次の文章は、近年のミツバチの減少について書かれたものである。 この文章を読んで、問1~問4に答えなさい。(配点35点)

(神户大 2021)

The Food and Agriculture Organization of the United Nations (FAO) states that there are 100 crop species that provide 90% of the food around the world and 71 of these are pollinated* by bees. In Europe alone, 84% of the 264 crop species and 4,000 plant varieties exist thanks to pollination by bees.

In Europe, bee populations and honey reserves have declined dramatically since 2015 — by 30% per year in some areas. And the latest statistics from beekeepers in the USA are not much more (A) — according to the Bee Informed Partnership poll, last winter 37% of honeybee colonies * died, 9% more than the usual average for winter deaths. But why are these insects disappearing?

In Oregon 50,000 bees died due to the effects caused by a pesticide; this is an example of how different substances can have an impact. The European Food Safety Agency (EFSA) confirmed that the cause behind the mass death of bees in Europe is specifically the use of a particular type of fertilizer* called neonicotinoids. The mixture of substances (B) with the learning circuits in insects' brains. They make the bees slower to learn or they completely forget basic associations for their survival, such as linking floral aroma and food. The bees die as they are not able to feed themselves.

In 2018, the European Union decided to completely ban outdoor use of three neonicotinoid insecticides* that are frequently used worldwide in corn, cotton and sunflower crops. And the European Parliament has already proposed that (C) usage of these insecticides should become a key objective of the common agricultural policy (CAP) in the future.

The Varroa mite* is one of bees' greatest enemies and one of the biggest causes of their disappearance. It is an external parasite that invades the insect and feeds on its blood and also transmits lethal viruses to the rest of the hive, including deformed wing virus*. This mite has spread across most of the world, except Australia so far.

A group of scientists from the University of Texas at Austin, USA, have developed a project that is pioneering the use of genetic engineering to improve bee health. The project involves creating genetically modified strains of bacteria* that live in the honeybees' digestive system to protect them from this destructive mite that causes colonies to collapse.

According to (1)the study, bees with genetically modified bacteria are 36.5% more likely to survive deformed wing virus. Mites that feed on these bees are 70% more likely to die than mites that feed on bees that have not received any treatment.

Air pollution also reduces the strength of chemical signals sent out by flowers, causing bees and other insects to find it more difficult to locate them. Climate change makes the situation even worse as it alters flowering and the amount of plants due to rainy seasons, which affects the quantity and quality of nectar*.

In (D) of the above, the disappearance of bees would cause a true food crisis. Around 84% of commercial crops depend on bee pollination. For example, in Andalusia (Spain) in 1987 a good sunflower harvest was expected but this did not occur due to the lack of beehives; this was caused by the loss of bees from the Varroa mite.

As for the elimination of the Varroa mite and the ban of the pesticides, we will have to wait and see how effective the measures are in preventing the loss of bees. We can fight this problem in our everyday life by taking steps to combat climate change and pollution. Even so, we are faced with questions such as: Are we in time to fix it or should we also work on preventing this phenomenon? (2) Are other animals disappearing that at first do not seem to be essential yet without whose activity we could not conceive life?

~に受粉する pollinate honeybee colonies ミツバチの蜂群 fertilizer 肥料 insecticides 殺虫剤 羽変形病ウイルス mite ダニ deformed wing virus 花蜜(ミツバチが strains of bacteria バクテリアの菌株 nectar 集める花の蜜)

問1 空所(A) \sim (D)に入る最も適切な語を、それぞれの選択肢から一つ選びなさい。

- (A) (\mathcal{T}) depressing (1) reassuring (ウ) suggestive (工) trustworthy (ウ) copes (工) interferes (B) (\mathcal{T}) accords (イ) cooperates (C) (\mathcal{P}) assuring (1) developing (ウ) reducing (工) supporting (D) (P) advance (ウ) order (エ) spite (イ) light
- **問2** 下線部(1)the study とはどのようなものか、その目的と方法が具体的に分かるように、35 字以内の日本語で説明しなさい。(ただし、句読点も1字に数えます。)

		35			

問3 ミツバチの減少に対してとられているさまざまな方策について、筆者は どのような態度を示しているか、25 字以内の日本語で説明しなさい(ただし、 句読点も1字に数えます)。

	•	, -				
			25			

問4 下線部(2)を日本語に訳しなさい。

次の文章は、「STEM 教育」について書かれたものである。この文章を読んで、問 1~問 5 に答えなさい。(配点 35 点)

(神户大 2021)

Women and girls are underrepresented in science, technology, engineering, and mathematics (STEM) education and careers. One (a)<u>prevalent</u> explanation for women's underrepresentation in STEM is the gender gap in math performance favoring males, particularly spatial skills. Research suggests that gender gaps in math performance emerge in middle school or high school; however, meta-analyses* indicate this gap has disappeared.

Given the evidence from meta-analyses, an ability explanation for women's underrepresentation in STEM is less plausible; many other explanations, including broad contextual factors (societal expectations, parental and peer influence, and climate within STEM majors and organizations) and women's motivations, math ability self-assessment, and choices, are well-supported. From a sociocultural perspective, research has documented how environments dominated by males can be threatening to women and girls and can (b)elicit stereotype threat, which can lower their sense of belonging, increase feelings of exclusion and isolation, and lead to disengagement from the domain.

