

平成 27 年度 入 試  
個別学力試験問題(前期日程)

英 語

学 部	問 題
法文学部, 教育学部, 総合理工学部, 生物資源科学部	1, 2, 4, 5 -A
医学部医学科	1, 2, 3, 4, 5 -B

注 意

1. 問題紙は指示があるまで開いてはいけません。
2. 問題紙は 8 ページ, 解答用紙は法文学部, 教育学部, 総合理工学部, 生物資源科学部受験生は 1 枚, 医学部医学科受験生は 2 枚です。指示があってから確認し, 解答用紙の所定の欄に受験番号を記入してください。
3. 法文学部, 教育学部, 総合理工学部, 生物資源科学部受験生は 1, 2, 4, 5 -A の問題を, 医学部医学科受験生は 1, 2, 3, 4, 5 -B の問題を解答してください。
4. 答えはすべて解答用紙の所定のところに記入してください。
5. 解答用紙は持ち帰ってはいけません。
6. 試験終了後, 問題紙は持ち帰ってください。

1

次の英文を読んで問いに答えなさい。(共通問題)

If you were walking in the woods, and suddenly the path split into two different roads, which one would you choose: the one covered with grass that few people had taken or the cleared one that many others had already walked down? Anyone who has read the poet, Robert Frost, probably recognizes this situation from one of his most famous poems, “The Road Not Taken.” After carefully considering both roads, the speaker of the poem chooses the grassy one, or “the one less traveled by.” Then he says that this choice “has made all the difference.”

Most American school children are taught this poem, often with a lesson that’s actually simpler than the poem itself. The lesson goes something like this: we can have an ordinary life by making the same choices others make or we can have a richer, more satisfying life by taking risks and choosing to be different. Or as the poem says, taking the less traveled road can make all the difference.

“To make the difference” is an expression that always has a positive meaning in English, whether you’re talking about something big or small. If a man tells his wife, for example, that marrying her has made all the difference, he’s saying that he’s very happy he married her. Or in the case of something small, you might say that using honey instead of sugar in a cake recipe makes the difference. In other words, the honey is what makes the cake taste so good. In Frost’s poem, of course, saying that the less traveled road has made all the difference suggests that the speaker has made the right choice.

I suppose this poem, and particularly the way it’s taught in school, expresses part of the American Dream. That is, the idea that if you have the courage to be different and to follow your own path, life will be more rewarding. It’s fairly common for teachers or parents to tell children, “If you believe in yourself, you can do anything: become a doctor, a successful

musician, or even the President of the United States. It's up to you." But is this really true? How many of us can actually become the President? Or even <sup>(3)</sup> a successful musician? There are a lot of very talented actors, musicians, and writers in the States who never experience success. And plenty of lawyers and Ph.D.'s who can't find a good job.

Of course, the American Dream sounds good and for some people it works, especially as a type of positive thinking. But it can be a burden too. <sup>(4)</sup> I remember one friend saying he hated being told he could do anything when he was growing up. He didn't want to be a doctor or the President and being pushed to do something special made him feel guilty for wanting a more ordinary life. After all, some people are happier on the well-worn path.

I think coming to Japan has helped me appreciate the value of being ordinary. Of course I've met lots of extraordinary people here as well. But it's OK to be ordinary in Japan, even desirable. I was struck by an advertising campaign for beer a few years ago. The ad basically said, this is the beer that ordinary people drink. And that was enough to sell it.

Of course I'll never know for sure which path is better. In coming to Japan, I suppose I chose the less traveled road. Though it has made all the <sup>(5)</sup> difference, now that I'm here, that ordinary, well-worn path looks awfully good to me at times. But then, life is full of ironies, isn't it?

(Kay Hetherly, *American Pie* より一部改変)

1. 下線部(1)の具体的内容を、本文にそって日本語で説明しなさい。
2. 下線部(2)を日本語に直しなさい。
3. 下線部(3)の具体的内容を、本文にそって日本語で説明しなさい。
4. 下線部(4)を日本語に直しなさい。
5. 下線部(5)を日本語に直しなさい。

2

次の英文を読んで問いに答えなさい。(共通問題)

I just finished my 23rd year of teaching at universities. There have been several changes in the way students approach their classes in that time. The most noticeable is that when I started teaching, students took notes in notebooks, but now almost every desk has a laptop on it when I give a lecture.

There seem to be a lot of obvious benefits to taking notes on a computer. For one, it is easy to save the notes in a place where you can find them later. For another, you will be able to read your notes later. My own handwriting is terrible, so it is nice to have a tool that will allow me to read my notes later.<sup>(1)</sup>

Before we encourage every student to bring a laptop to class, though, it is worth checking out a study in 2014 by two psychologists. They compared college students' performance on tests following exposure to material. The students were assigned either to take notes by hand or using a laptop.

