(北海道大 2006)

Read the following text and answer questions 1 to 6 below.

The creation of the European Union was intended to prevent a repetition of the two world wars that caused so much suffering in Europe. The EU started in 1952 as the European Coal and Steel Community. At that time it had only six members, but by 2005, the EU had 25 member states with a total population of 500 million people. The integration of Europe is now very advanced: there is an EU Commission, an elected parliament and a common currency, the Euro (although some countries like Britain still have their own national currency).

The success of the European Union in healing the wounds of the world wars and the economic benefits it brings to member states have prompted some people to ask if an Asian Union would be possible. There are already a number of regional organizations in Asia, such as APEC, as well as global organizations such as the World Trade Organization that provide opportunities for Asian leaders to meet and discuss trade and diplomatic issues. However, an Asian Union would be a bold, new step towards regional integration.

But how realistic is (1)<u>the suggestion</u>? Some of the conditions that make the European Union possible already exist in Asia. The European Union is built on a strong basis of common culture and values. Whereas there are many different languages (a) in Europe, the Roman alphabet is used throughout Western Europe, and many languages have common roots (such as the Germanic languages of English and German or the Romance languages such as French, Italian and Spanish). Also, Christianity is a common aspect of European culture, even though Europe has often been (b) apart by religious wars.

Similarly, common values and culture exist in Asia. Indeed, the former Malaysian Prime Minister Mohammed Mahathir frequently used the term "Asian values" and has (c) a distinct Asian model of development in contrast to the Western model. In terms of culture, Chinese characters form the basis of a number of writing systems across East Asia; and even when Chinese characters are no longer used (such as in Hangul), the roots of some Korean words can still be clearly traced back to Chinese characters. Furthermore, Buddhism and Confucianism are common religious and philosophical elements that could (d) Asia together.

One of the major obstacles to an Asian Union would be the current differences in the developmental levels of the potential member states. Japan, for example, is significantly wealthier than Cambodia or even China. It is hard to see how Asia could introduce a free labor market without economic migrants from poorer nations flooding into Japan, Taiwan and Korea to look for work. Even (2)<u>so</u>, this is a problem that Europe has managed to deal with. There are substantial differences in income in much of Western Europe compared to the newest members which were formerly in the Soviet bloc.

But perhaps (3)<u>the one factor that makes an Asian Union an impossibility</u> for the time being is population. The Chinese population on its own is over twice the size of the European Union. One of the continual issues within the expansion of the EU is whether there is a size at which large-scale political union becomes impractical. The break-up of the Soviet Union, it could be argued, was an example of why it is not a good idea to have political or economic union among too many diverse states and peoples.

In particular, one of the challenges facing the Chinese state is how to keep together a country that is not only undergoing incredible economic transformation, but also is developing in such an uneven way. The coastal cities are booming but the rural interior is (e) depopulation as economic migrants head to the cities. It is possible that economic and ethnic divisions within China could cause the break-up of China. If this happens, talk of an Asian Union would become meaningless. It could be argued that the survival of the Chinese state during the 21st century might be an achievement of "Asian Union" that far exceeds what the European Union has managed.

Question 1

Choose the most suitable word from the box below to fill in (a) through (e) in the text. Change the form if necessary.

bind, experience, speak, stress, tear

Question 2

What does (1)<u>the suggestion</u> refer to? Quote the most appropriate part from the second paragraph in English (in 7 words).

Question 3

In the third and fourth paragraphs, the author suggests that similar conditions are observed in the EU member states and in potential members of the "Asian Union." Put ONE appropriate word in [A] through [D] to complete the following chart.

	European Union	"Asian Union"
model	Western model	Asian model
writing system	Roman alphabet	[A][B]
[C] or philosophy	Christianity	[D] and Confucianism

Question 4

Explain what (2)so in the fifth paragraph means in Japanese.

自由労働市場をアジアに導入することによって、

ということ。

Question 5

Translate the underlined sentence (3) into Japanese.

Question 6

Of the following statements (A) to (G), choose the THREE <u>false</u> statements, according to the text.

- (A) Asia already has organizations to discuss regional and global problems.
- (B) The collapse of the Soviet Union could be a lesson for not having too large a community with different regions and peoples.
- (C) The creation of the European Union resulted in the tragedy of two world wars.
- (D) The long-term existence of the Chinese state is probably necessary for any future discussions of Asian Union.
- (E) It is not true that every EU country uses the same money.
- (F) More than 1,000 million people live in the coastal regions of China.
- (G) The survival of the Chinese state in this century might be easier than the creation of the European Union.

(北海道大 2006)

Read the following text and answer questions 1 to 5 below.

In April 1965 Gordon Moore made one of the most famous statements in the modern history of technology and computing. He claimed that the number of parts on a silicon chip would double every two years. This means that computers can become faster and products using chips can become more powerful with more functions. Dr. Moore went on to be highly successful in the computing business: he is the co-founder of chip maker Intel and his statement became known as "(1)<u>Moore's Law</u>." Chips have become cheaper as well as more powerful and this has contributed to ever faster computers, networks and storage devices. (2)<u>Without chips which continually improve</u> their performance and shrink in size, (<u>a</u>).

