

平成22年度(前期日程)

入学者選抜学力検査問題

英 語

(英語Ⅰ・英語Ⅱ・リーディング・ライティング・
オーラルコミュニケーションⅠ・オーラルコミュニ
ケーションⅡ)

試験時間 120分

文学部, 教育学部, 法学部, 医学部,
工学部(物質生命化学科及び社会環境工学科を除く)

問 題	ページ
I ~ IV	1 ~ 8

注 意 事 項

1. 試験開始の合図があるまで、この冊子を開いてはいけません。
2. 各解答紙に志望学部・受験番号を必ず記入しなさい。
なお、解答紙には、必要事項以外は記入してはいけません。
3. 試験開始後、この冊子又は解答紙に落丁・乱丁及び印刷の不鮮明な箇所などがあれば、手を挙げて監督者に知らせなさい。
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I 次の英文を読んで設問に答えなさい。

Exercise has long been said to be an overall cure for everything that troubles you. For better health, simply walk for 20 or 30 minutes a day, supporters say — and you don't even have to do it all at once. Count a few minutes here and a few there, and just add them up. Or wear a pedometer* and keep track of your steps. However you manage it, you will lose weight, get your blood pressure under control and reduce your risk of osteoporosis.*

If only it were so simple. While exercise has undeniable benefits, many, if not most, of its powers have been oversold.⁽¹⁾ Sure, it can be fun. It can make you feel energized. And it may lift your mood. But before you turn to a fitness program as the solution to your particular health or weight concern, consider what science has found.

(ア) exercise, such as walking, can reduce the risk of diabetes* in overweight and inactive people whose blood sugar is starting to rise. That outcome was shown in a large federal study in which participants were randomly assigned either to an exercise and diet program or to take a diabetes drug. Despite trying hard, those who dieted and worked out lost very little weight. But they did manage to maintain a regular walking program, and fewer of them went on to develop diabetes.

Exercise also may reduce the risk of heart disease, though the evidence is surprisingly mixed. Most of the heart protection appears to be realized by people who go from being inactive to being moderately active, usually by walking regularly. More intense exercise has been shown to provide only slightly (イ) benefits. Yet the data from several large studies have not always been clear, because those who exercise tend to be very different from those who do not.

Active people are much less likely to smoke; they're thinner and they eat differently than inactive people. They also tend to be more educated, and education is one of the strongest predictors of good health in general and a longer life. As a result, it is impossible to know with confidence whether exercise prevents heart disease or whether people who are less likely to get heart disease are also more likely to be exercising.⁽²⁾

Scientists have much the same problem in understanding the relationship between exercise and cancer. The same sort of studies that were done for heart disease find that people who exercised had lower rates of colon* and breast cancer. But whether that result is (ウ) or effect is not well established.

Exercise is often said to delay osteoporosis. Yet even weight-bearing activities like walking, running or lifting weights have not been shown to have that effect. Still, in studies in which elderly people were randomly assigned either to exercise or maintain their normal routine, the exercisers were less likely to fall, perhaps because they got stronger or developed

better balance. Since falls can lead to fractures* in people with osteoporosis, exercise may prevent broken bones — but only (エ).

And what about weight loss? Lifting weights builds muscles but will not make you burn more calories. The muscle you gain is extremely small (オ) with the total amount of muscle in the body. And muscle has a very low metabolic rate when it's at rest.

Jack Wilmore, an exercise researcher at Texas A & M University, calculated that the average amount of muscle that men gained after a serious 12-week weight-lifting program was two kilograms. That added muscle would increase the metabolic rate by only 24 calories a day.

Exercise alone, in the absence of weight loss, has not been shown to reduce blood pressure. Nor does it make much difference in cholesterol levels. Weight loss can lower blood pressure and cholesterol levels, but if you want to lose weight, you have to diet as well as exercise. Exercise alone has not been shown to bring sustained weight loss. Just ask Steven Blair at the University of South Carolina. He runs every day and even runs marathons. But, he adds, "I was short, fat and bald when I started running, and I'm still short, fat and bald. Weight control is difficult for me. I fight the losing battle."

The difficulty, Dr. Blair says, is that it's much easier to eat 1,000 calories than to burn off 1,000 calories with exercise. As he relates, "An old football coach used to say, 'I have all my assistants running five miles a day, but they eat 10 miles a day.'"

注：pedometer 歩数計. osteoporosis 骨粗しょう症(骨が萎縮し, もろくなる状態).
diabetes 糖尿病. colon 結腸. fracture 骨折.

