

2016 年度 入学 試験 問題

英 語

(試験時間 10:30~12:10 100分)

1. 解答用紙は、マーク解答用紙のみです。
2. 解答は、必ず解答欄にマークしてください。解答欄以外にマークすると無効となりますので注意してください。
3. 解答は、HBの鉛筆またはシャープペンシルを使用し、訂正する場合は、プラスチック製の消しゴムを使用してください。解答用紙に鉛筆のあとや消しくずを残さないでください。
4. 解答用紙を折り曲げたり、汚したりしないでください。
5. 解答用紙には、必ず受験番号と氏名を記入およびマークしてください。
6. 解答用紙への受験番号の記入およびマークは、コンピュータ処理上非常に重要なので、誤記のないよう特に注意してください。

I From the choices 'a' — 'e' below, select the best answers to fill blanks (1) — (5). Each answer can be used only once. (10 points)

1. A button is about to (1) off the shirt.
2. What does CEO (2) for?
3. It doesn't (3) to worry too much.
4. Some animals in Alaska (4) white in winter to disguise themselves.
5. Read a newspaper regularly so that you can (5) up with current affairs.

- a. come
- b. keep
- c. pay
- d. stand
- e. turn

II From the choices 'a' – 'e' below, select the best answers to fill blanks (1) – (5). Each answer can be used only once. (10 points)

1. Wandering (1) the city may lead to surprising discoveries that guidebooks do not mention.
2. Though pretending to be intelligent, he was totally (2) a loss as to what to do next.
3. The professor's lecture (3) ancient civilizations stimulated the students' academic curiosity.
4. Most people can hardly tell natural diamonds (4) artificial ones.
5. The runner fell (5) in the first half of the race, but kept running very hard and finished third.

- a. about
- b. at
- c. behind
- d. from
- e. on

III From the choices 'a' -- 'e' below, select the best answers to fill blanks (1) -- (5). Each answer can be used only once. (10 points)

1. Eat a lot of fruit and vegetables before dessert. It is for your own (1).
2. She concentrated so hard on writing an essay that she lost (2) of time.
3. I was in great (3) when I was young because I played soccer in college.
4. By mistake I deleted all of the data which was of great (4) to my customers.
5. Preparations for the international conference are well under (5).

- a. good
- b. shape
- c. track
- d. value
- e. way

IV From the choices 'a' -- 'e' below, select the words which are closest in meaning to the underlined words (1) -- (10). (20 points)

1. Some economists anticipate⁽¹⁾ a serious shortage of labor.
 - a. engage
 - b. enter
 - c. examine
 - d. expect
 - e. explain

2. I have a very vague⁽²⁾ memory of the house my family used to live in.
 - a. lasting
 - b. pleasant
 - c. terrible
 - d. unclear
 - e. vivid

3. The ratio⁽³⁾ of men to women in the council of top executives is five to one.
 - a. division
 - b. figure
 - c. proportion
 - d. quantity
 - e. sum

4. It takes not less than ⁽⁴⁾ 15 minutes to get there on foot.
- a. as much as
 - b. at least
 - c. at most
 - d. only
 - e. roughly
5. This household accounting software helps families manage their budgets and cut back on excessive consumption.
- ⁽⁵⁾
- a. compensate
 - b. exchange
 - c. reduce
 - d. restore
 - e. supply
6. It is ten years since my uncle passed away.
- ⁽⁶⁾
- a. died
 - b. disappeared
 - c. left
 - d. moved
 - e. traveled
7. In the interview, the president repeatedly referred to her mother as her role model.
- ⁽⁷⁾
- a. called
 - b. criticized
 - c. explained to
 - d. mentioned
 - e. remembered

8. The theater was practically full because the audience wanted to see the old actor's last performance.
(8)
- a. almost
 - b. completely
 - c. half
 - d. hardly
 - e. officially
9. Only refugees and their families are entitled to financial assistance from the government.
(9)
- a. can join
 - b. contribute to
 - c. have a right to receive
 - d. refuse
 - e. will return
10. Is the Australian dollar equivalent to the Canadian dollar?
(10)
- a. almost the same in value as
 - b. different in cost from
 - c. more widely used than
 - d. worth less than
 - e. worth more than

V Select the sentence that is grammatically incorrect in each group. (10 points)

1.
 - a. Although the girl had a perfectly pretty doll, she was jealous of her sister, whose doll was bigger and newer.
 - b. I read most of the book while waiting for my flight.
 - c. They say what was true in the 19th century is not equally true today.
 - d. Why don't you tell me about the conversation you overheard by chance on the way home?
 - e. You must be sixteen years at age to get a driver's license in that country.