When Dr. Moore wrote his 1965 article, ICs (integrated circuits) had only 30 components in them. "Integrated circuit" is the term used to describe the collection of electronic parts on a piece of semiconducting material (a substance that allows some electricity to pass through it). Over the past forty years his law has proven to be extremely accurate: between 1971 and 2001, the number of transistors on a chip doubled every 1.96 years.

Moore's Law may continue to be true for at least another decade, but (3)at some point chips will get faster more slowly. Even now, the improvement of chips faces two serious technical problems. Firstly, the more densely transistors are packed onto chips the hotter they get. Intel's chips will soon reach the energy density of a nuclear reactor and most people do not want to have a small nuclear reactor on their desk at home or in the office. At the moment this simply means that modern laptops can get very hot, but in the future these devices could become dangerous. A second and more serious threat to Moore's Law comes from the manufacturing process. Circuit patterns are printed onto silicon chips by shining focused light onto them. If manufacturers want to continue to put more and more circuits on their chips, they need to find a way of making the light beam they use narrower. The narrower the light, the smaller the circuit that is printed and hence, more circuits can be fitted onto a tiny piece of silicon. However, current technology cannot print lines narrower than 0.1 micron (one tenth of a millionth of a meter). In other words, when the limit of 0.1 micron is reached, chip technology will have come to its physical limit. In the semiconductor industry, this limit is known as "the wall."

So, what is the solution to these technological problems? Perhaps the most exciting alternative comes in the form of nanotechnology. Basically, nanotechnology will allow humans to control matter on a tiny scale. The smallest possible scale is the atomic level and if humans could control atoms we would be able to make incredibly small chips and computers. This is what nanotechnology is all about: the control of matter at the atomic level.

In 1981 IBM took the first practical step toward making nanotechnology a reality by making a new microscope. The microscope was so powerful it allowed researchers to see atoms and molecules for the first time. Scientists had talked and written about working at this atomic level before, but they had to wait until IBM's invention to make it possible. Now that scientists can see at this atomic level it may be possible to control atoms, move them around and build products from the atomic level. This would allow humans to make virtually perfect materials and products, atom by atom. Many scientists believe that nanotechnology will become as important as electricity, that it will allow the creation of new materials and products and great advances in electronics, energy and medicine. It would certainly allow chips to become smaller and more powerful than Gordon Moore ever imagined and get his law beyond "the wall."

Notes nuclear reactor: 原子炉 molecule: 分子

Question 1

Translate into Japanese the part of the first paragraph which states "(1)<u>Moore's Law</u>."

Question 2

Choose the TWO most appropriate statements for (a) to complete the underlined sentence (2).

- (A) commonly used electronic products would be less advanced than they are today
- (B) digital cameras would be more user-friendly than they are today
- (C) laptop computers would be slower than they are today
- (D) mobile phones would have more functions than they have today
- (E) people would be more eager to prove "Moore's Law" than they are today

Question 3

Choose the sentence below which is closest in meaning to the underlined part (3).

(A) the average speed of chips will fall sooner or later

(B) chips will become slower in the end

(C) chips will have fewer transistors on them ultimately

(D) it will take longer to manufacture chips in about 10 years

(E) it will take more time to improve chip speed eventually

Question 4

Of the following statements, which one is NOT a problem mentioned in the text of putting more transistors onto a chip?

(A) Chip manufacturers will need to develop very narrow light beams.

(B) The chip manufacturing process will become more and more difficult.

(C) Chip technology will come up against "the wall" if things go on like this.

(D) The chips will become dangerously hot.

(E) Circuit patterns printed on chips will get more and more vivid.

Question 5

According to the text, what is likely to happen with the development of nanotechnology? Choose THREE of the responses below.

(A) Chip makers like Intel will be able to make considerable profits from it.

(B) IBM will have a virtual monopoly in the field of nanotechnology.

(C) It will be possible to make new materials which do not currently exist.

(D) The "law" Gordon Moore put forward in 1965 will be ignored as inaccurate.

(E) Less energy will be required to produce new medicine.

(F) Making chips which are much faster than they are now will be possible.

(G) Matter will be able to be controlled at the atomic level.

(H) The need for electricity will be reduced.

(北海道大 2006)

Read the following text, and answer questions A and B below.

Japan and Italy may appear to be very different countries but they have two important factors in common: a falling birthrate and an ageing society. In Italy today 18.9% of the population is over 65, but this figure is likely to go up to 34.4% by 2050. The average age of Italians is currently 41.8 and in 2050 is predicted to be 50.5; 4.3% of the population is over 80 and by 2050 that figure will probably reach 14.2%. If these projections are right, then in 2050 Italy will have 15 million fewer people than today. Italy has the lowest fertility rate, at 1.23 children per woman, and the fastest ageing population in Europe.

