

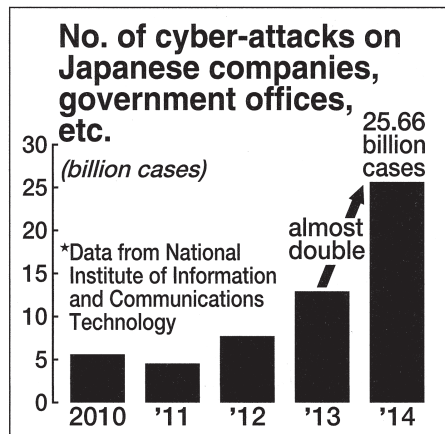
I 次は、2015年4月7日付けの新聞の記事である。グラフを参照しながら英文を読み、下記の設問に答えよ。(配点 24)

Information technology (IT) corporations that specialize in protecting the cybersecurity of their client organizations are working to strengthen their shields against cyber-attacks (see the passage ☆ on the next page), in response 1 a sharp increase in such assaults on government offices, businesses and other entities in recent years. Their new measures include around-the-clock monitoring of computers installed at client companies and setting up new bases for surveillance on cyber-attacks. The IT firms are also stepping up their cooperation with the government to halt the spread of damage from cyber-attacks.

NTT Communications Corp. is working with FireEye Inc., a U.S. network security company, to develop a service to provide nonstop surveillance of corporate computers. Scheduled to launch soon, the service is designed to detect computer viruses that slip past antivirus software, identify infected devices and stop transmissions of data to outside parties. NTT hopes to create a client base with a core of about 40 large companies in three years. NEC Corp. began operations in June 2014 at a base dedicated to checking day and night for cyber-attacks on companies and *fraudulent transmissions. It plans to launch a service by June that will allow system and other updates to be performed remotely.

Japanese government offices, companies and others monitored by the National Institute of Information and Communications Technology experienced about 25.66 billion transmissions associated with cyber-attacks in 2014, roughly double the previous year's figure, which itself was an all-time high. Cyber-attacks are said to have caused about ¥100 trillion in damage worldwide. In November 2014, Sony Pictures Entertainment Inc. saw its system shutdown and secret information leaked. The homepage of Nissan Motor Co. was altered in a cyber-attack from June to August 2014.

Officials said a major cyber-attack could occur when the Olympics and Paralympics 2 in Tokyo in 2020. The government is seeking to increase its preparedness. In January, the National Center of Incident Readiness and Strategy for Cybersecurity was established and the government has formed partnerships with *private-sector IT companies. "Things like cars and appliances are being connected to the Internet more and more, and will be subject to attack," said the head of the management and planning department at NTT Communications. "Now is the time for companies to re-examine how they handle risk management."



Graph

☆ Cyber-attacks

Cyber-attacks are illegal invasions of computer systems intended to cause damage or steal data. One method of paralyzing a target computer⁴⁾ is to send it a huge amount of data.

Viruses built into websites can infect devices when such sites are visited. Specific government offices or companies are sometimes targeted by false e-mails that contain 3.

注 *fraudulent transmissions 不正送信 *private-sector 民間の

(The Japan News, Apr 7, 2015)

- (1) Which of the following words or phrases is best to fill in 1 ~ 3 ?

Choose the best answer and mark the number on the answer sheet.

- | | | | | |
|---|----------------------|----------------------|-----------|------------|
| 1 | ① to | ② with | ③ for | ④ against |
| 2 | ① will hold | ② are holding | ③ is held | ④ are held |
| 3 | ① secret information | ② important data | | |
| | ③ viruses | ④ antivirus software | | |

- (2) Which of the following expressions has a different meaning from around-the-clock¹⁾? Choose the best answer and mark the number on the answer sheet. 4

- ① 24-hour ② nonstop ③ day and night ④ every time

- (3) Which of the following does the previous year's figure²⁾ refer to? Choose the best answer and mark the number on the answer sheet. 5

- ① 5-6 billion ② 7-8 billion ③ 12-13 billion ④ 25-26 billion

- (4) Which of the following has the same meaning as "Now is the time for companies to re-examine how they handle risk management"³⁾? Choose the best answer and mark the number on the answer sheet. 6

- ① It is time for companies to re-examine their way of handling risk management.
 ② It is an inappropriate time for companies to re-examine their way of handling risk management.
 ③ It takes companies a long time to re-examine how to handle risk management.
 ④ Companies have started to re-examine how to handle risk management just now.

