------------------|
| ① What do we know | ② What we do know |
| ③ Do we know what | ④ We do know what |

問 2 女性の病気のリスクについて, 第 2 段落の内容と合致するものを, 次の①～④のうちから 1 つ選べ。 24

- ① 女性の 8 % が自己免疫疾患を患う。
- ② 自己免疫疾患の患者の 8 % は女性である。
- ③ 女性が関節リウマチを患う確率は男性の 3 倍である。
- ④ 多発性硬化症は女性の自己免疫疾患の 1 / 4 を占める。

問 3 第3段落の内容と合致するものを、次の①～④のうちから1つ選べ。

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- ① 女性の3人に2人はアルツハイマー病を患う。
- ② アルツハイマー病患者の3人に2人は女性である。
- ③ 女性が致命的な心臓発作を起こす確率は、アルツハイマー病を患う確率の3倍である。
- ④ 男性が致命的な心臓発作を起こす確率は、女性の3倍である。

問 4 下線部 the 'classic' symptoms の1つとして最も適切なものを、次の①～④のうちから1つ選べ。
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- ① 胸の痛み ② あごの痛み ③ 息切れ ④ 性差別

問 5 27 に入る最も適切な語句を、次の①～④のうちから1つ選べ。

- ① a delayed ② an ancient ③ an immediate ④ a simultaneous

問 6 28 に入る最も適切な語句を、次の①～④のうちから1つ選べ。

- ① premature ages ② preschool age
- ③ childbearing age ④ retirement age

問 7 女性を臨床試験から除くことを正当化するために使われた下線部 Another reason として最も適切なものを、次の①～④のうちから1つ選べ。
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- ① 感受性の高い胎児を薬から守るため
- ② 月経周期のある女性の健康を維持するため
- ③ 女性は男性より病気になるリスクが高いため
- ④ 女性ではホルモンのばらつきがあり、結果が複雑になるため

問 8 下線部 This が示すものとして最も適切なものを、次の①～④のうちから1つ選べ。
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- ① 間違った仮定がひどい結果をもたらすこと
- ② 人体のすべての細胞に性があること
- ③ 病気や治療の影響が、女性と男性とでは異なること
- ④ 女性の健康に大きな被害があった後に、そこから学ぶこと

問 9 アメリカでの出来事について正しいものを，次の①～④のうちから 1 つ選べ。 31

- ① 1997 年から 2000 年の間に，市場から取り下げられた薬の大半は，男性でより多くの副作用がみられたものだった。
- ② 1997 年から 2000 年の間に，臨床試験での副作用が女性のみにもみられたので，8 割の薬しか市場での販売が行われなかった。
- ③ 2004 年から 2013 年の間に，女性で有害事象がみられた薬は 200 万種類だった。
- ④ 2004 年から 2013 年の間に，男性でみられた薬に関わる有害事象は 130 万件だった。

問10 最終段落の内容と合致するものを，次の①～④のうちから 1 つ選べ。 32

- ① 性による生物学的および医学的な違いを認識し，対応することについては，今のところ進展がない。
- ② FDA は製造者に対して，性が薬にどのように影響するかについての根拠を示すよう規則で定めている。
- ③ 2016 年にアメリカで行われた全ての臨床試験で，参加者の半数以上は女性であった。
- ④ NIH が出資した臨床試験では，参加者の男女比を詳細に調べたことはない。

4 次の英文を読み、後の問い(問1～9)に答えよ。

^ア Digital amnesia is a concept that has existed since 2007, first introduced in the study that addressed the phenomenon as a rising threat to the human memory as a consequence of the overuse of technology. The term was also referred to as 'digital *¹dementia,' coined by a German neuroscientist, used to describe how the overuse of digital technology is resulting in the breakdown of cognitive abilities in a way that is more commonly seen in people who have suffered a head injury or psychiatric illness. The history of digital amnesia as a phenomenon also recognises the work done by three major universities — Harvard University, Columbia University and the University of Wisconsin. Researchers from these universities were interested to study the effect of technology on youth and their research resulted (34) coining the term 'Google effect' that was described as the tendency to forget information that can be easily found online. Digital amnesia and Google effect are used in an exchangeable manner; however, digital amnesia is referred to as the tendency to forget information that one has stored on a digital device.

The term was officially coined by Kaspersky Laboratory, a cybersecurity firm based in Moscow, Russia. Both of these phenomena are similar, in that one forgets, either intentionally or unintentionally, information that is digitally available. The prime reason for this forgetting is that the source of the information is better remembered than the information itself. Thus, every time one wants to access information, it is available at the click of a button. Undeniably, over-reliance on connected devices and the Internet contribute to developing digital amnesia. These digital devices range from smartphones, tablets, laptops, computers to all other digitally equipped technological devices; however, research on digital amnesia in general and this passage shall often refer to digital devices and smartphones interchangeably as smartphones are the most used digital devices. Living with digital devices, as a result of the technological evolution, is changing the way we think, learn, behave, remember, live and evolve.

Kaspersky Lab conducted a survey-based research in 2015 to explain has / technology / the reliance / far / how / on come and the impact on peoples' daily lives. The study questioned over 6,000 consumers in Europe, across the UK, France, Germany, Italy, Spain and the Netherlands. The research findings reported a direct link between the availability of data at the click of a button and (37). The research found that many people struggle to recall memories and simple information they entrust to their devices, including the phone numbers of partners and parents. Based on these findings Kaspersky Lab coined the term 'digital amnesia' — the experience of forgetting information you entrust to a digital device to

store and remember for you. Kaspersky Lab conducted the follow-up study (2015–2016) across Europe, India and the USA.