(問 1) 文中の空欄(ア)~(オ)に入れるのに最も適当な語をそれぞれ(A)~(D)の中から選び, 記号で答えなさい。

- | | | | | |
|-----|---------------|--------------|----------------|--------------|
| (ア) | (A) Moderate | (B) Risky | (C) Stressful | (D) Vigorous |
| (イ) | (A) easier | (B) greater | (C) harder | (D) worse |
| (ウ) | (A) procedure | (B) affect | (C) suspect | (D) cause |
| (エ) | (A) barely | (B) recently | (C) indirectly | (D) usually |
| (オ) | (A) as | (B) compared | (C) than | (D) provided |

(問 2) 下線部(1), (2)を日本語に直しなさい。

(問 3) 下線部(3)を "it" が指すものを明らかにして日本語に直しなさい。

(問 4) 下線部(4)はどういうことか, 本文に即して日本語で説明しなさい。

II Read the following passage and answer the questions in English.

What did the universe look like when it was only 2 to 3 billion years old? Astronomers used to think it was a pretty simple place containing relatively small, young, star-forming galaxies.* Researchers now are realizing that the truth is not that simple. Even the early universe was a wildly complex place. Studying the universe at this early stage is important in understanding how the galaxies near us were assembled over time. Jiasheng Huang (Harvard-Smithsonian Center) said, “It looks like vegetable soup! We’re detecting galaxies we never expected to find, having a wide range of properties we never expected to see.” “It’s becoming more and more clear that the young universe was a big zoo with animals of all sorts,” said Ivo Labbé, lead author on the study announcing this result.

Using the Infrared Array Camera (IRAC) aboard NASA’s Spitzer Space Telescope, the astronomers searched for distant, red galaxies in the Hubble Deep Field South—a region of the southern sky previously observed by the Hubble Space Telescope. Their search was successful. The IRAC images displayed about a dozen very red galaxies at distances of 10 to 12 billion light-years. Those galaxies existed when the universe was only about one-fifth of its present age of 14 billion years. Analysis showed that the galaxies exhibit a large range of properties. “Overall, we’re seeing young galaxies with lots of dust, young galaxies with no dust, old galaxies with lots of dust, and old galaxies with no dust. There’s as much variety in the early universe as we see around us today,” said Labbé. The team was particularly surprised to find a curious breed of galaxy never seen before at such an early stage in the universe—old, red galaxies that had stopped forming new stars altogether. Those galaxies had rapidly formed large numbers of stars much earlier in the universe’s history, raising the question of what caused them to “die” so soon. The unpredicted existence of such “red and dead” galaxies so early in time challenges scientists who model galaxy formation.

“We’re trying to understand how galaxies like the Milky Way assembled and how they got to look the way they appear today,” said Giovanni Fazio, a co-author on the study. “Spitzer offers capabilities that Hubble and other instruments don’t, giving us a unique way to study very distant galaxies. These galaxies eventually became the ones we see around us now.”

注：galaxy 銀河。

1. How old is the universe now?
2. When is a galaxy considered to be “dead”?
3. Why do scientists need to study the early universe?
4. About how many red galaxies did the IRAC show?
5. Why does Giovanni Fazio think that Spitzer’s capabilities are superior to Hubble’s?
6. Find two expressions which illustrate that the early universe was wildly complex and had a wide range of properties.

III

次の文の日本語で書かれた部分(1)～(4)を英語に直しなさい。

In Ethiopia, there is one doctor for every 40,000 people and never enough medicine. In a nation with a per capita income* of \$220, modern treatment is reserved largely for the rich. But at Mother Teresa's Mission, Dr. Rick Hodes devotes himself to healing the poor.

Hodes, 55, the senior attending physician at the mission* in Addis Ababa says, “私は他の⁽¹⁾だれも関心を示さないような人々を助けることが好きなのです。” A native of Long Island who trained at Johns Hopkins University, he sees 20 adults and children a day at no cost to them. Many travel hundreds of miles from remote villages, sometimes in the backs of trucks, to his one-room clinic, where he stops at nothing to get them what they need.

If his patients require hard-to-find medication, he hunts it down. He arranges free surgeries abroad. He moves kids who need special care into his own modest home (three bedrooms inside, three in an outbuilding) or another that he rents nearby. “Whenever half a mattress is free,” he says, “I take in someone new.” 路上生活をしている子どもいれば、食べ物⁽²⁾を子供に与える余裕のない家の子もいる。 In addition to providing medical treatment, he looks after the children's education, lining up donors to pay for both.