In response to these problems the Italian government has decided to offer women who have a second child a payment of 1,000 Euros. This has already been paid to 190,000 Italian women, but many Italians believe that this policy does not go far enough. One town, where only 4 babies were born in 2002, has offered women 10,000 Euros over a 5-year period for each additional baby. This kind of policy has been introduced in another European country, Sweden, and was initially successful in increasing the number of new babies. However after only a few years the birth rate fell back to the same level before the financial support was introduced.

Letizia Mencarini, a professor at the University of Florence, questioned more than 3,000 mothers across Italy to find out what would persuade them to have more children. She found that the more the father was involved in looking after the child and doing household chores, the more likely his wife was to want and have a second baby. The survey indicated that Italian men do little around the house — fewer than 6% of mothers responded that their husbands "always" or "often" did household chores such as cooking or cleaning. As a result many women cannot face the dual burden of going out to work and looking after an extra child.

Other solutions to the problem of an ageing society include raising the official retirement age from 60 to 65, providing cheaper child care facilities so both parents can continue to work after having children, and extending paid maternity and paternity leave for parents after the birth of their children. One thing is certain for both Italy and Japan: solving the problems of an ageing society will be neither simple nor cheap and this will be one of the greatest challenges these countries face in the coming years.

<u>Note</u>.

maternity and paternity leave: a period of time after having a baby when parents are allowed to be away from work

A Short-Answer Questions

Write a one-sentence answer to the following questions. Please answer using a complete sentence in English.

Example: Question: What do you want to study at Hokkaido University? Answer: I want to study science at Hokkaido University.

- (1) Which two problems does Italy face?
- (2) Describe two features of the population in Italy in 2050.
- (3) Why is the Italian government offering women a payment of 1,000 Euros?
- (4) According to Letizia Mencarini, what do Italian women want their husbands to do?

B Essay Question

Paragraphs 2, 3 and 4 in the text report several ways to resolve the issue of an ageing society. Which of the suggested solutions (or your own solution) do you think would work best? Write a short essay (about 70-90 words in English) describing your solution. Give clear reasons to support your opinion.

(北海道大 2006) Read text A. Then, complete text B (which is a summary of A) by putting ONE suitable word in each of the blanks (1) to (12).

Lawrie Kingsley (LK):Good evening everyone and welcome to "In the
Hotseat" with me, Lawrie Kingsley. Tonight, my
guest is Sam Appleton, a spokesperson for the
charity WDA, Water for Development in Asia.
Welcome to the show Sam.

Sam Appleton (SA): It's a pleasure to be here Lawrie.

- LK: First of all Sam, tell us a little about the work of WDA.
- **SA:** Well Lawrie, Water for Development in Asia is aiming to bring clean and safe drinking water to all parts of Asia by 2030. At the moment, dirty drinking water causes thousands of deaths and millions of people to fall sick every year. It's a major barrier to economic development in Asia. At the moment, WDA is involved in many projects: we're building a sewage plant in northern Sri Lanka and have set up a welldigging project in central India.
- **LK:** That's great, but recently WDA has made some controversial statements criticizing the proposed Indian Ocean Tsunami Warning System. Can you explain why?
- **SA:** Lawrie, I need to correct your question. We have not criticized the project. After the devastating Asian tsunami in December 2004, I think everyone would welcome a warning system that could save lives in the event of a future disaster.
- **LK:** So what's the problem then?
- **SA:** It's a question of priorities. Usually, charities and governments have limits on what they can spend on development projects every year. After an event of the magnitude of the Asian tsunami, projects like providing clean water get cut back or postponed because money gets given instead to the big tragedy in the news. However, is the tragedy in the news really more important than issues not in the news?
- **LK:** Surely you're not saying that people should not help the Asian tsunami relief effort.

- **SA:** No no no. People needed a lot of help after the tsunami, but there are many people in Sri Lanka who need a sewage plant and people in central India who need wells just as badly. People don't think of clean drinking water as an urgent issue because they don't see it in the news everyday. However, the thousands of children who die of cholera and other diseases caused by unclean drinking water are just as much victims as those affected by the tsunami. The media focuses people's attention on the tragedy of the day rather than the longer-term needs of developing countries.
- **LK:** Are you blaming the media? If you didn't have the media, nobody would know about your charity!
- **SA:** Of course Lawrie, but you must understand that there are many things the media does not cover which affect more people than the stories reported in the media. Take accidents for example. Every year, hundreds of thousands of people are killed worldwide in traffic accidents, but only a few thousand are killed in plane crashes. But, it's the plane crashes that become news.
- **LK:** And you think the media is also misrepresenting the Asian tsunami crisis.
- **SA:** Yes, the same is true for the Indian Ocean Tsunami Warning System. Our concern is that it's a white elephant; in other words, an expensive project with limited benefits that might ultimately result in additional deaths in Asia. Tsunamis are once-in-a-generation, perhaps once-acentury events that we can do nothing to prevent. Deaths from a lack of clean drinking water are everyday events that can be easily and cheaply prevented. If the Tsunami Warning System takes development aid away from projects like ours, it's killing people. If all the money for the Tsunami Warning System was put into basic development projects like ours, we calculate that it would save many more than 200, 000 lives every year. This makes it a much better way to spend the money.