Stereotype threat is the phenomenon in which members of a stereotyped group worry that their performance on an evaluative task will be judged according to a negative group stereotype indicating inferiority in the domain. The stereotype relevant to STEM education is that women and girls are not as competent in math as men and boys. Thus, when women and girls take math tests, they may worry that their performance will be judged according to this stereotype and they may fear confirming the stereotype if they perform poorly. (1) This threat can lead to negative outcomes such as poor test performance and disengagement from the domain.

Arguably, the most widely studied academic performance outcome for women in the stereotype threat literature is math test performance; other less frequently studied outcomes include more negative attitudes toward the domain and lower intentions to pursue education and careers in the domain. For example, it was found that women taking a math test had poorer performance when they were told the test was diagnostic of math ability than when they were told the test was not diagnostic. In a diagnostic testing situation, women performed poorly because they feared confirming the stereotype that "women are not as good at math as men"; when women were told that no gender differences have been found on a math test, the women performed better than when no such information was given. Thus, stereotype threat is one factor in women's

underperformance in math. If women are worried about validating gender stereotypes regarding women's math ability, this additional cognitive burden may lead to (2)(<u>A</u>) performance, feeling a (<u>B</u>) of belonging in the field of mathematics, and (<u>C</u>) the domain.

As shown by these results, one important variable examined in stereotype threat research is gender identity, or the centrality and importance a person places on gender as part of one's larger self-concept. Research on gender identity among adults has shown that women who strongly identify with their gender are more (c)vulnerable to the negative effects of stereotype threat, presumably because they care more about confirming stereotypes that reflect poorly on their gender group. Performance pressure, not wanting to make the group look bad, or group-level stereotype threat, leads to underperformance for women who are highly gender identified.

However, a recent study showed that (3)<u>because stereotype threat is triggered within</u> <u>educational contexts</u>, it can be reduced through interventions to promote mathematics and <u>science education</u>, thus improving the educational pipeline leading to good careers in STEM. Educators, parents, practitioners, and policy makers can learn more about stereotype threat through many publicly accessible resources and partner with social scientists to carry out these interventions on a large scale.

注 meta-analyses メタ分析(複数の研究結果を統合し、より高次の見地から行う 分析)

問1 下線部(a)∼(c)の単語または語句について、本文中における意味に最も近いものを、それぞれの選択肢から一つ選びなさい。

(a) prevalent

- (P) common
- (1) exclusive
- (ウ) immediate
- (エ) possible

(b) elicit

- (\mathcal{P}) get rid of
- (1) give rise to
- (ウ) put up with
- (工) be concerned about

(c) vulnerable to

- (*P*) highly resistant to
- (1) easily influenced by
- (ウ) relatively indifferent to
- (工) strongly encouraged by
- **問2** 次の文は、下線部(1)This threat の内容を説明したものである。本文の内容に即して、空所[イ]と[ロ]に入る適切な日本語の文を書きなさい。

[イ]というステレオタイプの影響によって、[ロ]のではない かという脅威

問3 下線部(2)の空所(A) \sim (C)に入る最も適切な単語の組み合わせはどれか。 選択肢(あ) \sim (え)から一つ選びなさい。

	(A)	(B)	(C)		
(あ)	different	state	improving		
(٧)	improved	sense	entering		
(7)	inferior	fail	rejecting		
(え)	lower	lack	leaving		

問4 下線部(3)を日本語に訳しなさい。

問5 本文の内容と合致する文を選択肢から二つ選びなさい。

- (\mathcal{T})Educational interventions can pave the way for women to pursue rewarding careers in STEM fields.
- (1) The possible factors that explain women's underrepresentation in STEM are relatively predictable.
- (ウ)Gender gaps in math performance which emerge in early childhood education tend to increase over time.
- (工)Male-dominated environments can lead to stereotype threat, resulting in lower math performance of women.
- (オ)Decreasing a feeling of exclusion is pivotal in building women's negative attitudes toward STEM majors and careers.
- (カ) Women are more likely to perform well on math tests when they are informed that their math ability is being assessed.

次の文章は、アメリカのある経営学大学院での"Digital Transformation" という授業における議論の一部である。この文章を読んで、問1~問 4に答えなさい。(配点30点)

(神户大 2021)

Student A: Artificial intelligence, or AI is a powerful technology. If

humankind can find a way to regulate and use AI ethically, I truly believe this technology will bring (a)unparalleled

advancement and benefits to our way of living.

Professor: There is a problem, and it comes with the use of that one single

word: ethically. AI may have amazing potential, but the fast-moving technology needs to be employed carefully and

thoughtfully.

Student A: If AI is not regulated, a lot of harm can be done.

Professor: (1) For some three decades, digital technology has continued its

never-ending march of progress, remaking and disrupting a wide range of industries. Looking at the efforts of organizations to transform themselves digitally today, we are going to

examine some cases that investigated AI ethics.

