Ｍz 英 語 問 題

注 意

1. 試験開始の指示があるまでこの問題冊子を開いてはいけません。
2. 解答用紙はすべてＨＢの黒鉛筆またはＨＢの黒のシャープペンシルで記入すること になっています。ＨＢの黒鉛筆・消しゴムを忘れた人は監督に申し出てください。 (万年筆・ボールペン・サインペンなどを使用してはいけません。)
3. この問題冊子は16ページまでとなっています。試験開始後、ただちにページ数を確 認してください。なお、問題番号はⅠ～Ⅴとなっています。
4. 解答用紙にはすでに受験番号が記入されていますので、出席票の受験番号が、あな たの受験票の番号であるかどうかを確認し、出席票の氏名欄に氏名のみを記入して ください。なお、出席票は切り離さないでください。
5. 解答は解答用紙の指定された解答欄に記入し、その他の部分には何も書いてはいけ ません。
6. 解答用紙を折り曲げたり、破ったり、傷つけたりしないように注意してください。
7. この問題冊子は持ち帰ってください。

マーク・センス法についての注意

マーク・センス法とは、鉛筆でマークした部分を機械が直接よみとって採点 する方法です。

1. マークは、下記の記入例のようにＨＢの黒鉛筆で枠の中をぬり残さず 濃くぬりつぶしてください。
2. 1つのマーク欄には1つしかマークしてはいけません。
3. 訂正する場合は消しゴムでよく消し、消しくずはきれいに取り除いて ください。

マーク記入例： **A** 〔1 2 ● 4 5〕 (3と解答する場合)

Many cities around the world are spreading faster than their populations are growing. According to researchers at New York University, between 1985 and 2000 the population of Accra in Ghana increased by 50%, but its land area grew by 153%. People are having to travel further: in Nairobi, for example, the average commuting distance increased from less than 1 kilometer in 1970 to 25 kilometers in 1998. As this trend continues, governments face the problem of how to move people around ever-expanding metropolises efficiently enough that residents can take advantage of the opportunities—economic and otherwise—that cities have to offer.

This issue is certainly a public-policy challenge, but it's also an opportunity to improve the health of the world's growing urban population. And researchers and public-health experts say that making cities of the future function well and support human health may depend on the most low-tech, ancient assets available—our own two feet.

"If the pedestrian is happy and you see many pedestrians, that's a city with a good transport system," says Clayton Lane of the Institute for Transportation and Development Policy, a nonprofit organization based in New York. "The pedestrian is the indicator species for a sustainable transport system"—and, as it turns out, for a healthy one.

But getting there will require a major shift in government spending priorities and in public attitude. "In many cities around the world, the people and the politicians have this vision of modernity that prominently features automobiles," Lane says. As residents become wealthier, the urban infrastructure is remodelled to favor cars. Many cities in the developing world spend around 70% of their transportation budgets on car-oriented facilities, even though around 70% of trips take place on foot or by public transportation. The result is that the world is on track to have 2.3 billion cars by 2050. That's just over double the number that were on the road in 2010, and it represents a major threat to the health of the urban population.

Cars promote a sedentary lifestyle, with its attendant risk of health problems

such as obesity and heart disease. Driving, especially in congested traffic, causes stress, and air pollution worsens respiratory diseases such as asthma. Much better is what researchers call active transport: walking and cycling, mainly. Sitting in traffic is stressful, whereas physical activity boosts happiness. Fewer cars on the road means less choking pollution and fewer deaths in car crashes. Furthermore, the more that people walk and cycle in the city, the safer these activities become— both because there is safety in numbers and because cities provide infrastructure to accommodate these activities.

Of course, walking and cycling are not by themselves sufficient to meet people's transportation needs, especially in the growing number of megacities (those with 10 million residents or more). But walking and public transportation support each other. A walkable city needs good transportation to move people around. By the same token, walkable neighborhoods make transportation systems more cost-efficient to build and help to ensure that they are well used. Some studies have found that access to public transportation improves physical activity and health, largely because it gets people walking.

A well-designed city can encourage habits that promote good physical health. "Walking is a very simple physical activity that most people can do," says Yan Kestens, who studies how the built environment contributes to public health at the University of Montreal in Quebec. But making an environment more walkable can be challenging, especially in cities that took shape after the advent of the car. "The physical structure of our cities lasts for centuries," says Lane. "If we build our cities and suburbs for cars, it's very difficult to retrofit them for walking."