2.
 - a. Champagne is named after the region of France where this particular type of sparkling wine is produced.
 - b. He's never taken a class in economics, or does he intend to.
 - c. Let me forward this information by email to the person in charge.
 - d. The new material is four times stronger than steel and weighs two-thirds less.
 - e. We moved to a new place, but we are still in a state of chaos with boxes of books and clothes lying all over the place.

3.
 - a. Even though she forgot to water the plants for a week, they were still alive.
 - b. I want you to know how impressed I am with your dedication to work.
 - c. In addition to a bachelor's degree, she has an advanced certificate to teach flower arrangement.
 - d. Most children get up early on Christmas Day, looking forward to the gifts waiting for them under the tree.
 - e. My mother gave me a piece of advice what I have always remembered.

4.
 - a. I will lend friends my house on the condition that they promise to keep the place as clean as it looks now.
 - b. Massachusetts Institute of Technology is a university known for its programs in the sciences.
 - c. My close friend was miserable during months she unfortunately broke up with her fiancé.
 - d. Using recycled bottles and cans means that glass and metal are reused rather than thrown away.
 - e. What do you think is going to be the next big growth area in medicine?

5.
 - a. He owns an apparel factory as well as an enormous food business.
 - b. In the early 1940s, most runways were too much short for long distance airplanes to take off from.
 - c. Oak, one of the most durable hardwoods, is often used to make furniture.
 - d. The reason I didn't call you as I was supposed to was that I had lost your phone number.
 - e. While the increase in the number of visitors helps business and tourism, some sightseeing spots are facing serious environmental problems.

VI From the choices 'a' — 'e' below, select the best answers to fill blanks
(1) — (8). (16 points)

1. She found unnecessary charges on her credit card bill. That is (1) she
urgently contacted the company.

- a. because
- b. how
- c. since
- d. what
- e. why

2. A memorial concert was held (2) the late singer.

- a. at ease with
- b. for lack of
- c. in honor of
- d. on top of
- e. to the extent of

3. If (3) in a week, we would like to make a contract.

- a. it is capable for you to finish the job
- b. it is possible for you to finish the job
- c. the job is possible for you to finish
- d. you are possible to finish the job
- e. you enable to finish the job

4. We tend to think of the concept of beauty as objective and universal, but (4) depending on time and place.
- a. how beauty it is considered shifts
 - b. that it is considered beautiful differs
 - c. what beauty considers differently
 - d. what is considered beautiful varies
 - e. whether it considers beauty changes
5. I have known that businessperson for more than seven years, but yesterday it turned out that (5) went to the same high school.
- a. any of them
 - b. either of us
 - c. I with him
 - d. two of us
 - e. we both
6. The number of foreign tourists to Japan, especially to Tohoku, (6).
- a. are increasing lately
 - b. are increasing these days
 - c. has been increasing recently
 - d. have increased now
 - e. is increasing by now

7. (7) a popular singer, he gained greater fame as a journalist in his late forties.

- a. After
- b. Before
- c. For
- d. Once
- e. Whereas

8. In the 15 years (8) the huge dam, about 2000 villagers had to move and more than 100 billion yen was spent.

- a. during construction
- b. for construction time of
- c. taken to construct
- d. the construction took
- e. took in constructing

VII Read the following passage and select the best answer for each question.

(30 points)

It is easy to say we would like our cities to be cleaner and greener. But what does that even mean? “Greenness” is a concept that is hard to define — there is no official list of the top 50 most eco-friendly cities, nor any widely agreed set of measurements for working out how green a city actually is.

In the field of environmental science, concepts such as biodiversity can be assessed using indicators that give a standard set of measurements, (1), the number of different species of birds spotted in a certain area on a certain day. But for greenness or eco-friendliness, the possible indicators are (2), covering everything from road transport to recycling.