Assistant Professor: It's a timely topic. I think the public is becoming more aware of

the effect of algorithms* and AI. Digital transformation should be responsive to not only customer needs, but also to the

consequences it has for society.

Student B: I think AI is going to drastically change the way businesses

operate in the very near future. I hope that the major corporations, and citizens of the globe, will ensure it is rolled

out responsibly.

Assistant Professor: We are in a reflection phase. There is a movement. Companies

are starting to realize they have to be responsible in how they use this technology. Let me liken this movement to sustainability. About 20 years ago, companies began thinking about their environmental impacts because of the increasing concerns of their customers. Companies had to look at sustainability. It became a part of how they presented themselves. I think we're seeing (2) a similar shift in technology.

Professor: Still, there are concerns. Biases, for one, can creep into

algorithms. The technology behind self-driving cars can more easily identify white pedestrians than nonwhite ones, which makes them a higher risk for being struck. Discrimination can be baked into banking algorithms, making it harder for people

of color to obtain loans.

Assistant Professor: The autonomy built into these systems is raising the (b)stakes.

It has to be built with some sort of ethical framework.

Professor: Because the technology is advancing at such a rapid pace,

reigning it in may be difficult.

Student B: The optimistic part of me thinks that most companies

understand there is significant value to their consumers by utilizing technology responsibly, but there is no way

(c)<u>legislation</u> is going to be able to keep up.

Assistant Professor: This discussion went very well. I believe that our students, who

are well versed in social responsibility and business model design, are uniquely positioned to consider these issues that

emerge in the future.

Student A: I am full of excitement and am optimistic that we can use AI

for good. However, any technology is nothing more than a tool. It's a double-edged sword that has the ability to enslave or

empower humanity.

注 algorithms アルゴリズム(コンピューターなどで演算手続きを指示する規則)

問1 下線部(1)を日本語に訳しなさい。

問2 下線部(2)を 40 字以内の日本語で説明しなさい(ただし、句読点も1字に数えます)。

					40

- **問3** 下線部(a) \sim (c)の意味と最も近い単語を、それぞれの選択肢から一つ選びなさい。
- (a) unparalleled
- (*P*) comparable
- (1) exceptional
- (ウ) expected
- (工) explanatory
- (b) stakes
- (\mathcal{P}) charges
- (イ) interests
- (ウ) profits
- (エ) risks
- (c) legislation
- (\mathcal{P}) court
- (1) government
- (ウ) justice
- (エ) law
- 問4 本文の内容と合致するものを以下の選択肢の中から二つ選びなさい。
- (\mathcal{T}) It is necessary for humans to be optimistic about the future of AI technology.
- (1) Governments should be more cautious in enacting rules that regulate AI technology.
- (ウ)Humans should not fail to be aware of the ethics in using AI technology properly.
- (工)AI technology is supposed to contribute to solving various issues of racial discrimination.
- (オ)Companies' efforts to utilize AI technology result in facilitating environmental consciousness.
- (カ)AI technology has advantages as well as disadvantages in terms of its impact on human society.

The following is an excerpt from the article posted on a website. Read the passage and answer the following questions in English.

(神户大 2021)

In comparison to students of neighboring countries such as China and Korea, Japanese students show less interest in study abroad. According to the UNESCO database, Japan was ranked 23rd, with 33,494 post-secondary students studying abroad in 2012. In this same year, there were 698,395 students and 121,437 students studying abroad from China and Korea, respectively. Many experts have attributed the decline in the number of young Japanese studying abroad to their deep-seated "inward-oriented tendency" (uchimukishikou in Japanese). Although some scholars argue that this characteristic is not solely confined to Japanese youth, there is great interest among Japanese scholars and politicians in understanding this tendency among Japanese youth.

- (1) Explain "inward-oriented tendency (*uchimukishikou*)" among Japanese youth with some example(s) other than studying abroad, using around 40 words.
- (2) What do you think about the idea expressed in the underlined sentence? Write your opinion, using around 60 words.

Read the following passage.

(北海道大 2021)

There is an ongoing debate about whether students should be required to study subjects that are considered part of the "liberal arts." The liberal arts are university subjects that include history, philosophy, foreign languages, music, and so forth. A liberal arts education exposes students to a range of different subjects and seeks to cultivate students' critical thinking and reasoning skills. These are not the most practical subjects, but by exposing students to different ideas through liberal arts classes, supporters of the liberal arts believe that students will develop a more balanced skillset that will allow them to pursue different careers in the future.

However, in today's increasingly specialized world, many people question the validity of such an education. A liberal arts education is often compared to more practical majors, such as business, engineering, or computer programming. These specialized and more practical majors explicitly seek to cultivate students' skills in these fields and prepare them for jobs in industries related to their majors. By majoring in a field such as finance, for example, students can be expected to be best prepared to obtain jobs in the financial industry. This is because they will have specialized and detailed knowledge of finance and will hypothetically not require much time to learn how to perform the duties of their future jobs.