According to British geographer Adam Davies, who recently collaborated with researchers at Yahoo Labs on an analysis of 7 million geotagged photos taken in central London, walkability is hugely compromised by street networks designed around the car. "The more cars and the more lanes of traffic, the less human-friendly that particular street probably is," he says.

There are many reasons that people choose not to walk to destinations that are within walking distance. Lack of sidewalks, inconveniently placed pedestrian crossings, and the need to cross a major thoroughfare, for example, can make walking unappealing or even unsafe. And for some older people, or anyone who has

trouble walking, factors such as these can <u>erode</u> walkability surprisingly fast. "I've heard of stories where people take a taxi to go across the street," says Verena Menec, a researcher at the University of Manitoba in Winnipeg.

Communities and urban planners around the world are coming up with creative ways to improve neighborhood walkability. A grass-roots effort in the Indian city of Chennai, for example, is addressing conditions faced by many of the world's poorest urban dwellers. They have no choice but to get around on foot; however, they do so on streets that are not particularly good for walking. "We have city after city where many people are walking, yet the city is not walkable at all," Lane says. In such environments, pedestrians are especially vulnerable to injury and death from traffic accidents, according to the WHO.

The Chennai government has committed to spending at least 60% of the city's transportation budget on measures to encourage walking and cycling. By 2018, the city is aiming to make 80% of its roadways "complete streets"—wide sidewalks, bike lanes, space for public transportation and organized parking, as well as lanes for cars.

Another piece of the puzzle is developing public transportation systems to link walkable neighborhoods that are within the reach of cities, using scarce financial resources. Bus Rapid Transit (BRT) has emerged as a practical, affordable solution for many cities because BRT lines are much faster and cheaper to build than rail-based systems. Yet, they are fast and efficient—they have dedicated lanes, preferential treatment at intersections, and platforms to help people board faster.

One of the latest converts to the BRT approach is sprawling Accra, which is building a line between the suburb of Amasaman and the city center. Until now, the city's transportation system has been dominated by licensed minibuses, but these only service a little over half the routes that they are licensed to run on. Accra is like many cities in the developing world that lack a functioning mass transportation system. "There's such a huge, huge deficit to address, but BRT is a good solution to do it quickly and affordably," Lane says. "High-quality transit is key to a walkable city so you can access other parts of the city that are also walkable."

1. One idea of the first paragraph is that cities in the developing world

　イ. have a transportation problem.

　ロ. expect residents to walk too much.

　ハ. lack enough economic opportunities.

　ニ. have too many people for the available land.

2. The underlined word "one" (paragraph 3) refers to

　イ. city.

　ロ. pedestrian.

　ハ. species.

　ニ. transportation system.

3. The main purpose of paragraph 4 is

　イ. to predict how many cars will be on the road in the future.

　ロ. to challenge the view of modernity that favors automobiles.

　ハ. to argue for bigger transportation budgets in the developing world.

　ニ. to criticize politicians for doing too little about urban infrastructure.

4. One feature of "a walkable city" is that

　イ. public transportation is well-developed.

　ロ. people walk everywhere they need to go.

　ハ. the land area is adequate to population size.

　ニ. people have fewer transportation needs.

5. The passage suggests that the prospect of making a city more walkable depends a great deal on

　イ. where the city is located.

　ロ. how healthy the residents are.

　ハ. when the city grew into its current form.

　ニ. how big the elderly population is.

6. The underlined word "erode" (paragraph 9) is closest in meaning to

　イ. reduce.

　ロ. reveal.

　ハ. simplify.

　ニ. stimulate.

7. In Chennai, India,

　イ. most residents rely on cars to get around.

　ロ. walking is dangerous even in walkable neighborhoods.

　ハ. residents choose to walk rather than use public transportation.

　ニ. streets that are not walkable have many pedestrians.

8. The passage indicates that Accra, Ghana

　イ. is a large but walkable city.

　ロ. already has an adequate mass transportation system.

　ハ. is constructing its first Bus Rapid Transit (BRT) line.

　ニ. plans to expand the number of licensed minibuses.

9. According to the passage, a city's walkability has all the following effects EXCEPT that it

　イ. encourages residents to move to the suburbs.

　ロ. reduces deaths from traffic accidents.

　ハ. makes residents healthier and happier.

　ニ. improves access to economic opportunities.