In a 2015 study published in the journal *Ecological Indicators*, scientists based at the Lawrence Berkeley National Laboratory in California have made a potentially sensitive method for (3) Chinese “eco-cities” using 33 key indicators. So, for instance, they propose to measure renewable energy use by looking at the percentage of total energy purchased by a city that comes from renewable sources (not including nuclear).

Other “green indicators” in this study include the share of all trips made by public transport, and the daily average concentrations of air pollutants — plus a surprising number of social and economic factors, such as healthcare workers per 1,000 citizens and unemployment rates.

The study’s researchers have also reviewed other systems for assessing a city’s greenness, coming up with 14 international-level methods. But they conclude that, (4), there is no good system. Measuring a city’s relationship to its environment, they write, is “complex” and “challenging,” and eco-cities cannot easily be compared.

It should also be noted that, in general usage, the term “eco-city” is not well defined, and that despite China’s plans to establish hundreds of them, it’s not actually clear what constitutes the status “eco.”

In the absence of an accepted scientific indicator system, the EU's Green Capital program at least has a strict process for making a short list based on a technical assessment covering aspects such as biodiversity, green spaces and how a city deals with wastewater, noise and air quality. The program, however, is limited to European cities and, furthermore, to those that actually apply for consideration — the most recent winners are Copenhagen (the winners for 2014), Bristol (2015) and, for 2016, Ljubljana (in Slovenia).

Slightly less biased perhaps, is the Siemens-sponsored Green City Index put together by The Economist Intelligence Unit. Since 2009, the German engineering giant has been publishing reports assessing one region at a time, starting with Europe and working through Latin America, the US and Canada, Africa and, in 2014, Asia. In total, 120 cities have been assessed by indicators under the following subject headings: energy and CO₂, transport, water, air quality, land use and buildings, waste, sanitation and environmental governance.

Although it's difficult to compare cities from different regions, especially as the data from each was collected at different times, the Green City Index does attempt to rank cities, from those that perform well above average for their region down to those that perform well below average. So who are the winners?

Copenhagen was a predictable victor in the European region, scoring 87 compared to London's 72 (in 11th place) whereas Kiev finished last with 32. Despite its enthusiasm for bicycles, Copenhagen finished behind Stockholm and Amsterdam in transport — but made the top seven in every category.

Curitiba in Brazil, San Francisco in the US and Singapore came top in their respective regions, with Singapore's waste and water reclamation policies setting it apart from 21 other Asian cities (20% of Singapore's water is purified from wastewater using the most advanced technologies). In Africa, of the 15 cities that were assessed, most performed at about the average level, but two performed well below average — Dar es Salaam in Tanzania and Maputo in Mozambique.

The Green City Index is (5) the perfect system. Its data comes from cities that have different ways of collecting it, and certain city-level data is

missing or has to be estimated. Another problem it raises is how to compare cities in vastly different economic situations — is it fair to compare the developing and developed urban worlds?

One interesting finding to come out of the Siemens studies is that both the richest and poorest cities in a region often perform better than the middle-income ones. The average resident of Kuala Lumpur, for example, uses 497 liters of water per day and produces 816 kilograms of waste per year. Contrast these statistics to those of relatively richer Singapore — 309 liters of water and 307 kilograms of waste — or relatively poorer Delhi: 209 liters of water and 147 kilograms of waste. In the midst of economic growth, it seems, consumption overtakes sustainability and is not controlled until a city becomes positively wealthy. The “tipping point” in Asia appears to be a GDP of around US \$20,000 per person.

Perhaps we’re making this too complicated. Why not stop pretending “greenness” is a measurable thing, and instead focus on the details we’re actually interested in? For example, which cities have the cleanest air or the lowest greenhouse gas emissions? Yet even then, it’s still difficult to find data of this type that has been collected and reported on consistently across a wide number of cities.

The World Health Organization collects data on air quality from 1,600 cities worldwide, but the data is put together like a patchwork from different types of sources. Also, there is no list of the world’s biggest fossil-fuel burners on a city-by-city basis. The Global Protocol for Community-Scale Greenhouse Gas Emissions is a common standard for city-level greenhouse gas accounting, but that was only launched in December 2014.

