

2012年度

# I 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、消しきずはきれいに取り除いてください。

マーク記入例：

A	1	2	3	4	5
	○	○	●	○	○

(3と解答する場合)

I . 次の文を読み、下記の1～9それぞれに続くものとして、本文の内容にもっともよく合致するものを、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。

Dr. Levine's magic underwear resembled bicycle shorts, black and skintight, but with sensors mounted on the thighs and wires running to a waist bag. The look was part Euro tourist, part cyborg. Twice a second, 24 hours a day, the magic underwear's measuring devices would assess every movement I made, however small, and whether I was lying, walking, standing or sitting.

James Levine, a researcher at the Mayo Clinic in Rochester, Minnesota, has an intense interest in how much people move—and how much they don't. He is a leader in an emerging field that some call inactivity studies, which has challenged long-held beliefs about human health and \*obesity. To help me understand some of the key findings, he suggested that I become a research trial participant. First my body fat was measured inside a white, futuristic capsule called a Bod Pod. Next, one of Dr. Levine's colleagues placed a hooded mask over my head to measure the content of my breathing and gauge my body's calorie-burning rate. After that, I put on the magic underwear, then went down the hall to the laboratory's research kitchen for a breakfast whose calories were measured precisely.

A weakness of traditional activity and obesity research is that it relies on self-reporting—people's mistaken recollections of how much they ate or exercised. But the participants in a series of studies that Dr. Levine did beginning in 2005 were assessed the way I was; they consumed all of their food in the lab for two months and were told not to exercise. With neither a snack nor workout left to chance, Dr. Levine was able to understand the mysteries of a closed \*\*metabolic universe in which every calorie, consumed as food or expended for energy, could be accounted for.

His initial question was simple: why do some people who consume the same amount of food as others gain more weight? After assessing how much food each of his participants needed to maintain their current weight, Dr. Levine then began to give them an extra 1,000 calories per day. Sure enough, some of his participants put on weight, while others gained little to no weight.

"We measured everything, thinking we were going to find some magic metabolic factor that would explain why some people didn't gain weight," explains Dr.

Michael Jensen, a researcher who collaborated with Dr. Levine on the studies. But that wasn't the case. Then six years later, with the help of the motion-tracking underwear, they discovered the answer. "The people who didn't gain weight were unconsciously moving around more," Dr. Jensen says. They hadn't started exercising more—that was prohibited by the study. Their bodies simply responded naturally by making more little movements than they had before the overfeeding began, like taking the stairs or walking quickly down the hall to the office water cooler. On average, the participants who gained weight sat two hours more per day than those who hadn't.

People don't need experts to tell them that sitting around too much is not a good way to lose weight. The conventional wisdom, though, is that if you watch your diet and get <sup>\*\*\*</sup> aerobic exercise at least a few times a week, you'll effectively counter the effects of your inactive time. A growing body of inactivity research, however, suggests that this advice makes little more sense than the notion that you could counter a pack-a-day smoking habit by jogging. "Exercise is not a perfect antidote for sitting," says Marc Hamilton, an inactivity researcher at the Pennington Biomedical Research Center.

Hamilton's most recent work has examined how rapidly inactivity can cause harm. In studies of rats that were forced to be inactive, for example, he discovered that the leg muscles responsible for standing almost immediately lost more than 75 percent of their ability to remove harmful substances from the blood. To show that the ill effects of sitting could have a rapid onset in humans too, Hamilton recruited 14 young, fit and thin volunteers and recorded a significant negative effect on the participants from being inactive for 24 hours.

Over a lifetime, the unhealthful effects of sitting add up. Alpa Patel, an expert on disease studies at the American Cancer Society, tracked the health of 123,000 Americans between 1992 and 2006. The men in the study who spent six hours or more per day of their leisure time sitting had an overall death rate that was about 20 percent higher than the men who sat for three hours or less. The death rate for women who sat for more than six hours a day was about 40 percent higher. Patel estimates that, on average, people who sit too much lose a few years of their lives.