(5) Which of the following expressions has a different meaning from paralyzing a target computer? Choose the best answer and mark the number on the answer sheet.

7

- ① disabling a target computer
- ② contacting a target computer
- ③ making a target computer work poorly
- ④ putting a target computer out of action

(6) Which of the following statements is correct? Choose the best answer and mark the number on the answer sheet.

8

- ① All the IT firms are constructing new buildings for surveillance on cyber-attacks.
- ② Cyber-attacks can shut down computer systems and alter homepages.
- ③ Cars are not related to any cyber-attacks.
- ④ According to the graph, the number of cyber-attacks on Japanese companies over the past five years continued to increase gradually.

Ⅱ 次の英文を読み、下記の設問に答えよ。(配点 15)

A study published by the Proceedings of the National Academy of Sciences shows that more than 10 percent of the land mammal species *endemic to Australia have been wiped out since European settlement. The main *culprits? Cats and 9 brought to the continent by those settlers. Australia's extraordinary *extinction rate has been a source of puzzlement. In the rest of the world, the extinction of various species is generally (① on ② have over-hunted ③ who ④ blamed ⑤ humans)¹⁾ the animals or destroyed their habitat. But in sparsely populated Australia, much of the vast, desert interior remains virtually untouched by people. By global standards, it should be a haven for animals.

A group of Australian (① the scope ② pinpoint ③ set out to ④ of the extinction ⑤ scientists)²⁾ problem and its cause by tracking the fate of all the country's land and marine mammals since the first European settlers arrived in Australia in 1788. The researchers found that 11 percent of the 273 land mammal species endemic to Australia have gone extinct since European settlement and another 21 percent are considered threatened. 10 comparison, just one North American native land mammal became extinct since European settlement. Worldwide, around 1.5 percent of 5,500 mammal species are extinct.

The researchers found that much of the Australian species' decline coincided with the introduction of two animals: the *feral cat, (① brought to ② on ③ which ④ Australia ⑤ sailors)³⁾ ships to keep the onboard rat populations at bay, and red foxes, brought to the continent for hunting.

注 *endemic 固有の *culprits 犯人 *extinction 絶滅 *feral 野生の

(The Japan Times (AP). Feb 11, 2015)

- (1) 空所 9 と 10 に入る最も適切なものを、次の中からそれぞれ1つ選び、その番号をマークせよ。

- | | | | | |
|----|--------|---------|-----------|-------------|
| 9 | ① rats | ② foxes | ③ sailors | ④ Europeans |
| 10 | ① By | ② With | ③ Till | ④ While |

- (2) 下線部1)～3)を、文脈に合うように並べ替えて英文を完成し、4番目にくるものの番号をマークせよ。

- 1) (① on ② have over-hunted ③ who ④ blamed ⑤ humans) 11
- 2) (① the scope ② pinpoint ③ set out to ④ of the extinction ⑤ scientists)
12
- 3) (① brought to ② on ③ which ④ Australia ⑤ sailors) 13

Ⅲ 次のラジオ番組の会話を読み、下記の設問に答えよ。(配点 28)

Host: Today on this program, it's your chance to speak to blogger and creator of *Grannynet*, Melanie Gruff. Since it was launched four years ago, *Grannynet* has grown and grown and is now used by an estimated seven million¹⁾ families worldwide. Let's go to our first caller. Patty, what's your question for Melanie?

Patty: Melanie, I'm retired and my husband passed away two years ago. My daughter lives over in the next town but I only get to see my grandchildren a few times a year. But now with *Grannynet*, I talk to them every day, read them bedtime stories and we do so many things together. I've never been so happy. Melanie, what 15 you to start *Grannynet*?

Melanie: I was trying to use social media to keep in touch with my children and grandchildren who lived far away. But it was hard because most of the social media sites were not senior citizen friendly. So I decided to do something about it. I went to night school, studied about the Internet and started my own site for people like you and me.

Host: Now to our next caller, Derek.

Derek: Hello. I have three children and we use *Grannynet* to stay in touch with relatives. I'm working in web design. Melanie, what advice would you give to web designers looking to attract older customers?