10. The most appropriate title for this passage is

　イ. The Health Benefits of Walking and Cycling in Urban Areas.

　ロ. A New Approach to Urban Transportation.

　ハ. Urban Development and the Decline of the Automobile.

　ニ. Public Policy and Human Health in the Developing World.

Ⅱ. 次の空所(1)～(7)を補うのにもっとも適当なものを，それぞれ対応する各イ～ニから1つずつ選び，その記号を解答用紙の所定欄にマークせよ。

Natalie: What kind of a place would you like to live in when you leave this apartment?

Reiko: Well, not too big, not too small. Maybe with a veranda (1) a garden.

Natalie: With some trees and a lawn?

Reiko: Yeah, a squirrel or two would be nice.

Natalie: And a swimming pool?

Reiko: No (2). This is Tokyo, not Florida!

Natalie: A squirrel or two might also be (3) too much, then.

Reiko: I could (4) with a stray cat or two instead.

Natalie: In a garden the (5) of "a cat's forehead" as the Japanese say.

Reiko: I'll be able to rent only a tiny apartment without a garden, (6) that my salary will be like "a sparrow's tears."

Natalie: Maybe you can look for a place facing a little park, which is visited by some cats and birds.

Reiko: That's a lovely idea. When I find one, do come and visit.

Natalie: I look (7) to playing with the cats.

(1) イ. attaching   ロ. next   ハ. overlooking   ニ. seeing

(2) イ. possible   ロ. problem   ハ. reason   ニ. way

(3) イ. asking   ロ. creating   ハ. having   ニ. thinking

(4) イ. come   ロ. do   ハ. finish   ニ. go

(5) イ. ground   ロ. miniature   ハ. minimum   ニ. size

(6) イ. according   ロ. considering   ハ. suited ·   ニ. unluckily

(7) イ. ahead   ロ. forward   ハ. in   ニ. up

Ⅲ. 次の空所（1）～（6）を補うのにもっとも適当なものを，それぞれ対応する各イ～ニから
   1つずつ選び，その記号を解答用紙の所定欄にマークせよ。

Conversation A

George: Sally, I'm having a problem deciding where to go to study abroad.

Sally: You should ask Harry. （ 1 ）.

Harry: That's right. I went to England first and then to Korea.

George: Wow. You must like to travel.

Harry: （ 2). I just like living in other countries. I hate getting on airplanes.

Sally: Well, that's not important here. What we want to know is how you chose
         where to go.

Harry: Well, George, （ 3 ）?

George: First to learn a foreign language. And second to see the United States
         from a different perspective.

Sally: Then why not Korea? I hear that it's very different from the United States.

Harry: （ 4). The language is too different, so you can't make progress in just
         one year.

Sally: So George, you need a country that is different from home, but not too
         different.

Harry: You should choose a European country. You can study a language in the
         morning and take classes taught in English in the afternoon.

George: Great idea! I took German in my freshman year. I can work on that
         language.

（1） イ．He needs to know everything

     ロ．He has already done that twice

     ハ．He is good at organizing things

     ニ．He is interested in what you are going to do next year

（2）　イ．If it's convenient

　　　　ロ．I sure do

　　　　ハ．No, not really

　　　　ニ．Yes, I go every year

（3）　イ．why do you want to study foreign languages

　　　　ロ．do you like to travel or live abroad

　　　　ハ．which country do you want to visit

　　　　ニ．why do you want to study abroad

（4）　イ．That's the point

　　　　ロ．Not really

　　　　ハ．Well, that's what some people say

　　　　ニ．What's wrong with being different

Conversation B

Pat:　Now robots can write novels.　They even write good novels.

Bob:　（　5　）?

Pat:　I read a news report about it.　A Japanese robot wrote a very short story and almost won a literary prize.

Bob:　No kidding!　A literary prize?　Robots should not be so smart.　（　6　）.

（5）　イ．What's the title of the novel

　　　　ロ．Where did you hear that

　　　　ハ．Who introduced the novels

　　　　ニ．Where can you find them

（6）　イ．Then, we can ask them to do our homework assignments

　　　　ロ．Nevertheless we can find no other way to use them

　　　　ハ．Because we've always known how intelligent they are

　　　　ニ．Otherwise they will take over our jobs in the near future

次の空所（1）〜（7）を補うのにもっとも適当なものを，それぞれ対応する各イ〜ニから 1 つずつ選び，その記号を解答用紙の所定欄にマークせよ。

With companies exploring new ways to use virtual reality (VR) technologies, more people are entering virtual worlds that, although created with computers, unfold right before your eyes. VR simulations are （ 1 ） athletes to practice and people to train for dangerous jobs. Research that involves recording disappearing landscapes is also making （ 2 ）.