As more genuinely useful, comparable measures are developed for city-level use, it should become clearer which cities are performing best. Singapore, San Francisco, Curitiba and Copenhagen seem the most obvious candidates for the planet’s “greenest” title right now — but as better data emerges, others may begin setting new standards.

1. Which best fits blank (1)?

- a. because of that
- b. for example
- c. literally
- d. moreover
- e. therefore

2. Which best fits blank (2)?

- a. endless
- b. limited
- c. optimistic
- d. perfect
- e. simple

3. Which best fits blank (3)?

- a. creating
- b. developing
- c. evaluating
- d. repairing
- e. training

4. Which best fits blank (4)?

- a. basically
- b. fortunately
- c. furthermore
- d. however
- e. wrongly

5. Which best fits blank (5)?
- a. apparently
 - b. certainly not
 - c. definitely
 - d. possibly
 - e. surprisingly not
6. According to the article, which of the following is true about the study in *Ecological Indicators*?
- a. China has clearly defined what it means by “eco-city.”
 - b. The authors reported that it was fairly easy to compare the greenness of cities.
 - c. The number of healthcare workers is considered as an indicator of greenness.
 - d. The study’s researchers did not consider other measurement methods.
 - e. The study looked at 33 Chinese cities.
7. According to the article, which of the following is not true?
- a. Because of its enthusiasm for bicycles, Copenhagen was the top European city for transport.
 - b. In Asia, twenty-two cities were compared.
 - c. Kiev is less eco-friendly than London.
 - d. Ljubljana made a special application to be considered as an eco-friendly city.
 - e. Thirteen African cities only received an “average” score.

8. According to the article, which of the following is not true?
- a. Delhi is poorer than Kuala Lumpur, but its citizens create less waste.
 - b. Because it is richer, Kuala Lumpur uses more water than Singapore.
 - c. One-fifth of Singapore's water is recycled water.
 - d. People in Singapore probably have a GDP of more than \$20,000 per person.
 - e. Standards for measuring city-level greenhouse gases were only established in the last couple of years.
9. According to the article, which of the following is not true?
- a. Dar es Salaam and Maputo are not very eco-friendly.
 - b. In the Green City Index, Copenhagen was a surprise winner as the best eco-city in Europe.
 - c. It may be unfair to compare cities in developing countries with those in advanced nations.
 - d. San Francisco was considered the most eco-friendly city in the United States.
 - e. The Green City Index only compares cities in the same region at one time.
10. Which is the most appropriate title for the article?
- a. Can cities be eco-friendly?
 - b. Where is the world's greenest city?
 - c. Which cities are the richest?
 - d. Which cities have the best quality of life?
 - e. Why greenness should be measured

VIII From the choices 'a' — 'e' below, select the best answers to fill blanks (1) — (5). Each answer can be used only once. (20 points)

A. More than 60 artworks by anonymous prisoners from around South Australia will go on display at Adelaide's Festival Centre. Some of the works will be sold, with the money covering the cost of the exhibition and supporting (1). The idea is based on art programs for offenders run by the Koestler Trust in London.

The event in Adelaide was organized by Flinders University PhD student Jeremy Ryder, who is researching the role of art in prison. He said the exhibition would (2) to the outside world — a world they would eventually rejoin. "There are not a lot of good stories that come out of prison, and this is one way that prisoners can generate those sorts of different stories around themselves and around what they can do," he said.

"Prison can be a very hard place to adapt to and doing artwork is one of the ways that people can express themselves emotionally and psychologically. It can give prisoners (3), which they can also share with people close to them. Anything like this that helps them maintain positive relationships with people on the outside is important."

Mr Ryder said the exhibition has given the prisoners a valuable opportunity for self-expression. "In a tough place like prison, creating artwork is seen as an acceptable (4). Prisoners do not have to fear being seen as weak by other prisoners. In fact doing art can actually increase their social position because they get respect for the artwork that they do."

The artworks will be judged, and there will be an opportunity for members of the public to share their thoughts on the exhibition. The Commissioner for Victims' Rights, Michael O'Connell, is supportive of the event. "Art is a useful way for offenders (5) and also to look at ways of healing themselves and through art demonstrating that they've understood

their crime,” he said.

