

広島大学 前期 医学部 歯学部

学 力 検 査 問 題

外 国 語 (英語)

リーディング・ライティング

(5問)

平成 26 年 2 月 25 日

自 15 時 20 分

至 17 時 20 分

答案作成上の注意

- 1 この問題冊子には、リーディング・ライティングの問題があります。総ページは 16 ページです。
- 2 解答用紙は 1 枚（表裏の 2 ページ）です。解答はすべてその解答用紙に記入しなさい。
- 3 受験番号は、解答用紙の所定の箇所に、必ず記入しなさい。
- 4 配付した解答用紙は、持ち出してはいけません。
- 5 試験終了後、問題冊子は持ち帰ってください。

- [I] 本文で紹介されている *vervet monkeys* (ベルベットモンキー) と *humpback whales* (ザトウクジラ) の行動に具体的に触れながら、本文の要旨を 220~240 字の日本語で説明しなさい。句読点と数字も字数に含めます。

You don't have to be a teenager to want to fit in at the school lunchroom. Some wild animals seem to follow similar monkey-see, monkey-do behavior to follow the crowd and find the best eats, new research finds.

"We're not as unique as we would like to think," said monkey study lead author Erica van de Waal, of the University of St. Andrews in Scotland. "We can find many of the roots of our behaviors in animals." For her study, 109 *vervet monkeys* living in groups in the wild were given a choice of food that the researchers had colored pink or blue. A harmless but awful flavor was added to one color for each group. After a few meals, the food was no longer flavored but the monkeys still would not eat the color they figured was bad. But that changed when some of them tried to fit in with a new group of monkeys. Blue-food eaters instantly switched when they moved to an area full of pink-food eaters, even though they had avoided pink food before. Pink eaters also changed when they moved to a blue-food area. The social pressure may be like "teenagers with a desperate need to be just like the other guys," said co-author Andrew Whiten, also of St. Andrews. Or it could be that the monkeys are learning to adapt to local custom, he said.

The researchers were surprised by the findings. They were only aiming to find out if mothers taught their young the same color food preference they learned, Whiten said. The next generation automatically ate the same as their mother, showing how food choice is learned. Just by luck, some blue-eating monkeys went to the pink-eating tribes and some pink-eating males went to blue tribes. And that is when the researchers saw peer pressure in action. Of the 10 migrating males, nine instantly ate what everyone else ate. The only holdout was the most powerful male who stuck to his previous diet. Van de

Waal said it could be the eat-what-locals-eat idea, but she favors the concept of social conformity and peer pressure. She figures the other males were trying to get in good with females, while the dominant male acted as “if he’s already in charge, why does he need to do like the others?”

In the 27-year humpback whale study, scientists began tracking an unusual feeding behavior in 1980. Until then, whales usually fed by blowing bubbles underwater to gather small fish, which don’t like to swim through bubbles. Then the whales would lunge upward and eat them. But in 1980, researchers saw one whale first strike the water loudly with its tail, making a big noise and giant splash before blowing bubbles, said researcher Jenny Allen, who used to be at St. Andrews. The number of whales doing that maneuver has climbed steadily and is now at 37 percent, she said. This new trick coincided with a dramatic drop in the number of herring^(注 1), which the whales like to eat. Allen said the technique, which might bring fish closer to the surface, seems to be passed down through the generations. This definitely appears to be something that is learned by copying more successful whales, she said.

Lori Marino of Emory University, who was not a part of either study, praised the research, saying it fits with other studies showing how many animals learn socially and how strong conformity is.

(Adapted from “Animals Just Follow the Crowd When It Comes to Eating, Study Says,” *The Japan Times*, 2013)

(注 1) herring ニシン

〔Ⅱ〕 次の対話を読んで、下の問いに答えなさい。

Tom is a student at a university in the United States and is meeting with his academic advisor, Professor Jones.

Tom: (knocking on the half-open door) May I come in?

Professor Jones: Ah, yes Tom, come on in. What can I do for you?

Tom: I (A) to ask something about the classes I'm taking next semester.

Professor Jones: Okay, am I right that this is connected to the fact that you didn't pass *Introduction to Academic Writing* last year? I don't think that's a particularly tough class, so I was (B) what happened there, you know?

Tom: Well, the thing is the class was in the first period, which is too early for a night person like me to be in class on time, and then I didn't get along (C) the teacher.

Professor Jones: So?

Tom: So I stopped going.

Professor Jones: Well, you know the saying: you've made your bed and now you have to lie in it.

Tom: Yeah, I realize that's my own fault really. I understand that I have to pass this course because it's a required class. So I need to take it again, but next semester I want to take *History of Psychology* as well. Then the problem is that both classes are offered at the same time on Friday morning.