Being inactive for nine hours a day at the office is bad for your health whether you go home and watch television afterward or visit the gym. It is bad whether you are seriously obese or marathon-runner thin. "Excessive sitting," Dr. Levine says, "is a deadly activity."

The good news is that inactivity's danger can be countered. Working late one night at 3 a.m., Dr. Levine invented a name for the concept of enjoying major benefits through thousands of minor movements each day: NEAT, which stands for Non-Exercise Activity Thermogenesis. In the world of NEAT, even the smallest stuff matters. McCrady-Spitzer showed me a chart that tracked my calorie-burning rate with zigzagging lines. "What's that?" I asked, pointing to one of the spikes, which indicated that the rate had suddenly increased. "That's when you bent over to tie your shoes," she said. "It took your body more energy than just sitting still."

In a motion-tracking study, Dr. Levine found that obese participants averaged only 1,500 daily movements and nearly 600 minutes sitting. In my trial with the magic underwear, I came out looking somewhat better—2,234 individual movements and 367 minutes sitting. But I was still nowhere near the farm workers Dr. Levine has studied in Jamaica, who average 5,000 daily movements and only 300 minutes sitting.

Dr. Levine knows that we can't all be farmers, so instead he is exploring ways for people to redesign their environments so that they encourage more movement. We visited a chairless first-grade classroom where the students spent part of each day crawling along mats labeled with vocabulary words and jumping between platforms while reciting math problems. We stopped by a human-resources staffing agency where many of the employees worked on the move at <sup>\*\*\*\*</sup>treadmill desks.

Dr. Levine was in a philosophical mood as we left the agency. For all of the hard science against sitting, he admits that his campaign against what he calls "the chair-based lifestyle" is not limited to simply a quest for better physical health. His is a war against inactivity itself, which, he believes, sickens more than just our body. "Go into an office building in a tightly controlled corporate environment and you immediately sense that there is anxiety being tied behind a computer screen seated all day," he said. "The soul of the nation is exhausted, and now it's time for the soul of the nation to rise."

\*obesity : 肥満

\*\*metabolic : 新陳代謝 (性) の

\*\*\*aerobic : 有酸素の

\*\*\*\*treadmill desks : ランニングマシン (トレッドミル) と作業用机が一体化したもの

1. The main function of the “magic underwear” is to measure

- イ. body weight.
- ロ. calorie usage.
- ハ. heart rate.
- ニ. movement.

2. James Levine’s research on weight gain showed that, compared to the people who gained weight, those who didn’t gain weight

- イ. spent more time sitting.
- ロ. moved around more.
- ハ. did more physical exercises.
- ニ. ate fewer snacks.

3. The field of “inactivity studies” has challenged the belief that

- イ. exercise is a better way to lose weight than going on a diet.
- ロ. people who stay active all day will not gain weight.
- ハ. obesity is caused by consuming too many calories.
- ニ. it’s okay to be inactive as long as you get some exercise.

4. The underlined word “antidote” (paragraph 6) is closest in meaning to

- イ. activity
- ロ. preparation
- ハ. cure
- ニ. situation

5. Marc Hamilton's recent research suggests that
- イ. the effect of inactivity on rats is not the same as that on humans.
  - ロ. a single day of inactivity has harmful effects on the body.
  - ハ. getting regular aerobic exercise helps prevent most health problems.
  - ニ. not getting enough aerobic exercise is the main cause of obesity.
6. The study conducted by Alpa Patel showed that
- イ. the effects of sitting are less serious for men than for women.
  - ロ. sitting at work is less harmful than sitting during leisure time.
  - ハ. the negative effects of sitting appear after about 14 years.
  - ニ. sitting for 3 hours or less has few negative effects on health.
7. The underlined word "quest" (paragraph 13) is closest in meaning to
- イ. care
  - ロ. claim
  - ハ. reason
  - ニ. search
8. James Levine would probably agree that
- イ. inactivity influences mental as well as physical health.
  - ロ. there is little we can do to solve the problem of inactivity.
  - ハ. small movements do not really help people to lose weight.
  - ニ. sitting is worse for people's health than lying down.
9. The most appropriate title for this passage is
- イ. Exercise Techniques for a Healthy Body.
  - ロ. Patterns of Activity in Modern America.
  - ハ. Sitting Still is Harmful to Your Health.
  - ニ. The Health Benefits of Inactivity.