B

Lawrie Kingsley is a television chat show host and he is conducting an) with Sam Appleton, a spokesperson for the charity Water for 1 Development in Asia (WDA). Sam starts by explaining a little about (2) WDA's mission is: it believes that clean drinking water is essential for development in Asia. At the moment, the charity is (3) part in a number of projects, such as a sewage plant in Sri Lanka. However, WDA has caused 4) recently by criticizing the Indian Ocean Tsunami Warning System. They are not opposed to the warning system but are worried that the money could be better (5) on other projects. Sam says the project might be a white elephant that will cost more lives than it (6). Lawrie gets a little annoyed at Sam because Lawrie thinks that Sam is criticizing the (7). Sam says that very often it does (8) report the tragedies that affect most people, such as traffic accidents, but concentrates on more newsworthy stories (9) plane crashes. They both agree that the Tsunami Warning System is a (10) idea. However, with limited amounts of (11) available for development projects in Asia, Sam thinks it is a question of priorities: there may be better ways to save lives in Asia than by (12) up the warning system.

Note

sewage plant: 汚水処理施設

(北海道大 2012)

次の英文を読んで、設問に答えなさい。

In many parts of the world — Western Europe, North America and Japan — there have recently been massive losses in the honeybee population. In Britain, for example, 30% of the honeybee population died in the winter of 2007. That's nearly 80,000 colonies: in one colony, there will be at least 20,000 bees, so we're talking about a large number. As a result of these deaths, there will be less honey available for us to buy, and honey will become more expensive. But why should you care? You might not even like honey, and you might not be bothered if there were no bees in the world. However, expensive honey is not the only problem that results from the decline in the honeybee population.

At root, all land mammals — and a large proportion of birds — depend on plants for food. Humans eat plants, but they also eat animals that eat the plants. If you eat chicken, you are also indirectly eating the corn and other grains that the chicken ate. If there are no plants, we have only fish to eat, and it is a widely known fact that fish stocks are diminishing rapidly across the world. Plants such as blueberries, for instance, depend on pollination to reproduce. Because of pollination, insects help grow one third of everything that humans eat: nuts, vegetables and fruit. Humans use honeybees to do most of (1)<u>this work</u>, placing hives in areas where plants are flowering. 90% of the food we consume comes from 100 crop species. 71 of these species are pollinated by bees. The scale of the work done by these creatures is breathtaking: according to recent estimates, pollination by bees is worth \$14 billion to the US economy each year that's just over ¥1 trillion. Honeybees don't get rewarded for their work; (a), humans make it increasingly difficult for them to live.

Due to Colony Collapse Disorder (CCD), there is less pollination by honeybees, therefore fewer crops, so there will be more frequent and severe food shortages. When a country cannot produce enough food itself, it can import food from abroad. But in this situation, importing food is no solution, because CCD is a worldwide problem. Famine is a real concern, especially when we consider that the world human population may be as high as 8 or 9 billion by the year 2050.

What exactly is causing the number of honeybees to decline? The problem is that scientists don't know for certain. Possible causes are changing climate conditions (especially more wet weather), air pollution (which interferes with the honeybees' sense of smell), and a parasite that kills worker bees. Because bees fly, the parasite is carried on their body, so it is able to travel around the world. One certain cause of CCD is (2)<u>the increased use of pesticides in farming</u>. Pesticides make the honeybees forgetful, and they also affect the ways in which they communicate, so either they cannot remember where nectar-producing plants are, or they are unable to inform other bees where to find them. But banning pesticides is very difficult, since they assist in the successful growth of other crops. Banning pesticides might create more food shortages, and we cannot simply revert to a world without agricultural chemicals. (3)<u>Furthermore, reducing air pollution is not easy, especially in quickly developing countries, where the emphasis is on economic rather than environmental welfare</u>. It seems that a lot of research is needed on this issue in order to create pesticides that are not harmful to honeybees. We simply cannot afford to lose the honeybee and all the hard work it does for us. We must investigate all possible causes of this problem and formulate creative solutions, otherwise in the next half-century, a large part of the world will become very hungry indeed.

- 問1 下線部(1)は文中のどの単語を指しているのか、最も適切な英語1語を記しなさい。
- **問2** 空欄(a)に入る最も適切な1語を次の(A)~(D)から選びなさい。 (A)so (B)otherwise (C)however (D) rather
- 問3 下線部(2)が honeybees に与える影響を、具体例 2 点に触れな がら簡潔に日本語で答えなさい。

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ものを次の(A)~(H)から <u>3 つ</u>選びなさい。

- (A) Banning pesticides is the only way to stop CCD.
- (B) Air pollution is one of the factors that affect the honeybee population.
- (C) Eating more fish is one solution to the CCD problem.
- (D)CCD affects only less developed countries.
- (E) We will be facing the prospect of famine unless we do something about CCD.
- (F) We could have anticipated the problem if we had been more concerned about climate change.
- (G) Scientists are not sure what is killing the honeybees.
- (H) Fanners should grow more crops to counter the effects of COD.