“彼ならアメリカで開業しても十分やっていくことができたでしょう。” But he chose to do something so much harder,” says Dr. Irving Fish at New York University Medical School, who visited the mission recently. “He's totally selfless. I've really never met anyone like him.”

ほとんどのアメリカ人が当然のことと思っている快適さがなくても、彼はやっていける。⁽⁴⁾ He has all but given up on finding a partner with whom to share his life and work. But to him, these aren't sacrifices. To quote his favorite passage from the Talmud, ancient writings on Jewish law: “Saving one life is like saving an entire world.”

注：per capita income 一人あたりの年間収入。

mission (教会運営による貧困者や社会的弱者のための)社会福祉施設。

IV

Read the following conversation. For questions 1–5, choose the best answer (A, B, C or D). For questions 6 and 7, answer in English.

Pat: Watch out! You almost hit that guy. Would you please stop using your cell phone while you're driving? You'll cause an accident, and anyway, it's illegal, you know.

Ted: OK, wait a minute. I'm almost finished. Now, what's the big deal? I can handle it. Haven't you ever heard of multi-tasking? I can do at least two things at a time, no problem.

Pat: Yeah, that's what they all say — until they have an accident. Really, it's dangerous. Why do you think it's illegal?

Ted: That's a good question. I really don't think it should be. I mean, think about it: What's the difference between talking to someone on a phone and talking to someone in your car?

Pat: Oh, come on. There's a big difference. For one thing, when you use the phone, you have to drive with one hand. That's definitely unsafe.

Ted: Yeah, maybe, but now there's technology that lets you clip something to your ear, so you can talk without holding the phone. Both hands are free to steer. What's wrong with that?

Pat: Well, yes, but I think there's more to it than just steering with both hands.

Ted: Like what?

Pat: Well, I think it's a question of where your mind is. When you talk to someone who is in the car, your mind stays in the car. You're in the same location. But, when you're on the phone, your mind has a tendency to go where they are located.

Ted: Sorry, I'm not following you.

Pat: Well, if you're talking to someone who is at home in the kitchen, then your mind tends to drift to where they are. You start to visualize yourself actually there in the kitchen with them. You can momentarily forget you're driving. It's easy to lose your concentration. I mean, just a few seconds; that's all it takes.

Ted: Hmm, I never looked at it that way before. Let me think about it some more.

Pat: Well, don't think about it too hard or we'll really have an accident! By the way, I think I hear your phone ringing.

Ted: Uh-oh. Um, would you answer it for me?

1. What is the main reason why Pat wants Ted to stop using his cell phone while driving?
 - (A) It's dangerous.
 - (B) It's illegal.
 - (C) It's impolite.
 - (D) It's noisy.

2. What reason does Ted give for why he thinks using a cell phone while driving is OK?
 - (A) Because he has the newest technology.
 - (B) Because he's a multi-tasker.
 - (C) Because he's a very safe driver.
 - (D) Because it's legal.

3. What does "I'm not following you" [underline (2)] mean?
 - (A) I can't answer you.
 - (B) I can't agree with you.
 - (C) I can't do what you want me to do.
 - (D) I can't understand you.

4. What does Pat mean by "that's all it takes" [underline (3)] ?
 - (A) It is easy to drive safely.
 - (B) It is easy to have an accident.
 - (C) It is easy to keep your concentration.
 - (D) It is easy to use a cell phone.

5. What happens at the end to show that Ted's thinking may have changed?
 - (A) Pat doesn't answer Ted's question.
 - (B) Pat hears his phone ringing.
 - (C) Ted hesitates to answer his phone.
 - (D) Ted really has an accident.

6. Finish Ted's sentence [underline (1)] with the best word.

I really don't think it should be _____.

7. What is the expression in the conversation that is used to ask for some examples?

SOURCES

- I Kalota, Gina. “Does Exercise Really Keep Us Healthy?” *New York Times*. New York Times, 1 Aug. 2008. Web. (一部変更)
- II “Press Release 2005-08: Young Universe.” *Exploring the Universe*. Harvard-Smithsonian Center for Astrophysics, 9 March 2005. Web. (一部変更)
- III Miller, Kenneth. “Dr. Rick Hodes Helps the Children of Ethiopia.” *Reader’s Digest*. Reader’s Digest, Aug. 2008. Web. (一部変更)
- IV 書き下ろし