II. 次の文を読み、下記の1～9それぞれに続くものとして、本文の内容ともっともよく合致するものを、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。

One of the biggest obstacles to taking on “impossible tasks” is that others are often quick to tell you they can’t be accomplished. It is tough to address a big problem. But once you decide to take it on, it is equally hard to break out of traditional approaches to solving it. This is another place where it is helpful to break a few rules. The following exercise forces people to do this in a surprising way. First, come up with a problem that is relevant for the particular group. For example, if it is a group of executives in the \*utility business, the topic might be getting companies to save energy; if it is a theater group, the problem might be how to attract a larger audience; and if it is a group of business students, the challenge might be to come up with a cool, new business idea. Break the group into small teams and ask each one to come up with the best idea and the worst idea for solving the stated problem. The best idea is something that each team thinks will solve the problem brilliantly. The worst idea will be ineffective, unprofitable, or will make the problem worse. Once they are done, they write each of their ideas on a separate piece of paper, one labeled BEST and one labeled WORST. When I do this exercise, I ask participants to pass both to me, and I proceed to scrap the BEST ideas. As they have spent a lot of time generating these great ideas, they are both surprised and not too happy.

I then redistribute the WORST ideas. Each team now has an idea that another team thought was terrible. They are instructed to turn this bad idea into a wonderful idea. They look at the horrible idea that was passed their way and quickly see that it really isn’t so bad after all. In fact, they often think it is marvelous. Within a few seconds someone always says, “Hey, this is a great idea!”

I once did this exercise with a utility company, asking teams to come up with an idea for saving energy. One of the “worst ideas” the teams came up with was to give each employee a quota for how much energy he or she used and to charge extra for going over that \*\* allotment. They thought this was a pretty silly idea. The team that received this idea turned it into an idea that is really worth considering, in which employees *do* have a quota for how much energy they use. If they use less

they get money back, and if they use more they are charged for it. They could even sell energy credits to their co-workers, giving them an even larger incentive to save electricity.

I also did this exercise with the staff responsible for putting on arts events at Stanford. One of the teams charged with finding ways to bring in a larger audience came up with the “bad” idea of putting on a staff talent show. This is seemingly the opposite of what they do now—bringing in first-rate talent from around the world. The next team turned this idea upside down. They interpreted this much more broadly and proposed a big fund-raiser, where the professors and staff across the university would display their diverse talents. This would very likely bring in lots of people who don’t normally go to performing arts events and would help build awareness for their other programs.

When the challenge was to come up with the worst business idea, the suggestions were boundless. One group suggested selling bikinis in Antarctica, one recommended starting a restaurant that sells cockroach sushi, and one proposed starting a heart attack museum. In each of these cases, these bad ideas were transformed into pretty interesting ideas that deserved some real consideration. For example, the group that was tasked with selling bikinis in Antarctica came up with the slogan “Bikini or Die.” Their idea was to take people who wanted to get into shape on a trip to Antarctica. By the end of the hard journey, they would be able to fit into their bikinis. The group that needed to sell cockroach sushi came up with a restaurant called La Cucaracha (The Cockroach) that made all sorts of exotic sushi using nontraditional but nutritious <sup>\*\*\*</sup> ingredients and targeted adventurous diners. The group given the challenge of starting a heart attack museum used this idea as the starting point for a museum devoted entirely to health and preventative medicine. All groups came up with compelling business names, slogans, and commercials for these ventures.