One can expect that in today's data-driven and technical work environment, a specialized major would be better for most students. However, the evidence is far from conclusive. Many successful people received a liberal arts education and they have been able to translate the skills learned from their liberal arts curriculum into success in many specialized fields. For example, Peter Thiel, co-founder of PayPal and a successful technology entrepreneur, majored in philosophy at Stanford University. Jack Ma, billionaire and founder of Alibaba Group, majored in English. Susan Wojcicki, CEO of YouTube, majored in history.

It is thus clear that a liberal arts education will definitely not prevent one from entering a more specialized field. But is it truly advantageous? Would it serve students best to avoid a liberal arts education and instead focus on a specialized one? The debate continues, but we should be able to obtain a clearer answer to this question in the near future.

Answer questions A to C <u>in English</u>. You may use words and ideas from the text, but you <u>must not</u> copy complete sentences.

Question A

Complete the following sentences.
Even though liberal arts subjects are not practical, they are very useful in making a career
decision because students can
by studying them.

Ouestion B

Answer the following question with reference to the third paragraph.

What makes the author state that specialized majors are not always better than those of liberal arts in today's technical work environment? Complete the following sentence.

There are lots of people _______.

Question C

The text describes two different fields of university subjects: liberal arts subjects and practical majors, such as business, engineering, etc. In your opinion, which field should be considered more important in the near future? Write a 70-100 word paragraph, providing two specific reasons to support your opinion.

Read the following transcript [I] of a conversation between friends, Susan and John. Then, read the summary of the transcript [II]. The summary contains 12 blanks. For each blank, choose the most appropriate option from the list. Each option can be used only once. On your answer sheet, write the letter (A, B, C, etc.) that corresponds to your choice.

(北海道大 2021)

[I: Conversation]

Susan: You're looking very tired today. Are you feeling OK?

John: Yes, I'm fine, but I am exhausted. I got up at 4:30 this morning and went for a run, so I've only had five hours of sleep. I also feel a bit strange because I've been on this diet where you only eat meat with no fiber.

Susan: Sounds extreme! What's made you start doing all that?

John: I've been watching this successful businessman's podcast on YouTube. Each week he explains the secret of his success and last week he said we waste thousands of hours by sleeping too much and have no energy because we eat the wrong things. Some of it sounds a little crazy, but he is hugely successful and I'm not, so there must be some truth in it.

Susan: I see... but I have to tell you that I was recently reading an article on the BBC about the fact that many people think like you do, but that they're looking at things in the wrong way.

John: What do you mean?

Susan: If you want to be successful, you should spend more time thinking about the people who don't make it, not just the ones who do.

John: How would that help?

Susan: OK, a famous instance is from a Hungarian mathematician named Abraham Wald, who was hired by the US military during World War II. His job was to figure out how to better protect planes from being shot down, so he studied the ones that had been shot but successfully made it back to the airfield.

John: OK, I can see where this is going. He looked at the places where the planes had been damaged and recommended that those places should be better protected with stronger materials in the future, right?

Susan: Well, that was his first idea, but then he realized that his focus shouldn't have been the aircraft that made it back, but the aircraft that were shot down. The places where a successfully returned plane had been shot were precisely the places that didn't require

extra protection. It was where the surviving planes had never been shot that needed better armor!

John: Oh, I see. The fact that the planes had made it back without crashing meant that they had been shot in places that weren't really serious. But what has this got to do with being successful in life?

Susan: It's the same principle. You shouldn't be focused on what one successful person eats and how many hours they sleep, but on the habits of the thousands of unsuccessful people and all the others in the middle. For example, think about sleep. Scientists have shown in large studies that having as little as five hours of sleep a night will negatively affect your performance. You need to look for connections in the data of large groups of people, not just make one connection between a famous person's success and the amount of sleep he or she has.

John: Hmm... I'm beginning to see your point. So why are we naturally attracted to only focusing on successful people?

Susan: Psychologists don't know for sure, but it probably has something to do with their visibility in society. Think about Abraham Wald's planes. He could clearly see the places where they had been shot, so naturally his attention was drawn to those spots. It is harder for us to focus on what isn't so visible. This is one of the dangers of celebrities and powerful figures in society. We pay more attention to what they say than we should, and therefore don't pay attention to the more important bigger picture.

John: Well, the good news is that I can now get a good night's sleep! I can also go back to eating natto!

[II: Summary]

Two colleagues, Susan and John, are having a conversation. Susan asks John why he is looking so tired and John replies that he got up early and he has just started a new diet. He goes on to (1) that he is following the secrets for success of a businessman who has his own podcast on YouTube.

Susan is (2) and points out that she has recently read an article that (3) the popular habit of trying to succeed by following the example of well-known successful people. The (4) talks about the need to focus more on the people who don't (5) success and not just on the smaller number of people who are very successful.

She uses the (6) of a scientist in World War II who was studying how best to protect planes from being shot down. At first, he focused on the planes that successfully made it back and the places where they had been damaged. However, he soon (7) that he shouldn't be focusing just on the planes that returned successfully, but also the ones that were hit and hadn't made it back. John understands Susan's explanation, but is a little confused about its (8) to trying to succeed by following the advice of successful people. Susan points out that it is the same (9) because we shouldn't be looking only at, for example, the number of hours that a small number of famous people sleep. Instead, we should be focusing on the number of hours that most people sleep and the positive or negative (10) it has on their abilities to be successful.