(北海道大 2012)

次の英文を読んで、設問に答えなさい。

We often hear about the need to find (1)<u>alternative</u> energy sources in order to protect our planet from the harmful effects of climate change. Wind, wave and solar energy are all possible sources, but most of the electricity produced from non-fossil fuel sources comes from nuclear power. Nuclear energy may be 'clean', that is, it does not produce as much carbon dioxide or other greenhouse gases as fossil fuel energy plants, but it is not a permanent energy solution. Like coal and oil, the amount of uranium on earth is limited, and nuclear energy may only be a viable source of energy for the next 100 years. The effects of nuclear energy production, however, are more long-lasting, and potentially more problematic, than any damage that has resulted or could result from fossil fuel-induced climate change: even though building - design and technology have improved, nuclear power plants are still susceptible to accidents that can damage whole regions, even countries; they also produce waste that remains harmful to the biosphere for centuries.

In its 57-year history, the nuclear energy industry has so far generated a minimum of 300,000 tons of high-level nuclear waste. In order to be safe, this waste must be kept away from living creatures for at least 100,000 years. How do we dispose of this material safely? An example from Finland demonstrates some of the problems we face. The Finnish government is currently building a deep geological repository, a 5km-long tunnel that winds its way down 400m into the bedrock to a network of storage vaults. The location is called 40nkalo'. It will be ready to store waste in 2020, and then sealed in 2120. The Finnish government intends that Onkalo will remain closed for 100,000 years.

That's a difficult prospect for architects. How do you design something that's meant to last for such a long time? In 100,000 years, there will be little or no trace of our present civilization. Some of the oldest buildings on earth, the Egyptian pyramids, have been around only for about 3,000 years. Onkalo presents a. difficult conceptual problem for humans: anatomically modern humans have been in existence for around 200,000 years, but think how different the first humans would have been. How would you communicate with them? How could you make them understand the world in which you live? What will humans be like in 100,000 years?

Since the material to be stored is so dangerous, the designers of Onkalo — and all nuclear nations that must build these structures, at great expense — have to think about these issues. How can we prevent humans from trying to excavate the site in the future, causing massive damage to their species and their environment? The designers could leave a warning sign, something like This is a very dangerous place. Stay away. Do not try to enter.' But how can we communicate with humans so far in the future? Which language would we use? English? Chinese? It's probable that neither of these languages will exist in the year 102012. Language itself might have become (\mathcal{T}) obsolete by that time. How about using a picture? If so, what would it be?

Alternatively, should we not leave any markers about the site's dangers, and simply hope that Onkalo remains undiscovered? We must consider whether leaving a marker, even a warning, would make humans less or more curious to find out what's there. We can think about the pyramids again. It's clear that these were designed as burial structures, houses for the dead. They were not intended to be opened and explored, but (2)humans did so anyway. But even after around 200 years of excavation, our knowledge of the pyramids' purpose is still incomplete, as is our understanding of the Egyptian hieroglyphic system of writing. Humans are by nature (1) inquisitive: if we see something we don't understand, we have a need to find out, even if our investigations are damaging towards ourselves and the environment. But (3) the destruction that could result if Onkalo were excavated in the future is much more extreme than simply rejecting the wishes of the dead or disrespecting their beliefs. In fact, if we don't think of the right ways to manage the problem, there may not be any humans in the future to judge whether what we did was right or wrong.

- **問1** 下線部(1)は何に対する alternative を指していますか。文中から英語 2 語からなるフレーズを抜き出して答えなさい。
- 問2 原子力発電の問題点を第一段落から3つ抜き出し、簡潔な日本語で述べなさい。
- 問3 下線部(2)は具体的にどのような内容を指しているのか、以下の英文を完成させて答えなさい。

Humans

問4 下線部(ア)と(イ)の英単語を置き換えるのに適切と考えられる 別の英単語をそれぞれの選択肢(A)~(D)の中から1つずつ選びな さい。
(ア) obsolete:

(A) disused
(B) diversified
(C) standardized
(D) visualized
(1) inquisitive:
(A) cautious
(B) curious
(C) destructive
(D) diligent

問5 下線部(3)を日本語に訳しなさい。

問6 この文章のタイトルとしてふさわしいものを次の(A)~(F)の 中から2つ選びなさい。

- (A) How We Can Prevent a Nuclear Plant Accident
- (B) Learning from a Finnish Failure
- (C) Managing the Nuclear Legacy
- (D) Prospects of Post-Nuclear Energy Sources
- (E) Will Nuclear Waste Outlive Us?
- (F) The World in the Year 102012

(北海道大 2012)

Read the following passage.