In the first study, students watched a TED talk. They took notes during the talk. Then, they engaged in other activities for about 30 minutes. Finally, they were given a quiz about the lecture. The quiz contained both factual questions and conceptual questions that required some understanding of the subject matter. Students did about equally well on the factual questions regardless of how they took notes.<sup>(2)</sup> However, the students did much better on the conceptual questions when they took notes by hand.

The experimenters compared the content of people's notes to the transcript of the lecture the student heard. When people typed their notes on a laptop, they were much more likely to copy what people said directly rather than writing their impressions of it. That is, people writing out their notes had to think more deeply about the content of what they heard than those people who were just typing.

The experimenters expanded on this finding<sup>(3)</sup> in two other studies. In one study, they instructed people using the laptops to take good notes rather than just writing down what they heard. Even when people were given these

instructions, they still had a greater tendency to type what they heard than people who were taking notes by hand. As before, the people who used the laptops did more poorly on a test of conceptual knowledge than those who took notes by hand.

In a third study, students were tested one week after hearing the initial <sup>(4)</sup>lecture. In this study, students had a chance to read over their notes before the test. The idea was that if students took really detailed notes on the laptop, then perhaps those notes would be more valuable a week after the lecture than they were immediately afterward. Participants who reviewed their notes still did better if they took notes by hand than if they took notes on the laptop. Interestingly, the students did equally poorly regardless of the type of notes they took if they were not able to study their notes before the test.

Putting all of this together, it suggests that there is real value in having to think about the material in the process of taking notes. It is because handwriting is slow and effortful that people have to think more clearly about what they want to write down rather than copying down what is being said by rote. In addition, there is real value to studying later. Just taking good notes is not enough to be able to remember the information later. It is also <sup>(5)</sup>important to go back over your notes and make sure that you think about the information again after being exposed to it the first time.

(Art Markman, "If You Are Going to Take Notes, Do It By Hand"より一部改変)

[注] TED 米国で講演会を主催している団体 by rote 機械的に

1. 下線部(1)を日本語に直しなさい。
2. 下線部(2)を日本語に直しなさい。
3. 下線部(3)の具体的内容を、本文にそって日本語で説明しなさい。
4. 下線部(4)で明らかになったことを、本文にそって日本語で説明しなさい。
5. 下線部(5)を日本語に直しなさい。

3

次の英文を読んで問いに答えなさい。(医学部医学科用問題)

Jean McFee Raichle, 94, is a remarkably cheerful woman. She lives in an assisted living center in Seattle staffed by aides who are warm and caring. She exists in the moment, mostly untroubled by her Alzheimer's disease. Only once in the past several years has her daughter, Marilyn Raichle, witnessed her become alarmed. That was when Marilyn was having problems at work and called to tell her mother about it. "She could hear the stress in my voice, and I could feel her becoming anxious," said Ms. Raichle, 63. "I saw that she was picking up on my emotions, and I just stopped right there."

Ms. Raichle had stumbled onto a phenomenon experienced by many people <sup>(1)</sup> with relatives who have Alzheimer's: emotional contagion. The term refers to the way we sense the emotions of others through their facial expressions, tone of voice or body language, and reflect them without being conscious of doing so. Babies have this innate ability to catch and mirror the emotions of those around them. And it's not just humans who share this capacity: other primates, rodents and birds appear to have it, too, according to several scientific studies.

Now, new research finds that emotional contagion is heightened in people with mild cognitive impairment (MCI) and Alzheimer's. And the greater the level of cognitive deterioration, the more noticeable this emotional mirroring seems to be. Several explanations may account for the finding, <sup>(2)</sup> said Virginia Sturm, an assistant professor of neurology at the University of California, San Francisco, and lead author of the report. As the hippocampus—the brain region that helps control emotional responses—atrophyes in Alzheimer's disease, emotional sensitivity may be heightened, she speculated. And the <sup>(3)</sup> brain network associated with emotional connection and empathy may become more active as pathways involved in memory and internal reflection become impaired. "These networks may have a reciprocal relationship" that's not yet

understood, Dr. Sturm said.

In their research, the San Francisco researchers asked caregivers, friends or relatives to fill out a questionnaire rating the emotional responsiveness of 62 people with MCI and 64 with Alzheimer's; 111 people with cognitive concerns served as a control group. Then, all the participants in the study received MRI scans of their brains. The scans showed that higher levels of emotional contagion were associated with atrophy in the hippocampus and other temporal lobe regions, predominantly on the right side. Those regions are involved in several social and emotional functions, including assessing the trustworthiness and perspectives of other people. "Deterioration in these regions may make people less able to identify the emotions of others in pencil and paper tasks, but they're still able to maintain emotional reactions and connections via other routes that don't depend on higher-level cognition," Dr. Sturm said.