John begins to agree with Susan's point, and then asks why it is that we tend to focus on (11) in our culture. One explanation that Susan offers is that famous people are very visible in our society, so that it is natural that they (12) our attention more than regular people.

(A) achieve	(B) affection	(C) article
(D) businessman	(E) celebrities	(F) concerned
(G) connection	(H) criticizes	(I) disappointed
(J) discuss	(K) disposition	(L) effect
(M) example	(N) explain	(O) guessed
(P) hold	(Q) idea	(R) invention
(S) make it	(T) ordinary people	(U) pay
(V) proposes	(W) realized	(X) reflection

次の英文を読んで、設問に答えなさい。

(北海道大 2020)

What do Hercule Poirot, Sherlock Holmes, and James Bond (007) all have in common? The answer is that they are famous solvers of mysteries, whose stories are relayed in thrilling action-adventure fashion. They were created respectively by Agatha Christie, Sir Arthur Conan Doyle, and Ian Fleming. (1) That these authors were all themselves extraordinary figures whose colorful life-stories have been made the subject of biographies and television documentaries is perhaps not well-known.

As one of the four most commercially-successful film series of all time (along with Harry Potter, Star Wars, and the Marvel Franchise), the storyline of the Bond films may be familiar to many. In the movies, Commander James Bond is a spy, a member of the British Secret Service, whose (2)death-defying acts to defeat evil villains and 'save the day' are always assisted by cutting-edge technology, accompanied by womanizing, and flavored by seeming insubordination to his superiors. Bond's taste for luxurious clothing and fine food often showcases him early in the film in the gambling room of a five-star hotel where he gains access to the movie's villain by seducing a beautiful woman. Bond is also a master of the fighting arts, familiar with all types of weaponry, and capable of driving or piloting any kind of vehicle. Often, the movies build to a climax, in which Bond, trapped by the villain, overcomes seemingly impossible odds by use of his spy gadgetry, wit, fighting skills, luck, and the assistance of the heroine, who has inevitably fallen in love with him. The undercurrents of violence running through the films (Bond possesses a "License to Kill") are balanced out by Bond's refined manners as well as his dry sense of humor.

Like Bond, author Ian Fleming was also a member of the intelligence forces. He was born in 1908 into a wealthy family in the United Kingdom, where Fleming's father was a member of Parliament. Fleming later served as a banker and journalist and also spent time living abroad in Germany, Switzerland, and the USSR before being recruited into the Navy by Rear Admiral John Godfrey in 1939. During the War, while serving as an intelligence officer, he worked in collaboration with the American CIA, and was responsible for planning and administering elite intelligence units.

Fleming's wartime experiences, as well as his career as a journalist, provided the content and depth of his writing for the Bond novels, a career which he took on from the year 1952. Fleming has acknowledged that the Bond character "was a compound of all the secret agents and commando types I met during the war." The character from the Bond novels has appeared in 26 movies and been played by seven different actors.

Bond novels have contained many themes based on the geopolitical tensions of the day as well as a decidedly male chauvinist* slant. Bond's character in the novels embodies many of Fleming's personal traits, including a love for gambling. Fleming was also a heavy drinker and smoker who died from a heart attack at age 56, and was involved in a number of extramarital affairs. In this sense the novels could be criticized for fostering stereotypes and an immoral search for thrills.

On the other hand, however, the Bond movies have also changed with the times, reflecting current issues such as developments in human rights. For example, some of the Bond character's less fashionable attitudes, such as prejudice against different races, have been dropped, and in recent films he has also stopped smoking and can be emotionally damaged.

What is the value of a spy story for contemporary people? Perhaps, as the Hollywood Industry might have it, it is just to provide us entertainment, a sense of relief from the boredom or stress of our everyday life. Bond movies have been running for almost 60 years and shed light on shifting international relations and social trends. Perhaps watching a spy movie and learning about the life of its creator will give us a glimpse into our society and its values in the course of changing times.

*chauvinist: a person displaying excessive support or loyalty for their own belief, group, or sex

問1 下線部(1)を日本語に訳しなさい。

- **問2** 下線部(2)の内容に最も意味の近い文を、次の(A)~(D)から1つ選びなさい。
- (A) Bond is not afraid of death in order to strike down his enemies.
- (B) Bond denies villains' abilities to engage in deadly actions.
- (C) Bond never dies in the course of his pursuit and destruction of an evil.
- (D) Bond is dying to save the United Kingdom when his superiors actually have turned to the evil side.