- a. a sense of success and achievement
- b. form of expression
- c. help reconnect prisoners
- d. to explore their crimes
- e. victims of crime

- B. Too many energy drinks cause heart attacks even in healthy people, according to scientists who warned parents to watch how many cans their children consume.

Almost one in three 12 to 19-year-olds regularly consume the drinks which often contain large amounts of caffeine that can be bad for the heart. They can also contain “hidden” caffeine in the form of ingredients such as guarana, which comes from a Brazilian plant and is identical to caffeine found in coffee beans (1).

Adding guarana and other popular substances, such as taurine, to these types of drinks may generate “uncertain interactions,” the researchers said. The researchers’ work focused on the biochemistry of energy drinks (EDs) (2). The team also studied how the marketing of EDs as a means to relieve fatigue and improve physical performance may be ignoring real dangers.

The energy drink market is booming. Sales rose from 454 million liters in 2011 to more than 550 million liters in 2014 — a market value that climbed from £1 billion to £1.3 billion, according to a report by Mintel. It predicted sales would rise to around 650 million liters by 2019 helped by well-known advertising campaigns from sports stars such as footballers Steven Gerrard and Gareth Bale.

Although caffeine, defined as a drug (3), is widely used and

generally regarded as safe, serious negative effects have been reported, especially when consumed in larger doses. According to Lucozade's website, a one-liter Lucozade Energy bottle will contain approximately 120mg of caffeine, varying slightly for different flavors. The Food Standards Agency recommends, "Children, or other people sensitive to caffeine, should only consume caffeine in moderate amounts. Pregnant women are advised not to have more than 200mg of caffeine a day, (4)."

The international research team based in Spain warned that energy drinks can cause sudden deaths due to heart attacks in young, apparently healthy individuals. "The rapid rise in popularity of energy drinks, particularly among people aged 10-19 years and young adults, has serious implications for health," lead researcher Dr Fabian Sanchis-Gomar said. "As ED consumption continues to grow, doctors are advised to ask younger patients whether they drink EDs, to be aware of the symptoms of having too many EDs, and (5) alone or mixed with alcohol."

The scientists said one 250ml can per day is safe "for most healthy young people" and that drinking EDs before or during sports practice should be avoided.

- a. among children and young adults
- b. because it stimulates the central nervous system
- c. but at twice the concentration
- d. roughly two cups of instant coffee
- e. to discuss the dangers of drinking EDs

IX Read the following passage and select the best answer for each question.

(24 points)

Japanese people may not be the best in the world when it comes to speaking English, but Japan remains a pioneer in developing advanced translation technology. With the 2020 Tokyo Olympics approaching, the nation is once again planning to surprise the world, this time with high-quality, real-time machine translation systems. Public and private institutions are working eagerly to develop and upgrade the technology so it can easily be used by tourists, whose numbers are growing sharply.

Below, we take a look at the current situation of the machine translation industry and what the future holds for real-time translation devices. Real-time translation systems include applications that can be installed on smartphones, computers or other devices linked to the internet. One merely selects the targeted language, speaks into the device and waits for it to translate the words in audio or visual form. The words of the speaker are sent by the app to a computer server, which analyzes the voice and selects the closest translation from a vast collection of phrase pairs in its database. The more the app is used, the more (1) it becomes. This is done by gradually increasing the amount of usable data on the server with the user's consent.

Machine translation is the product of over 60 years of research and is now entering its prime thanks to advances in cloud computing and machine learning, said Eiichiro Sumita, a senior researcher at the government-funded National Institute of Information and Communications Technology (NICT) who has more than 35 years of experience in the field. NICT's official translation app, VoiceTra, currently covers 27 languages, including Urdu, Sinhala and Dzongkha, for text. For speech, it is "good enough to make understandable 90% of what you want to say" in English, Korean, Chinese and Japanese, if short sentences are used, Sumita said.

In April 2014, the internal affairs ministry announced a global communication program, which, using NICT's translation engine, is aimed at helping people around the world engage in borderless communication. The ministry wants to provide real-time machine translation services at sightseeing spots, shopping centers and medical facilities to help visitors who may feel hesitant about coming to Japan because of the language barrier. The ministry's vision reflects the government's tourism goal, which is to raise the annual number of travelers to Japan from 13 million in 2014 to 20 million by 2020. It approved ¥1.38 billion for 2015 to improve the overall quality of real-time speech translation technology and to increase the available languages to 10 or more, including Thai, Vietnamese and Indonesian, to cover 90% of the tourists who come to Japan. The plan to host the Olympics has no doubt increased the urgency of the project, Sumita said, because both public and private organizations have started working together on it on an "all-Japan basis."