Professor Jones: Okay, well it turns out you're quite fortunate and you don't really need to be concerned about the timetable clash. All we need to do is to transfer you to the other *Introduction to Academic Writing* group on Monday afternoon. You said *History of Psychology* is on Friday, right?

Tom: Yes, Friday.

Professor Jones: And you'll be able to make it every Monday at 3:00 p.m.,
(x) won't you?

Tom: Except that I usually have tennis practice at that time.

Professor Jones: Oh, come on now, Tom! Which is more important for you, becoming a better tennis player or passing the course? You'd better be more (D) about your studies. You do want to graduate, don't you?

Tom: Yeah, I guess I'd better follow your advice.

問 1 空欄(A)~(D)を補うのもっともふさわしい語句を下の(1)~(4)から一つ選び、それぞれ番号で答えなさい。

- (A) (1) am forbidden (2) fail
(3) have no time (4) would like
- (B) (1) expressing (2) surprising
(3) taking (4) wondering
- (C) (1) beside (2) for
(3) to (4) with
- (D) (1) psychological (2) punctual
(3) serious (4) silent

問 2 下線部(ア)~(エ)の意味として、もっともふさわしいものを下の(1)~(4)から一つ選び、それぞれ番号で答えなさい。

- (ア) (1) difficult (2) poor (3) solid (4) strong
- (イ) (1) forget (2) propose (3) remember (4) understand
- (ウ) (1) excited (2) interested (3) surprised (4) worried
- (エ) (1) get to class (2) prepare for class
(3) register for class (4) understand the class

問 3 波線部(1)の背後にある考えとして、もっとも妥当なものはどれか、下の

(1)~(4)から一つ選び、番号で答えなさい。

(1) People need to accept the consequences of their choices.

(2) People need to have clear goals in their lives.

(3) People need to relax in difficult situations.

(4) People need to sleep well at night.

問 4 次の問いに英語で答えなさい。

(1) Why is Tom reluctant to take *Introduction to Academic Writing* on Monday afternoon?

(2) How is Tom's timetable problem solved?

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〔Ⅲ〕 次の英文を読んで、下の問いに答えなさい。

The debate around immigration in America often touches on language. The fear of some Americans is that immigrants do not learn (and maybe do not want to learn) English. If many of them speak the same language and cluster geographically, they threaten to make America bilingual. If this happens, so goes the concern, they will inevitably make demands for more legal recognition of other languages, threatening English's status as a unifying force.

Americans know that this is an immigrant country. So why did previous waves of immigration not threaten English, while today's does? In the traditional story, immigrants back in the good old days wanted to, and did in fact, learn English. But this is not really so.

(1)
Immigrant languages probably persisted longer in America a century ago
(2)
than they do today. And one language in particular persisted in large, coherent pockets in America for more than half a century: German. German immigration to America peaked from around 1840 to 1880. Like most immigrants, Germans came to towns where their co-nationals had settled, so they built up big communities in cities like Milwaukee, Cincinnati and St. Louis.

So what did this immigrant community look like? Hard-working English learners who quickly dissolved in the great melting pot? Hardly. Miranda Wilkerson and Joseph Salmons studied just one town in southeastern Wisconsin, called Hustisford. They focused on the year 1910; German-speaking decreased fairly quickly in America after the First World War (1914-1918), for the obvious reasons. But before the war, German monolingual communities persisted for many decades after immigrants' arrivals.

Almost a quarter of Hustisford's population (over ten years old) was monolingual in German in 1910. Of that share, a third were born in America. Of the German monolinguals born abroad, a majority had been in America for

more than 30 years, having immigrated during the height of the German wave. In other words, in small-town America a century ago, it was perfectly (A) to grow up, or to live there for decades after immigrating, (B).

German was the single biggest and most concentrated foreign language on American soil after independence—until today. Almost five decades of immigration from Spanish-speaking countries has recreated something like the German situation. Some people feel that America’s “Anglo-American core” is threatened like never before. But for many reasons (hard to rank in importance), it is nearly impossible today to grow up in America without learning English. One study of more than 5,000 children in the Miami and San Diego areas (thick with Spanish-speakers) found that 94.7 percent of Latino middle-school children who had been born in America spoke English well. The researchers concluded that “knowledge of English is near universal, and preference for that language is dominant among most immigrant nationalities. On the other hand, only a minority remain fluent in the parental languages.”