- **問3** 以下の1~7の文には、本文の内容に合致するものが5つある。それら 5つの文を時系列順に正しく並べなさい。
- 1. Ian Fleming was born into a wealthy family in the United Kingdom.
- 2. Ian Fleming served as a member of Parliament.
- 3. Ian Fleming was an officer in the Navy, planning and administering intelligence units.
- 4. The character of James Bond in Ian Fleming's novels appeared in a series of Bond movies.
- 5. Ian Fleming undertook his career of writing James Bond novels.
- 6. Ian Fleming directed the Bond movies, in which seven different actors played the role of Bond.
- 7. Ian Fleming worked as a banker and a journalist, and experienced living abroad.
- **問4** 時代とともに映画の中のジェームズ・ボンド像はどのように変化したか。近年のボンドの具体的な特徴を本文から探し、3 点挙げて、日本語で述べなさい。(順不同)

- **問5** この文章のタイトルとしてもっともふさわしいものを、次の(A) \sim (D)から1つ選びなさい。
- (A) Shifting International Relations and the Transformation of Bond the Hero
- (B) James Bond and the Life of the Author, Ian Fleming
- (C) A Comparison of Contemporary Mystery Writers and Hero Characters
- (D) The Secret behind the Popularity of 007 Film Stories

問6 本文の内容と-致するものを、次の $(A)\sim(G)$ から2つ選びなさい。

- (A) It is regrettable that violence in the Bond films is expressed in a refined manner with a sense of humor.
- (B) Ian Fleming could drive or pilot numerous kinds of vehicles, which is reflected in the character of James Bond.
- (C) James Bond was born from Ian Fleming's childhood dream to be a spy, for Fleming himself was actually a banker and journalist.
- (D) The character of James Bond was constructed from different people Ian Fleming met during the war years.
- (E) Bond in the films is critical of the gambling industry, which often provides the villains he fights against.
- (F) Some of the themes of the Bond movies reflect stereotypes and undesirable attitudes, which have remained consistent over time.
- (G) Bond movies reflect changing relations among different nations and shifting trends in human society.

次の英文を読んで、設問に答えなさい。

(北海道大 2020)

People often think of place as concrete, a fixed location. Space, on the other hand, is often envisioned as something more abstract, something not fixed. However, in contemporary society locations that were once seen as fixed can gradually come to seem more abstract. This point is apparent if we compare the present to the past. One way to see how some of our ideas regarding location are changing is by examining the development of cyberspace as a concept alongside the shifting meaning of one's hometown. At first glance, they seem almost to be in opposition, that is, cyberspace as abstract and a hometown as fixed. (a), today they have more in common than you might expect.

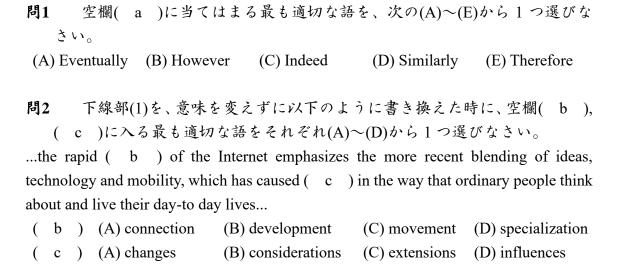
The concept of cyberspace emerged in the 1990's alongside the World Wide Web, a global network system of information exchange that revolutionized the way people think and interact. There were, of course, earlier precedents that combined globalization and networks, such as the emergence of air travel in the mid-twentieth century. Nevertheless, (1)the more recent mixing of ideas, technology, and mobility highlighted by the rapid evolution of the Internet has altered how average people consider and conduct their day-to-day lives like never before. Today the influence of the 'web' can be witnessed in everyday aspects of life as diverse as research, banking, and dating. Moreover, the Internet can be found just about anywhere and sociocultural shifts related to it are ongoing.

(2)<u>Progressive urbanization</u> is another socio-cultural shift. It has altered the way that many individuals think about their hometown. In Japan, for example, only a century ago the majority of the nation's population were engaged in occupations related to primary resource extraction, notably fishing and farming. Thus, unsurprisingly, the bulk of people lived, sometimes for generations, in the same rural towns. However, as Japan emerged as a post-agrarian and then post-industrial society, more and more people moved to cities. Today, the largest proportion of Japanese residents are urbanites who tend to work in a variety of 'goods and service' related industries.

Through such changes people are increasingly forced to reconsider fundamental concepts like location and related terms like space and place. For example, cyberspace is, in fact, not a singular physical site, or a particular place, but a series of connections, some wireless and some wired. Cyberspace actually refers to a wide range of relations — a broad physical network from keyboards, to computer codes, to servers and on to the individuals that utilize the system. At first, the idea of a hometown seems to refer to the opposite, a (3)static place. However, urbanization has meant that due to rural

depopulation many regions have become smaller or even disappeared. On the other hand, areas surrounding and even within cities have been dramatically altered via the development of new suburbs and the redrawing of urban boundaries. Urbanization has also meant that the majority of the nation's workforce is no longer bound to specific plots of farmland or coastal areas. More than ever, individuals relocate for a variety of reasons such as education, marriage, or employment. In short, these days, both cyberspace and the concept of hometown primarily refer to relations rather than fixed locations.