Although not always grammatically perfect, the output of current real-time translation devices is practical enough to enable the simple conversations desired by tourists, experts say. With the 2020 Olympics approaching, VoiceTra was used on an experimental basis by volunteers at the Tokyo Marathon in February 2014, which drew some 5,000 runners from abroad. Each volunteer was encouraged to install the app on his or her smartphone to offer support in multiple languages.

Meanwhile, NTT Docomo Inc. has developed Jspeak, an app that translates real-time phone conversations via voice recognition technology and its own original database. The carrier aims to improve Jspeak's output quality enough to achieve a TOEIC score of 700 for Japanese-English translators by 2016. That means it would be able to accurately translate documents involving official announcements or the details of business meetings, said Minoru Eto, managing director of NTT Docomo's innovation management department.

Both professional interpreters and developers of machine translation systems agree that electronic systems will never be able (2) the professionals.

Mikako Miyahara, a veteran Hiroshima-based interpreter who specializes in information technology, said machine translation will not take the place of humans because people are unlikely to trust machines for important work. "If there is just a little bit of doubt in translation output, communication as a whole may end up in doubt," she said, warning that if the Japanese government wants to promote intercultural understanding with its global communication program, using machine translation alone will not work.

But Miyahara also expressed concern that some clients of machine translation services, who usually can only speak one language, tend to depend too much on low-cost translation and disregard the quality and skills of professionals. "More and more clients now ask translators merely to do the final job, which is to fix machine translation output into natural expressions, at extremely low wages," she said.

NICT's Sumita agreed. "You have to bear in mind that machine translation can cover only a small portion of what man can do no matter how much it develops," he said. "The good thing about machine translation is you can rely on it anytime you need it in (3) situations where you don't need professionals," he said.

1. Which best fits blank (1)?

- a. cultivated
- b. cultured
- c. fatigued
- d. sophisticated
- e. wired

2. Which best fits blank (2)?

- a. to correct
- b. to improve
- c. to replace
- d. to teach
- e. to use

3. Which best fits blank (3)?

- a. complex
- b. every day
- c. everyday
- d. unexpected
- e. unlikely

4. Which word is closest in meaning to the underlined word "borderless"?

- a. general
- b. imprecise
- c. timeless
- d. unclear
- e. unrestricted

5. According to the article, which of the following is true?
- a. In preparation for the 2020 Olympics, real-time translation apps have been installed at the major tourist sites in Japan.
 - b. Machine translation apps are practical enough to assist with normal conversations as they are almost always grammatically perfect.
 - c. Some people use machine translation apps as they are economical.
 - d. The apps use vast databases of phrase pairs stored on mobile phones and computers.
 - e. VoiceTra was tested by 5,000 marathon runners from abroad who volunteered to install the app on their phones.
6. According to the article, which of the following is not true?
- a. In order to improve intercultural understanding, the Japanese government cannot rely solely on machine translation apps.
 - b. Machine translation apps are having a negative effect on the income of some human translators.
 - c. Machine translation apps do not have to be grammatically perfect to help tourists with simple conversations.
 - d. The Japanese government aims to help tourists in Japan by developing state-of-the-art machine translation apps.
 - e. VoiceTra can translate conversations in 27 languages correctly 90% of the time.

7. According to the article, which of the following is true?
- a. Because public and private organizations are working together, there is less urgency to develop machine translation apps.
 - b. Even small errors can mean that people lose trust in the overall translation.
 - c. JSpeak aims to improve its TOEIC score of 700 by 2016.
 - d. Machine translation apps output natural expressions for little cost.
 - e. You can use machine translation apps anytime you need professionals.
8. Which is the most appropriate title for the article?
- a. How to say 'Olympics' in 27 languages
 - b. Intercultural understanding at the press of a button
 - c. JSpeak leads the way in machine translation apps
 - d. New developments in real-time machine translation ahead of the 2020 Olympics
 - e. The end of language barriers