Mary Sano, director of the Alzheimer's Disease Research Center at Mount Sinai Medical Center in New York City, called the study "fascinating" and said, "We talk so much about the cognitive loss in MCI and Alzheimer's, but in fact the emotional disturbance is equally problematic." Irritability or emotional volatility in people with MCI and Alzheimer's are common; these may arise because "someone is picking up an emotional cue that they can't put into a cognitive context and is therefore misunderstood," Dr. Sano said. Dr. Dylan Wint, director of education programs at the Cleveland Clinic's Lou Ruvo Center for Brain Health in Las Vegas, said, "I often tell caregivers that as facts start to fade, feelings and tone of your interactions become more important. A great deal of what our higher-order cognitive function does is inhibit or modulate our lower-level responses." Dr. Wint continued, "As these higher-order functions fail, there's less of a dampening effect and our instinctual responses rise to the surface."

What can caregivers do? Dr. G. Allen Power, a geriatrician in Rochester, talks to groups around the country about this issue. "We have to be very

aware of our body language when we're with someone with dementia," he said. "If we're not, they'll pick up on it and it will begin to shut them down. If we are calm, we can bring people with dementia to a calm place," he explained, "and if we are anxious, we can make them anxious." Also, recognizing that (6) people with dementia live in a world filled with emotion can help caregivers understand the importance of identifying feelings that may underlie a patient's behavior and respond to those, meeting needs that someone is no longer able to express directly.

If you're getting frustrated with someone with dementia, try stopping and counting to 10, Dr. Power suggested. Think of a positive quality they have, and focus on that. "Any mind trick you can use to get a place of acceptance and being nonjudgmental makes a difference, because the person you're caring for will sense that and respond to that," he said.

(Judith Graham, "Empathy Without Boundaries"より一部改変)

[注]	Alzheimer's disease	アルツハイマー病	primates	霊長類
	rodents	(ネズミ, リスなどの) <sup>げっし</sup> 齧歯動物	impairment	機能障害
	deterioration	低下, 悪化	atrophy	萎縮(する)
	reciprocal	相互の	MRI	磁気共鳴映像法
	temporal lobe	側頭葉	volatility	不安定さ
	dampening	抑制する	geriatrician	老年病専門医
	dementia	認知症		

1. 下線部(1)の具体的な内容を, 本文にそって日本語で説明しなさい。
2. 下線部(2)の具体的な内容を, 本文にそって日本語で説明しなさい。
3. 下線部(3)を日本語に直しなさい。
4. 下線部(4)を日本語に直しなさい。
5. 下線部(5)が生じるメカニズムについて, Dr. Wint はどのように考えているか, 日本語で説明しなさい。
6. 下線部(6)を日本語に直しなさい。

4 次の日本文の下線部(1), (2)を英語に直しなさい。(共通問題)

最近、スマートフォンの画面を見ながら通りを歩いたり、階段を上り下りする若者を見かける。<sup>(1)</sup>時には、暗い夜道で自転車に乗りながら、小さい画面の文字を読んでいる姿を目にする。これは危険な行為である。

私はそういうものにはあまり興味がないが、それをよく使う人によると、いろんな機能が付いていて大変便利であるという。少し前に、多くの若者がスマートフォンを使って毎日何時間も過ごし、<sup>(2)</sup>読書をほとんどしないと聞いたことがある。それに費やす時間の大半が無駄であると言うつもりはないが、読書を通して得られる幅広い教養や貴重な経験を考えると、もったいない時間の過ごし方に思われる。

[注] スマートフォン smartphone

5 法文学部、教育学部、総合理工学部、生物資源科学部受験生はAの問題に、医学部医学科受験生はBの問題に答えなさい。

A. Which do you prefer, spending free time indoors or outdoors? In three to five English sentences, answer the question with reasons for your opinion.

B. 次の日本文の下線部(1), (2)を英語に直しなさい。

科学研究や、そのような科学研究の成果を文章にした科学論文においては、仮説とその仮説を検証できる観察データが必要不可欠である。観察と並び、<sup>(1)</sup>仮説、とりわけ検証可能で厳密な仮説を設定することの科学研究における重要さは、強調してもしすぎることはない。この仮説の設定が曖昧なこと、及び観察データで検証するという認識の欠如<sup>(2)</sup>という基本的な誤りが、事件の無用な拡大や対策の遅れをもたらすのではないかと思われる。

(津田敏秀『医学と仮説』より一部改変)

[注] 仮説 hypothesis