Melanie: I think simplicity is important. That is the key to the success of *Grannynet*. You open it up and your family is right there. Derek, think about your own home. It's familiar, isn't it? You know where everything is, right? But also in your home, you have pretty much anything you might need. We tried to make the same true for *Grannynet*. So, I think it has an intuitive design. Everything is easy to find. But any feature you might need is there somewhere. So simplicity is the key for a great online experience but security is vital too. If your system is not secure, then older people won't come. Older people are concerned about the security of their family and are not going to let their grandchildren anywhere near your site 16 they know it is 100% secure.

Host: Thank you, Derek. Let's go to our next caller, Jim.

Jim: Hello, Melanie. I'm also a *Grannynet* member with an interest in IT. Do you think the success of *Grannynet* is a sign that older people are using the Internet more?

Melanie: Yes, I do. And to be honest, I think this is just the beginning. Although the elderly came to the table relatively late, they are going to be the power players in the not too distant future. And it's not just about catching up the young generation. There are a number of key dynamics at work here. Basically, the proportion of older people in society is increasing. 17 that but the over 65s have more disposable income than younger age groups. Perhaps most importantly they have the most free time available to invest in the Internet.

Host: Thank you, Jim. And thanks to Melanie Gruff for being our guest today.

- (1) How is seven million written in numbers? Choose the best answer and mark the number on the answer sheet. 14

① 7,000 ② 70,000 ③ 700,000 ④ 7,000,000

- (2) Which of the following words or expressions is best to fill in 15 ~ 17 ?

Choose the best answer and mark the number on the answer sheet.

15 ① included ② increased ③ inspired ④ invaded

16 ① because ② so ③ unless ④ yet

17 ① After ② Despite ③ Just before ④ Not only

- (3) Which of the following statements about Patty is correct according to the interview? Choose the best answer and mark the number on the answer sheet.

18

- ① Her husband lives in the next town.
② Her daughter died recently.
③ It is difficult to meet her grandchildren because of her job.
④ She is the happiest she has ever been.

- (4) Which of the following statements about *Grannynet* is correct according to Melanie's reply to Derek? Choose the best answer and mark the number on the answer sheet. 19

- ① You need a key to use it.
② It is targeted at people who love their homes.
③ Some things in it are difficult to find.
④ It is designed with simplicity and security in mind.

- (5) Which of the following statements is correct according to Melanie's reply to Jim?

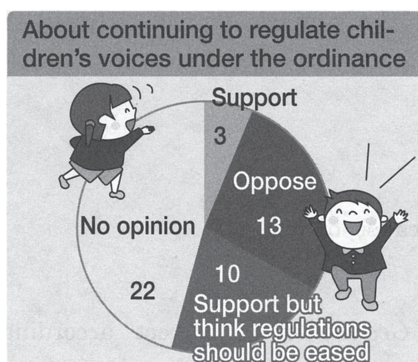
Choose the best answer and mark the number on the answer sheet. 20

- ① Melanie thinks older people will use the Internet more.
② Older people tend to be later for dinner than younger people.
③ The percentage of older people in society is falling.
④ Older people usually have less disposable income than younger people.

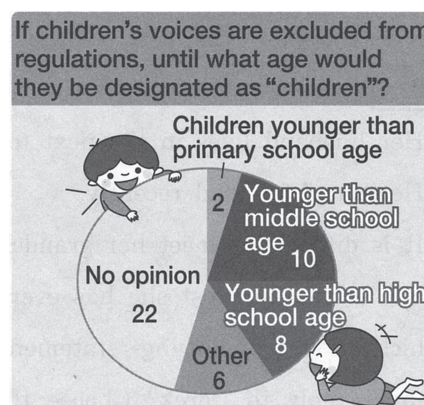
Ⅳ 次は、2015年2月27日付けの新聞の記事に基づく英文である。グラフを参照しながら英文を読み、下記の設問に答えよ。(配点 15)

Do children's voices equal noise?

While the Tokyo metropolitan government has recently presented a plan to exclude voices of children younger than primary school age from an *ordinance that regulates noise, the pros and cons of the ordinance have been stirring debate among municipalities and residents in Tokyo.



Graph 1



Graph 2

The Tokyo government conducted a questionnaire on cities and wards of Tokyo in March last year. It found that municipalities agreed with the idea of regulating children's voices under the ordinance, while ten said children's voices should be regulated but the regulations should be relaxed. municipalities expressed disapproval to the idea. Concerning the ages of children whose voices should be excluded from the regulations, two said voices of children younger than primary school age should be excluded, which the Tokyo government's plan, while ten said voices of children younger than middle school age should be excluded and eight said those of children younger than high school age should be excluded.