What is noise? Noise is unwanted or unpleasant sound. When noise becomes irritating or harmful, it is considered pollution. Two prominent sources of noise pollution are construction and transportation. Heavy equipment such as cranes and trucks used to build roads, houses, and skyscrapers can be very loud. Likewise, passing cars, trains, and airplanes generate a lot of sound.

Noise pollution is an unfortunate byproduct of civilization. While people may become accustomed to the troublesome sounds of modern life, they should not ignore their harmful effects. Noise pollution is hazardous to health in general. Loud noise can disrupt sleep, increase stress, and raise blood pressure. Noise pollution can also inflict psychological damage: people exposed to loud sounds can become irritable and aggressive.

These problems seem likely to worsen. The World Health Organization estimates that 20% of Europeans experience noise levels at night potentially harmful to health. The United Nations reported that in 2008, more than half the world lived in urban areas, and the number has continued to rise. This demographic trend is cause for concern because city residents will encounter increasing noise pollution as transportation systems expand and construction increases.

At present, noise pollution may not seem as serious a problem as global warming or air and water pollution. Nevertheless, if the situation remains unchanged, noise pollution will continue to disrupt society, damage human health and make our daily lives less comfortable.

____•

Answer questions A through 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

In your own words, define in one sentence what noise pollution is.

Question B

Complete the following sentence about how noise pollution affects our health.

Because of noise pollution, people _____

Question C

Noise is an unavoidable part of modern life and cannot be reduced. Do you agree? State your opinion in 70 to 100 words. Include examples or reasons to support your opinion.

(北海道大 2012)

以下の英文[I]は二人の友人による対話で、英文[Ⅱ]はその内容要約 です。英文[I]との内容が合致するように、英文[Ⅱ]の(1)~(12)の空 欄に入る最も適切な語を下の枠の中からそれぞれ一つずつ選びなさ い。

- [I]
- Masanori (M): I hate election time. I was woken up this morning by one of those election cars with political slogans blasting out of its loudspeakers. I would not mind so much if politicians always kept their promises, but they offer so much and so loudly, yet they deliver so little.
- Naoko (N): I find it best not to expect too much from politicians, then you won't be disappointed. Nevertheless, I always vote. My great-grandmother is still alive. She's 95 years old now, and when I was very little she told me how happy she was on the day when she was first allowed to vote. Women only got the vote in 1947, you know. When she was my age she was not allowed to vote, so you see, my great-grandmother would not forgive me if I did not vote.
- M: I can see that. My opinion is not backed up by a similarly interesting story. I just believe all citizens should take responsibility for the direction their country goes in, so we should all vote. Do you know who you'll vote for?
- **N:** Yes, but it's a secret! How about you?
- M: I haven't had a chance to read all the manifestos properly yet. Only then will I make a final decision. However, I am interested by the proposal to make abstention illegal in some of the parties' manifestos.
- N: No, I disagree with that completely. You can't force people to vote.
- M: They do in Australia. Why not in Japan? I think it would work really well here. When you are registered as a voter you get a letter saying: 'People who fail to vote will be required to pay $\cong 10,000$." Then many more people would vote.
- **N:** No, that's not a good idea. Why should people be forced to vote if there is nobody whose policies they like? Abstention is a perfectly legitimate way to express your political opinions. I'm not worried about low voter

turnout. If 40% of people don't want to vote, then that's their democratic right.

- **M:** Well, I think people ought to vote. With political rights come political responsibilities, and voting is one of the responsibilities.
- **N:** I, like you, would like to see higher turnout, but people should be encouraged, not forced. If you were going to encourage people to vote, how would you do it?
- **M:** How about this then? Everyone who votes gets a lottery ticket, and after polling stations have closed and while the votes are being counted they have an election night lottery.
- N: Get real! That would just devalue election day. I can just imagine the newspaper headlines: "Politician loses seat, wins 100,000 in the lottery!" It's crazy.
- M: Why? People on election day would be thinking, "I can vote and have the chance of winning the jackpot, or I can do nothing and have no voice and no chance of winning some money." It makes voting an easy choice.
- N: Mm, I can see what you are getting at.
- **M:** And if election day became sort of like New Year's Eve, when everyone sits around the table with their End of Year Jumbo lottery tickets, we could generate family pressure to vote, too.
- **N:** I can see how it might encourage more people to vote, but I am still not completely convinced that we want to turn an event like an election into a national lottery.

[II]

The conversation is between two young voters in Japan, Masanori and Naoko. Both are (1) about politicians but have plans to vote in the next election. They say that despite the frequent promises made and then (2) by politicians, it is their duty to have their say on the future of the nation. However, while Naoko has (3) made up her mind on who to vote for, Masanori is still (4). Furthermore, their opinions (5) on the key issue of compulsory voting. Masanori thinks that maximum turnout would be ensured by giving fines to people who do not (6) on election day. Naoko responds by saying that people should not be (7) to vote for a candidate if there is no person whose manifesto they support. But in an era when young people feel detached from politics, they discuss what could be done to (8) more people to vote. Masanori raises the idea of running a national lottery on election day, when going out to vote (9) you a lottery ticket. While the election results are being calculated, he says, there could be a live draw on television. Initially, Naoko (10) the suggestion, but the more she thinks about it the more she (11) Masanori's point. Nevertheless she remains skeptical, although she concedes that such (12) might increase the voting rate.