When we turn to physical perceptions of location, the increasing similarity between the experience of cyberspace and that of one's hometown becomes even more striking. We talk of an Internet community, but it is hard to envision cyberspace accurately in physical terms, that is to say, in the sense of a singular location in relation to an individual's body. In other words, an actual cyber 'place' largely remains unimaginable. One needs only to ask a simple, yet unanswerable, question: where, precisely, is 'it' located in relation to me? Alternatively, an individual's physical experience of their hometown may seem clearly linked to place. But here too, through mobility, community is becoming no longer recognizable for an increasing number of people. For example, one's 'hometown' may rapidly and radically change due to one or more of the above factors or a person may only reside in their place of birth for a short time never really being a part of the social, cultural or material relations of the location before moving away. Thus, the borderline between place and space is ever-shifting. (4) What used to seem fixed and definite is being modified by changes in society and social relations.



問3 下線部(2)は、過去1世紀の間に日本人の農業と居住地域に起きた、どのような変化を指しているか。本文に即して、80字以内の日本語で簡潔に述べなさい。

				80

問4 下線部(3)の意味に最も近い、2語から成る語句を第1パラグラフの中から抜き出し、英語で答えなさい。

問5 下線部(4)を日本語に訳しなさい。

問6 本文の内容と-致しないものを、次の(A)~(F)の中から2つ選びなさい。

- (A) Place has traditionally been conceived of as a static physical location, whereas space, on the other hand, has been seen as more abstract.
- (B) The emergence of the concept of cyberspace almost parallels the emergence of air travel in the mid-twentieth century in terms of its significance.
- (C) The emergence of 'the web' has transformed the way people approach research and banking.
- (D) Increasing urbanization facilitated the relocation of individuals, thus a great number of Japanese people have left the rural towns where they lived for generations.
- (E) While some individuals have a lasting experience of their hometown, some others may not.
- (F) Experiencing cyberspace used to be similar to experiencing one's hometown, which is not necessarily true today.

Read the following passage.

(北海道大 2020)

It is 7:30 a.m., and you are on your way to work in your car. However, you are not 'driving' in the traditional sense of the word. It is a driverless car, and for the whole journey you can work on your PC or even catch up on your sleep. At 4:00 p.m. you activate your driverless car while seated in your office, having it pick up your 7-year-old son at school and drive him to his swimming class. In the 1980's, this kind of vehicle was a mere science-fiction fantasy. Nowadays, however, experts agree that people will start using fully autonomous, or driverless, vehicles within the next couple of decades.

An autonomous vehicle is defined as a vehicle that can guide itself without human operation. Originally born from military research and development, automated driving technology is now considered to be valuable for consumers. Parking assistance, collision avoidance systems, and emergency brakes have already been incorporated into existing vehicles with the aim of reducing human errors.

Vehicles now vary in their level of automation from zero to five according to the definitions given by the Society of Automotive Engineers. For now, commercially available cars, in which drivers must perform the key aspects of driving with the assistance of automated systems, are ranked level two at best. Automakers as well as other start-up companies are racing toward a fully driverless future. Someday, a combination of cameras, sensors, radar devices, cruise control, and data that are all under the control of software algorithms will assist the fully automated operation of vehicles. Yet, it will be a while before driverless, or fully autonomous, vehicles run freely on our streets.

In the meantime, the move to driverless cars remains controversial. Advocates of autonomous vehicle technology envision a driverless society in which people will benefit from safer and more productive journeys. In addition, they believe that driverless vehicles will improve the mobility of citizens who are disabled. On the other hand, critics are less optimistic. They argue that the improvement of autonomous vehicle technology will deteriorate our driving skills, which could be fatal if the vehicle's autopilot cuts out for some reason. They wonder who should be legally responsible for a driverless car crash. Finally, they fear that hackers might hijack driverless cars. Against such a background, human wisdom may possibly decide whether the upcoming driverless future will be a Utopia or a dystopia.

Answer questions A to C <u>in English</u>. You may use words and ideas from the text, but you <u>must not</u> copy complete sentences.

Question A						
Complete the following sentences with r	reference to the first paragraph.					
The author illustrates how a driverless car may make our lives easier. In the morning, it						
could while you are resting in it. In the afternoon, it could						
pick up your son at school, taking him to	a swimming lesson. Experts agree that this kind					
of vehicle will no science-fiction fantasy.						
Question B						
Complete the following sentences with r	reference to the second and third paragraphs.					
An autonomous car can run itself even	n though a human					
Today, the key aspects of driving	ng in commercially available cars must					
, often with th	e assistance of automated systems.					

Question C

Would you like to live in a society where driverless cars are commonly used on the streets? Write a 70-100 word paragraph to explain your position, providing at least two reasons to support your opinion.

Read the following conversation among three college students from the same town. Then, read the summary. The summary contains 12 blanks. For each blank, choose the most appropriate word or phrase from the list.

(北海道大 2020)

[Conversation]

Kazuki & Hi, Reika.

Shohei:

Reika: Hi guys! Welcome to our town's sightseeing association

office. Are you having a good summer?

Kazuki: Not bad. How's your job here going?

Reika: It's been wonderful. Since we started promoting our town on

SNS, the number of visitors has tripled. My boss is particularly proud of the quality of the photos I've been able to collect and post. He says many locations that nobody outside the town knew about before are now attracting

hundreds of tourists!