This exercise is a great way to open your mind to solutions to problems because it demonstrates that most ideas, even if they look silly or stupid on the surface, often have at least a seed of potential. It helps to challenge the assumption that ideas are either good or bad, and demonstrates that, with the right frame of mind, you can look at most ideas or situations and find something valuable. For



example, even if you don't start the "Bikini or Die" excursion to Antarctica, this is an interesting starting point for ideas that might be more practical.

\*utility : ガス, 水道, 電気などインフラにかかわる

\*\*allotment : 割り当て

\*\*\*ingredients : 食材

1. One of the author's main purposes is to encourage people to solve problems
  - イ. more quickly and efficiently.
  - ロ. from a business perspective.
  - ハ. without breaking any rules.
  - ニ. that seem difficult or impossible.
  
2. After each team submits their "best" and "worst" ideas for solving a particular problem, the author begins by
  - イ. examining the worst ideas for their effectiveness.
  - ロ. totally ignoring the best ideas.
  - ハ. choosing the best ideas and redistributing them.
  - ニ. asking teams to consider a new problem.
  
3. One of the "worst ideas" for saving energy at the utility company was changed in a way that allowed employees to
  - イ. get paid for the energy they don't use.
  - ロ. set their own energy quotas.
  - ハ. charge other employees for the extra energy they use.
  - ニ. use as much energy as they need.
  
4. The author mentions the staff talent show at Stanford as an example of how
  - イ. training exercises are not always successful.
  - ロ. even ordinary people have special talents.
  - ハ. universities can be good at raising money.
  - ニ. a good idea can grow from a bad one.

5. The underlined word "boundless" (paragraph 5) is closest in meaning to
- イ. unacceptable
  - ロ. unclear
  - ハ. unlimited
  - ニ. unsurprising
6. The idea of selling bikinis in Antarctica was transformed into a plan for people to
- イ. lose weight by taking a hard trip.
  - ロ. wear summer clothes on a package tour.
  - ハ. get into shape by wearing bikinis.
  - ニ. design bikinis suitable for cold weather.
7. The underlined word "compelling" (paragraph 5) is closest in meaning to
- イ. attractive
  - ロ. boring
  - ハ. common
  - ニ. profitable
8. The passage suggests that one of the best ways to approach a hard task is to
- イ. be open to an unusual solution.
  - ロ. work with lots of other people.
  - ハ. ignore one's worst ideas.
  - ニ. do various logical thinking exercises.
9. The most appropriate title for this passage is
- イ. How to be a Creative Thinker.
  - ロ. Why Your Best Ideas are Your Worst Ones.
  - ハ. Training for Creative Problem-Solving.
  - ニ. Creativity in the Business World.

Ⅲ. 次の1～8それぞれの空所を補うの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. The lawyer brought up new evidence to counter the opinion (        ) earlier in the trial.

イ. given

ロ. giving

ハ. in giving

ニ. to give

2. (        ) every major karate title, Kaori Maeda retired from international competition.

イ. Having won

ロ. In winning

ハ. To have won

ニ. While winning

3. Mary got her driving license in Japan, so she is used to (        ) on the left.

イ. be driving

ロ. drive

ハ. driving

ニ. have driven

4. (        ) I didn't recognize Carly Simon. But when she started to talk I instantly recalled the dinner we had enjoyed together last year.

イ. At first

ロ. First

ハ. Firstly

ニ. First of all

5. On our last night in Japan, we had a farewell party with our host at a ( ) restaurant.

- イ. near
- ロ. nearby
- ハ. nearest
- ニ. nearly

6. ( ) a kid, I used to eat breakfast every day. But now that I work the night shift, I find myself sleeping until lunchtime.

- イ. As
- ロ. Even
- ハ. Since
- ニ. Then

7. In spite of the stricter regulations put in place in recent years, automobile crashes remain ( ) far the leading cause of death and injury in our country.