(A) undecided	(B) force	(C) earns	(D) register
(E) complimentary	(F) critical	(G) vote	(H) persuade
(I) recommends	(J) not	(K) broken	(L) object
(M) dismiss	(N) already	(O) incentives	(P) considered
(Q) made	(R) encouraged	(S) differ	(T) sees
(U) receives	(V) torn	(W) rejects	(X) ticket

(関西大 2011 年 2 月 5 日実施分) A. 次の英文の空所(1)~(15)に入れるのに最も適当なものを それぞれ A~D から一つずつ選びなさい。

Once there was a boy named Johnny who loved bargains. Johnny's favorite day of the week was Sunday, because the newspaper was filled with coupons—hundreds of dollars in savings! He loved to watch television, but when regular programs would come on, he would change the channel because all he wanted to see were the commercials. Nothing excited Johnny (1) than getting a deal, making the most of his money.

Sometimes Johnny's family worried about him. "Shouldn't he be playing baseball? Or chasing girls?" his parents wondered. His coupon collection (2) three giant file cabinets, arranged by subject, expiration date, and price. If someone was leaving (3) the store to buy something like shampoo or garbage bags, he would cry out "wait!" and check his data base for the very best coupon. Within seconds, he would know which store to go to and which brand to buy. (4) it came to saving money, Johnny was best in the town.

Johnny had an eye for bargains but sometimes he didn't think things (5). For example, his mother once sent him to the store to buy some milk and bread. That day he had read in the newspaper that there was a sale on beans, six cans for one dollar, a very good deal! He went to the store and (6) getting milk and bread, he bought thirty cans of beans. But no one in his family liked beans. The family garage was filled with shelves and shelves of similar purchases.

One day, Johnny read that there was a big sale on televisions at Kendall's Appliances. He could get a 32-inch color television at sixty percent off! That sounded like great savings. Johnny figured that if he bought three televisions he would save even more.

The store was very crowded. Everyone was standing in line to buy a television at sixty percent off. When it was Johnny's (7) to make his purchase, he asked for three televisions. Rather than saving \$100 on one, he would save \$300 on all of them! He told the store to ask his parents to (8). He was so pleased with his purchase he whistled all the way home.

But when Johnny told his parents, they were very unhappy with him. "What are we going to do with all these extra televisions? We can't afford such things," they complained. Johnny explained that if he had only purchased one television, he (9) only \$100. "This way, we save \$300! A very good deal!" he said cheerfully. But his parents did not agree. They were afraid that Johnny's love of bargains would (10) them go broke, so they told Johnny to return the televisions. But since they were on sale the store would not accept them. "Oh, what shall I do with these three televisions." Now he was (11). He went door to door trying to sell his televisions. He took the televisions to school and tried to sell them to his teachers. But he couldn't sell his televisions—even at sixty percent off. Then he had an idea. "I'll have a garage sale," he thought to himself. He hunted for a good price on poster board and made posters announcing the sale. He found a way to put a free classified ad in the newspaper. Things were looking better.

A few days before the sale, Johnny went to the storage area in the garage and began hauling items up to his driveway: thirty cans of beans, ten Rubik's Cubes, thirteen electric coffee makers, two cases of rare tropical bird food, thirty-six balls of string, five boxed sets of Beatles' CDs, seven pairs of lefthanded scissors, and much much more. (12) the years, he had purchased all of these items at very good prices but never had gotten around to using them.

The day of the garage sale arrived. People lined up to get a first look at all of Johnny's merchandise. He had arranged all of his bargains very neatly, presenting each item in a way that made it most attractive. He even wrote little (13) of the merchandise, like "Beans: good in soup or salad or cooked with pork" or "Rubik's Cube—for the young genius." People came from all over town. They enjoyed shopping at Johnny's garage sale. Even Johnny's parents seemed to enjoy themselves, especially when their friends complimented them on the variety of the merchandise and the very good prices.

In the crowd of shoppers was Mr. Kendall of Kendall's Appliance Store. He was most impressed with the way everything was priced, especially the televisions. Johnny was selling the televisions for \$20 more than Kendall's Appliance Store! When Mr. Kendall went to pay for a Rubik's Cube and an electric coffee maker, he asked Johnny if he would like to work at his store on weekends. "You seem to understand buying and selling in a way (14) grown-ups do," he said to the young boy.

Johnny felt very proud. It had been a wonderful garage sale, and so far he had sold all of the television sets and most of the merchandise from the garage. To have gotten a job offer on the same day was (15) good to be true. Johnny told Mr. Kendall he would love to work at his store. "Will I get an employee discount?" Johnny asked. Already he was thinking about making his very next deal.