Standing in the batter's box, I face the pitcher. At my feet are dirt and green grass, while white clouds float in a blue sky above. The pitcher throws a fastball at over 130 kilometers per hour. It grazes my chest, and I involuntarily bend backward to avoid it.

（ 3 ） reality, this is not a baseball field. When I remove the goggles I'm wearing, I am back in a very ordinary conference room.

The background footage was filmed near the batter's box at a real baseball field, using a special 360-degree camera that takes videos in all directions. Separately shot pitching scenes with professional pitchers and a white ball rendered with computer graphics are （ 4 ） to the footage.

Through the use of VR goggles, the footage moves in （ 5 ） to the movement of your face, making it feel almost as if you are standing inside the batter's box.

The images projected onto the left and right eyes are slightly different, making the space in front of the eyes appear three-dimensional. Additionally, the goggles incorporate a number of sensors that measure rotation. These sensors instantaneously （ 6 ） any movements of the face, and the image moves in accordance with those changes.

Images are refreshed at the （ 7 ） of several dozen per second, eliminating choppiness. Even fastballs are said to look natural.

（1）　イ．helping　　　ロ．moving　　　ハ．taking　　　二．telling

（2）　イ．adventure　　ロ．progress　　ハ．retreat　　二．risk

（3）　イ．At　　　　　ロ．In　　　　　ハ．On　　　　二．With

（4）　イ．added　　　　ロ．removed　　　ハ．taken　　　二．wiped

（5）　イ．response　　　ロ．rhythm　　　ハ．sympathy　　二．tune

（6）　イ．destroy　　　ロ．detect　　　ハ．distract　　二．stop

（7）　イ．face　　　　ロ．race　　　　ハ．rate　　　　二．tick

V. 次の1～12それぞれの空所を補うのにもっとも適当なものを，各イ～ニから1つずつ
選び，その記号を解答用紙の所定欄にマークせよ。

1. I saw a man leading an old lady gently (　　　　) the elbow up the stairs.
　　イ．by　　　　　　ロ．for　　　　　　ハ．in　　　　　　ニ．with

2. They are (　　　　) up for months ahead, but I think they'll find a room for us if
　　we ask them.
　　イ．advanced　　　ロ．booked　　　　ハ．kept　　　　　ニ．recorded

3. It is difficult to tell (　　　　) she might have accomplished if the war had not
　　occurred.
　　イ．since　　　　　ロ．so　　　　　　ハ．though　　　　ニ．what

4. With the weather (　　　　) it was, they had to retreat to their camp.
　　イ．being as　　　　　　　　　　　ロ．so that
　　ハ．turned unexpectedly　　　　　　ニ．usually as

5. To her surprise, her husband demanded that she (　　　　) up with him at 4 a.m.
　　when he was on the early shift.
　　イ．get　　　　　　ロ．gets　　　　　ハ．getting　　　　ニ．gotten

6. (　　　　) you have any further questions, do not hesitate to ask me.
　　イ．Should　　　　ロ．Since　　　　　ハ．While　　　　　ニ．Would

7. When she heard the sad news, she tried (　　　　) cry before her friends.
　　イ．hard not to　　　　　　　　　　ロ．hardly no
　　ハ．hardly not to　　　　　　　　　　ニ．not hard to

8．There were times when we wondered （　　　　） reach our destination.

　　イ．if not to

　　ロ．if only we

　　ハ．whether we would

　　ニ．whether would we

9．Although they all took what he said seriously, it was （　　　　） but a joke.

　　イ．all　　　　ロ．anything　　　ハ．nothing　　　ニ．the last

10．In an email to staff members, the president （　　　　） that he would be retiring soon.

　　イ．had he known

　　ロ．had it been known

　　ハ．let it be known

　　ニ．was known

11．This student's research is important （　　　　） shows that our previous findings were incorrect.

　　イ．in that it　　　ロ．so that it　　　ハ．such as that　　　ニ．that it

12．The satellites orbiting the earth transmit signals （　　　　） the clock.

　　イ．around　　　ロ．of　　　ハ．with　　　ニ．without