Shohei: Ahm. Reika, we actually came to ask you a favor which

involves just that.

Reika: You mean the tourists?

Shohei: Yes. Kazuki and I have different issues, though. Let me

explain mine. There are photos of my family's farm on the website and on SNS. My parents request that they be taken

down.

Reika: Why? They are the ones that get most "likes" on SNS!

Shohei: The photos are attracting too many tourists to our farm, and

some of them are causing trouble. For example, my parents caught tourists taking photos in the middle of our vegetable field, stepping on the young plants and ruining them. Moreover, tourists' shoes may be contaminated with bacteria and pests, which can seriously damage the field and the plants.

And after all, they are intruding on private property.

Reika: Oh, I didn't know! Sorry to hear about your family's

hardships. But the photos are too beautiful to drop...

Kazuki: Hearing what Shohei says, I think part of the town is now

experiencing so-called "overtourism." Have you ever heard of

the term, Reika?

Reika: Yes. That's when people's lives are badly affected by too many

tourists coming, right? I know the problem is discussed a lot regarding popular destinations like Kyoto and Barcelona. But I never imagined similar things would happen in our small

town.

Kazuki: That's the point. Overtourism can happen any place

nowadays. SNS has so much power that it can change an unknown place into a world-famous tourist destination

overnight.

Reika: And does your issue also involve overtourism, Kazuki?

Kazuki: Yes, but it is the opposite side of the problem. I am doing a

research project on the economic structure of the town, and have conducted several interviews with retailers and restauranteurs who own businesses on Main Street. They all say the number of customers hasn't increased. Tourists don't come around to Main Street to eat and shop, which means that the increased tourism is not actually contributing to the town's

economy.

Reika: So, what shall we do then?

Kazuki: Shohei and I think the tourist association should present a

more balanced image of the town as a whole. After taking down the photos of Shohei's family farm, why don't you post the photos of foods and goods available on Main Street, for

example? We all have our favorites in this town, don't we?

Shohei: If you could take down the farm photos, Reika, I will go

around the town and take photos of the ramen places I love,

so that you can post them on SNS.

Kazuki: In addition, working with similar organizations in adjacent

towns may help to disperse tourists. If we suggest different places for them to visit around the area, they won't concentrate on just one or two sites. That would, in turn, present a more attractive picture of this area as a whole. Tourists may come

to like our town and the area even more!

Reika:

Hmm, it sounds like we are about to make big changes to the community. I will take down Shohei's family farm photos. But first, I want to make sure the food photos that replace them are appealing enough. Shohei, would you take us to one of the *ramen* places you recommend?

[Summary]

Kazuki and Shohei visit Reika, who works for the local sightseeing association as her summer job. Reika is (1) that the photos posted on the association's website and SNS accounts, which she is in charge of, have led to a dramatic increase in the number of tourists to their town. However, Shohei (2) her to remove the photos of his family's farm from the association's SNS accounts, because tourists have been trespassing onto the farm and damaging the farm plants. Reika is shocked, but is (3) to take down the photos. Kazuki joins the discussion and points out that the town is in a state of "overtourism."

Reika has heard of the term, but thought it (4) only to world-class tourist destinations such as Kyoto and Barcelona. According to Kazuki, overtourism can affect any place these days, because a piece of information posted on SNS can attract a great number of people to (5) unknown place, (6) making it into a famous destination. In addition, he is concerned that the increased tourism has not yielded enough financial (7) to the town.

Reika asks Kazuki and Shohei whether they have any ideas about how to (8) the situation. Kazuki first comes up with an idea that she should post images of foods and souvenirs available in the (9) district of the town. He feels that, then, tourists would enjoy the local specialties and the local businesses would benefit as well. Shohei offers to help with taking photos of his favorite restaurant foods as an example. Second, Kazuki proposes that their town should (10) with neighboring municipalities to guide tourists to visit locations around the area. In this way, tourists would disperse to many different places, and the danger of too many people concentrating on limited locations would be (11). This would also lead to higher satisfaction levels for tourists.

Realizing that she and her friends now have a chance to change the local tourism scene, Reika agrees to replace the photos as requested. Then she asks Shohei to take her and Kazuki to one of the restaurants he (12).

1.	(A) boasted	(B) concerned	(C) pleased	(D) upset
2.	(A) suggests	(B) teaches	(C) threatens	(D) urges
3.	(A) confused	(B) delighted	(C) keen	(D) reluctant
4.	(A) applied	(B) influenced	(C) led	(D) proved
5.	(A) an already	(B) a conceivably	(C) a previously	(D) a simultaneously
6.	(A) aggressively	(B) gradually	(C) instantly	(D) seemingly
7.	(A) benefit	(B) governance	(C) plans	(D) reputation
8.	(A) dissolve	(B) improve	(C) involve	(D) solve
9.	(A) agricultural	(B) commercial	(C) economical	(D) residential
10.	(A) collaborate	(B) commemorate	(C) compete	(D) consolidate
11.	(A) apparent	(B) minimized	(C) sanitized	(D) singled out
12.	(A) criticized	(B) interviewed	(C) mentioned	(D) worked at