(1)	A. less	B. another
	C. better	D. more
(2)	A. saved	B. filled
. ,	C. piled	D. left
(3)	A. for	B. from
. ,	C. on	D. in
(4)	A. What	B. Who
	C. When	D. Why
(5)	A. about	B. through
	C. up	D. little
(6)	A. instead of	B. in response to
	C. in spite of	D. in contrast with
(7)	A. decision	B. turn
	C. period	D. job
(8)	A. loan	B. buy
	C. pay	D. rent
(9)	A. would have saved	B. would save
	C. will be saving	D. will save
(10)	A. leave	B. make
	C. force	D. stress
(11)	A. pleased	B. relaxed
	C. worried	D. mistaken
(12)	A. Between	B. During
	C. For	D. Over
(13)	A. implications	B. objections
	C. descriptions	D. indications
(14)	A. few	B. less
	C. no one	D. a couple

(15)	A. often so	B. always very	
	C. hardly no	D. almost too	

B. 本文の内容に照らして最も適当なものをそれぞれ A~C から一つ ずつ選びなさい。

(1) The main reason why Johnny liked to collect information on bargains is that

- A. he always wanted to buy things at their lowest prices.
- B. his parents wanted to save as much money as possible.
- C. his neighbors wanted to find the best brand using his computer data base.
- (2) Johnny's parents were worried about him because
 - A. he was interested in many things such as baseball, girls, and coupons.
 - B. he was obsessed with collecting coupons and shopping.
 - C. he always talked about the supermarkets where he went to shop.
- (3) Johnny thought it a good way to save money to purchase a lot of the same items at the same time,
 - A. but he might have been losing money since he was getting many unnecessary things for the family.
 - B. because he was planning to open his own shop sooner or later which would carry a variety of goods.
 - C. and he was actually good at negotiating with the shop managers to make them much cheaper.
- (4) Many people came to shop at Johnny's garage sale since
 - A. all items were well-used goods and priced lower than the original.
 - B. they were friends with Johnny's parents and wanted to help Johnny.
 - C. Johnny was well prepared and had provided a lot of publicity in advance.

- (5) On the day of the garage sale, Johnny's parents seemed
 - A. proud of him because the shoppers were satisfied with the items and their prices.
 - B. concerned about whether the useless things collected by Johnny would sell well.
 - C. disappointed with him because he would sell what he was not asked to.
- (6) Mr. Kendall offered Johnny a job at his store since he
 - A. found televisions were sold more cheaply in the garage than at his appliance store.
 - B. thought Johnny knew how to do business even though he was young.
 - C. knew that Johnny was probably the best bargain hunter in town.
- (7) This story is about a boy who
 - A. was a tough negotiator whenever he bought bargain items in supermarkets.
 - B. was economically oriented by nature and succeeded in becoming an appliance shop manager.
 - C. thought he was only a clever buyer but turned out to be a good seller as well.

(岐阜大 2021)

Read the following text on sniffer dogs and fill in the blanks (1)-(8) to complete the sentences. For each blank, you have four choices given below. Choose the best word and write A, B, C, or D.

People noticed long ago that illness had a particular smell. Hippocrates, the ancient Greek (1), famously sniffed his patients. In the last several decades, medical research found that dogs could smell (2) such as hypertension and malaria.

The smells of disease come mostly from volatile organic compounds (VOCs). We excrete hundreds of VOCs in our sweat, breath, urine and other bodily fluids, $\begin{pmatrix} 3 \end{pmatrix}$ a signature smell. If we're sick, it stands to reason that our cells' metabolism changes, and so $\begin{pmatrix} 4 \end{pmatrix}$ our odor signature.

Scientists first identified cancer VOCs in 1971. But it wasn't until 1989 that someone put dogs and cancer VOCs (5) in an essay in *The Lancet* titled "Sniffer Dogs in the Melanoma Clinic?"

Evidence was slow to build, $\begin{pmatrix} 6 \end{pmatrix}$. Finally, in 2004, a research team in the United Kingdom conducted a study to $\begin{pmatrix} 7 \end{pmatrix}$ if dogs could detect bladder cancer from urine. After seven months of training, the dogs got it right 40 percent of the time. That may not seem amazing today, but it was statistically $\begin{pmatrix} 8 \end{pmatrix}$ and inspired others to conduct similar research.

(Adapted from Heather Millar, "The Nose Knows: Can Dogs Be Trained to Sniff Out Cancer?," *Cure*, April 18, 2017,

https://vmw.curetoday.com/publications/cure/2017/spring-2017/the-nose-knows-can-dogs-be-trained-to-sniff-out-cancer)

1.	A. accountant	B. architect	C. skipper	D. physician
2.	A. methods	B. diseases	C. prescriptions	D. tissues
3.	A. creating	B. diagnosing	C. impairing	D. shortening
4.	A. is	B. has	C. does	D. should
5.	A. under	B. together	C. with	D. apart
6.	A. neither	B. seemingly	C. however	D. thus
7.	A. see	B. wonder	C. presuppose	D. argue
8.	A. immaterial	B. reversal	C. irrelevant	D. significant
				-