Citizens in Tokyo also have different opinions over the issue. When the Tokyo government sought public opinions in December and January, many opinions were sent to the government. Out of them, 79 supported the plan saying such things as "Letting their voices out is very important for children's development, both mentally and physically," or "The decline in children's ability to exercise is partly because they cannot play freely outdoors." , 45 opposed the plan because it is difficult to the high-pitched voices of many children, or because people working the night shift can't get a good sleep.

注 *ordinance 条例

(The Japan News. Feb 17. 2015)

(1) Which of the following words is best to fill in 21 and 22 ? Choose the best answer and mark the number on the answer sheet.

- | | | | | |
|----|---------|-------|------------|------------|
| 21 | ① three | ② ten | ③ thirteen | ④ eighteen |
| 22 | ① Three | ② Ten | ③ Thirteen | ④ Eighteen |

(2) Which of the following expressions is best to fill in 23 ? Choose the best answer and mark the number on the answer sheet.

- | | | |
|----|----------------|----------------------|
| 23 | ① differs from | ② hardly agrees with |
| | ③ is far from | ④ is the same as |

(3) Which of the following expressions is best to fill in 24 and 25 ? Choose the best answer and mark the number on the answer sheet.

- | | | |
|----|---------------------|-------------------|
| 24 | ① On the other hand | ② Particularly |
| | ③ To begin with | ④ In addition to |
| 25 | ① do little with | ② sing along with |
| | ③ put up with | ④ keep up with |

V 次は, Taro と旅行者の会話である。 26 ～ 31 に入る最も適切な表現を, それぞれ 1 つ選び, その番号をマークせよ。(配点 18)

Taro is helping tourists in Kyoto as a volunteer.

(1) Tourist: Excuse me, would you mind writing the name of our hotel in Japanese? We might need to show it to a taxi driver.

Taro: 26 It's my pleasure.

Tourist: Thank you so much.

- ① I don't write.
- ② No, thanks.
- ③ Not at all.
- ④ Of course, I mind.

(2) Tourist: We'd like to go to *Kiyomizu Temple*. What's the best way to get there?

Taro: You can take the bus or train.

Tourist: That's great. We have bus passes so we'd prefer to go by bus.

Taro: OK. Take the 206 bus from over there. 27 Get off at *Gojozaka*.

- ① There are buses every ten minutes or so.
- ② If you see a bus, it will be ten minutes to two.
- ③ So, there's a bus for ten minutes.
- ④ There are no buses so you will have to walk.

(3) Tourist: We want to try some Japanese food for lunch. Do you know a good restaurant?

Taro: There are many good restaurants in Kyoto. What kind of food would you like to eat?

Tourist: My husband likes steak. Is there anywhere we can try Japanese beef?

Taro: 28 It's not far from here and they have a lot of beef dishes.

- ① How is *The Kobe Grill*?
- ② Why do you try *The Kobe Grill*?
- ③ Please suggest *The Kobe Grill*.
- ④ I recommend *The Kobe Grill*.

(4) Tourist: We have visited many temples. Some are called temples and some are called shrines. Is there any difference between a temple and a shrine?

Taro: Yes, there is. There are two main religions in Japan: Buddhism and Shintoism. Temples are Buddhist, 29 shrines are Shinto.

- ① when
- ② whenever
- ③ whereas
- ④ wherever

(5) Tourist: We'd like to get some souvenirs for our family. Do you know a good area to buy souvenirs?

Taro: I'm sorry. 30

Tourist: Souvenirs are gifts we buy when we are on holiday.

Taro: Oh, I see. Yes, there are many places you can buy souvenirs. I'll show you some areas on your map.

- ① I don't know what the word souvenir means.
- ② I don't mean the word souvenir.
- ③ I don't think souvenirs are what I mean.
- ④ I don't understand what souvenirs you mean.

(6) Tourist: Is there a post office around here? I need to send some postcards.

Taro: Yes, there is. Go down this street and 31 the first left. You'll see it next to a supermarket.

Tourist: Thanks.

- ① become
- ② bend
- ③ take
- ④ keep