The research conducted in Europe revealed some surprising statistics where people reported the following:

- Devices were being used as digital brains, to store information people needed to remember.
- 34% of European consumers admitted that their smartphone was their memory, as it contained almost everything they need to know or recall.
- 32% of people admitted their digital devices are like an extension of their brain.
- Over three-quarters (79%) of respondents were more reliant on their digital devices than for accessing information than they were five years ago.
- Digital amnesia was seen as a phenomenon in the old and young age groups.

The research conducted in the USA revealed the following:

- There was an overwhelming number of consumers who easily admitted their dependency on the Internet and devices as a tool for remembering.
- Almost all (91.2%) of those surveyed agreed that they use the Internet as an online extension of their brain.
- Almost half (44.0%) also admitted that their smartphone serves as their memory — everything they need to recall and want to have easy access to is all on it.
- In addition, many consumers were happy to forget, or risk forgetting information they could easily find, or find again online.
- When faced with a question, half of US consumers would turn to the Internet before trying to remember and 28.9% would forget an online fact as soon as they had used it.

The research conducted in India showed the following:

- 50% of the survey group treated the Internet as an extension of their brain.
- 73% of them used their smartphones to connect to the Internet.
- 50% of Indians weren't interested in remembering facts as much as they were interested in remembering the source for the facts.
- The trend of smartphone dependency seemed to decrease as the age of the test group increased. That's because smartphones have not been around for long enough to influence a 55-year-old man or woman the same way it's influencing a teenager.

Digital amnesia is a phenomenon under research. To put it in simple terms, it explains

that what is not needed to be remembered is easily forgotten. Cognitive neuroscientists and psychologists have not yet affirmed digital amnesia as a scientific phenomenon, but they agree that relying (X) on the mind builds (Y) neuron connections in the brain, stopping its development. Among the restricted literature available, the disadvantages of digital amnesia outweigh the constricted advantage it possibly has. Given the lack of secure procedures to save the digitally stored information and the hidden threat of behavioural addiction, it is essential to realise the adversities of the growing phenomenon of digital amnesia.

(Adapted from 'Digital Amnesia: are we headed towards another amnesia,' *Indian Journal of Mental Health*, by Pragya Lodha, 2019)

注) *¹dementia : 認知症

問 1 Which of the following is true about Digital amnesia in this passage? 33

- ① This term was made in order to promote the use of digital technology.
- ② It was another name of digital dementia, which described the bad effects of technology.
- ③ Indian neuroscientists and German psychologists coined this term in 2007.
- ④ A historian at Harvard University recognized this phenomenon before 2007.

問 2 Which of the following is the most appropriate for (34)?

- ① in ② into ③ around ④ without

問 3 According to the author, what is the main reason for forgetting digitally available information? 35

- ① It is because the information source is better remembered than the information itself.
- ② It is because digitally available information is sometimes difficult to find online.
- ③ It is because over-reliance on connected devices and the Internet causes a left-brain injury.
- ④ It is because digital devices like smartphones are sold and not prohibited in many countries.

問 4 Put the underlined has / technology / the reliance / far / how / on in the correct order.

Which of the following is the **FOURTH** word(s)? 36

- ① has ② technology ③ the reliance ④ far
⑤ how ⑥ on

問 5 Which of the following is the most appropriate for (37)?

- ① the quality of information on the Internet
② the trustfulness of online private information
③ a failure to commit that data to memory
④ the painful memory stored in our brains

問 6 Which **TWO** of the following are true about the follow-up study (2015-2016) across Europe, India and the USA? Mark the **TWO** correct answers on the same line on the answer sheet. 38

- ① Two-thirds of European consumers admitted that their laptop was their memory.
② Most of European respondents were not reliant on their digital devices for accessing information.
③ Almost half of American consumers admitted that their smartphone serves as their memory.
④ In America, many children using digital devices were happy to forget what they learned at school.
⑤ Over 70% of Indian consumers use their smartphones in order to remember scientific facts.
⑥ In India, it seemed that the smartphone dependency decreased as the age of the respondents increased.

問 7 Which of the following is common about all three of the follow-up studies conducted by Kaspersky Lab? 39

- ① The overuse of digital devices or the Internet causes human brains to develop their memory.
② Some people regard their digital device or the Internet as an extension of their brain.
③ Digital devices have seriously bad effects on the young age group, which leads to digital amnesia.
④ More and more people are suffering from Internet addiction compared with 5 years ago.

問 8 Which of the following is the most appropriate combination for (X) and (Y)?

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X

Y

- | | |
|---------|-------|
| ① less | more |
| ② less | fewer |
| ③ fewer | less |
| ④ fewer | more |

問 9 Which of the following is true about the passage?

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- ① In studying human memory, researchers from several major universities were interested in the effect of technology on elderly people.
- ② Digital amnesia and Google effect are used in an exchangeable manner because both mean the tendency to forget information that is stored on smartphones.
- ③ In 2015, various cybersecurity firms, including Kaspersky Lab, conducted a survey-based research with the purpose of improving their security level.
- ④ According to cognitive neuroscientists and psychologists, digital amnesia has not been confirmed as a scientific phenomenon yet.