- イ. as
- ロ. by
- ハ. in
- ニ. too

8. I stayed up all night studying for an exam, only ( ) the next day that it had been postponed.

- イ. finding out
- ロ. found out
- ハ. having found out
- ニ. to find out

IV. 次の Harry と Sally の一連の会話を読み、(1)～(6)それぞれの空所を補うの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。

Harry is talking with Sally at a coffee shop about a new reading device.

Harry: Sally, have you read any good books lately?

Sally: Actually, I travel a lot and really have no time for books.

Harry: Can't you read at the airport or on the airplane?

Sally: ( 1 )

Harry: I know what you mean. I had the same problem.

Sally: ( 2 )

Harry: Yes. I still read, but not a book as you imagine it.

Sally: What do you mean?

Harry: Well, I read books off an \*e-reader.

Sally: ( 3 )

Harry: It's a small electric book reader that is light and holds many books.

Sally: Really.

Harry: It's also very easy to use. You can order books within minutes.

Sally: That's convenient. Are the books expensive?

Harry: ( 4 )

Sally: That sounds good. Tell me more.

Harry: Well, I sometimes take mine to meetings and read it if I have nothing important to say.

Sally: ( 5 )

Harry: I guess so. But I can follow the flow of the meeting while I read.

Sally: Is there anything else I should know?

Harry: Hmm. Mine did freeze once and I couldn't restart it right away.

Sally: So what did you do?

Harry: I called the company and they immediately sent me a new one.

Sally: ( 6 )

Harry: I was able to restart it, so I sent the new one back.

Sally: E-readers sound pretty neat—I might get one myself.

\*e-reader : 電子書籍リーダー

- (1) イ. I guess so. I just don't like to read.  
ロ. Actually, I did read an interesting article in the newspaper.  
ハ. There just doesn't seem to be anything worth reading these days.  
ニ. Yes, but books are heavy and they take up too much space in my luggage.
- (2) イ. How did you solve it?  
ロ. You sound like you've solved it.  
ハ. You still seem to have this problem.  
ニ. Can I help you solve this problem?
- (3) イ. I can't even imagine owning one of those.  
ロ. An e-reader? I still don't know what you're talking about.  
ハ. As I said, I like to travel light.  
ニ. I once bought one but couldn't figure out how to use it.
- (4) イ. Yes. That's the part I don't like.  
ロ. Well, convenience comes at a price.  
ハ. Actually, e-reader prices are cheaper than bookstore prices.  
ニ. I have never had a problem buying books for my e-reader.
- (5) イ. You seem to understand this device really well.  
ロ. Then I definitely want to buy one.  
ハ. Shouldn't you be paying attention to the boss?  
ニ. Is it okay to do your own work during meetings?
- (6) イ. They seem to offer good aftercare.  
ロ. Really? What did you do with the broken one?  
ハ. Are you still satisfied that the e-reader is a good product?  
ニ. They should have given you a few free books for the inconvenience.

V. 次の空所(1)~(6)それぞれに適切な1語を補い, 英文を完成せよ。解答は解答用紙の  
所定欄にしるせ。

In \*extemporaneous speaking, you speak from a general outline, but you do not have the exact wording in ( 1 ) of you or in memory. You have rehearsed the speech ( 2 ) that you know key ideas and their organization, but not to the degree that the speech sounds memorized.

An extemporaneous style is conversational; it gives your audience the impression that the speech is being created ( 3 ) they listen to it, and to some extent it is. An extemporaneous speech sounds spontaneous rather ( 4 ) fully prepared in advance. The extemporaneous method reflects the advantage of a well-organized speech delivered in an interesting and vivid manner.

You develop an extemporaneous style by first rehearsing your speech, using extensive notes. As you continue to rehearse, try to rely less on your notes, but don't try to memorize your message word ( 5 ) word. After going over your speech a few times, you will rely less on your notes and focus ( 6 ) on adapting your message to your listeners. The final draft of your notes may be an outline of a few key words and essential facts or statistics that you want to remember.

\*extemporaneous : 即興的な

【以下余白】