(Adapted from “Immigration and Language: Stolz, Amerikaner zu sein,” *The Economist*, 2013)

問 1 下線部(1)の指す内容を、本文をふまえて日本語で簡潔に説明しなさい。

問 2 下線部(2)の説明として、本文ではドイツ語を例にどのように述べていますか。下の(ア)~(エ)から一つ選び、記号で答えなさい。

- (ア) 100年前のドイツ移民は同国者で形成する地域社会に住み、ドイツ語で生活していたので、現在より長い期間母国語を維持できた。
- (イ) 100年前のドイツ移民は同国者で形成する地域社会に30年以上住んでいたため、現在より長い期間母国語を維持できた。
- (ウ) 100年前はアメリカ政府が今ほど英語学習を強く奨励していなかったため、ドイツ移民は現在より長い期間母国語を維持できた。
- (エ) 100年前は出身国によって住む地域が決まっており、母国語での生活が奨励されていたので、ドイツ移民は現在より長い期間母国語を維持できた。

問 3 空欄(A)と(B)を補うのもっともふさわしい語句の組み合わせを下の(1)~(4)から一つ選び、番号で答えなさい。

- (1) (A) impossible (B) without knowing German
- (2) (A) difficult (B) without going to school
- (3) (A) possible (B) without learning English
- (4) (A) easy (B) without getting help from
German neighbors

問 4 本文をふまえ、今日のアメリカにおける移民について、もっとも適切に述べている英文を下の(1)~(4)から一つ選び、番号で答えなさい。

- (1) American-born immigrant children speak good English, and a majority of them do not master their parents' languages.
- (2) Immigrants have no necessity to learn English when moving to America since they have already mastered it in their countries of origin.
- (3) Immigrants now threaten Americans by increasing demands for making their languages official instead of English.
- (4) Immigrants speak only their mother tongues in their community and switch to English when talking to Americans.

[IV] 次の英文を読んで、下の問いに答えなさい。

Inside a lab^(注1) on the Stanford University campus here, students experienced what it might feel like to be a cow. They wore a virtual reality helmet and walked on hands and feet while in a virtual mirror they saw themselves as a cow. As the animal was jabbed with an electrical prod, a lab worker poked a volunteer's side with a sticklike device. The ground shook to simulate the prod's vibrations. The cow (A) the end was led toward a slaughterhouse^(注2). Participants then recorded what they ate for the next week. The study sought to uncover whether temporarily "becoming" a cow prompted reduced meat consumption.

The motivation wasn't to make people vegetarians, said Jeremy Bailenson, director of Stanford's Virtual Human Interaction Lab. But the project hoped to uncover whether virtual reality could alter behaviors that harm the environment and contribute to climate change. "If somebody becomes an animal, do they gain sympathy for that animal and think about its unfortunate situation?" Bailenson asked. "In this case, sympathy toward the animal also coincides with an environmental benefit, which is that not eating animals consumes less energy."

Virtual reality, together with computer games and other kinds of technology, is being used to approach environmental issues (B) new angles. The National Science Foundation awarded a \$748,000 grant to Stanford and Harvard University to run four experiments. Meanwhile, in British Columbia, Vancouver, smaller towns and professors from the University of British Columbia are running environment-related experiments that use visualization techniques. The work is important because many people have difficulty understanding climate change facts, said Tim Herron, who manages the Decision Theatre Lab at the University of British Columbia. "It's just a much more compelling way of getting people to understand the effects of their

behavior (C) the future,” Herron said. “It’s about visualizing the data for people. Once people can see it, it’s amazing how much it changes things. People begin to really understand the necessity to make some changes now to prevent these sorts of things.” Virtual reality experiences can alter behavior, Bailenson said.

In another one of several environment-related experiments Bailenson conducted in the lab, volunteers virtually chopped down a tree, a study aimed at examining attitudes toward paper use. In the experiment, the participants stood in the virtual reality version of a forest where they heard wind rustling and birds chirping as they flew past. They held a device meant to represent a chain saw, and felt resistance as they passed it back and forth through a tall tree. The wood cracked, then crashed to the ground with a thunderous boom. The forest fell silent, birds no longer singing.

Before the participant left the lab, a woman there knocked over a glass of water on a desk and asked the participant to help her clean it up. The people who had gone through virtual reality used 20 percent less paper than those who had watched a video of a tree being cut down, Bailenson said. He also said he gets emails months after that experiment from people telling him they can’t walk down the toilet paper aisle of a store without thinking about the falling tree.

(Adapted from “If You Know How a Cow Feels, Will You Eat Less Meat?”
Scientific American, 2013)

(注 1) lab = laboratory

(注 2) slaughterhouse = a place where animals are killed for their meat

問 1 本文によれば、Bailenson が行った二つの実験に共通する目的は何ですか。日本語で簡潔に説明しなさい。

問 2 Bailenson が行った二つの実験で実験参加者には何が課せられましたか。また、その効果はどのようにして確かめられましたか。本文で触れられている二つの例を取り上げ、それぞれの内容を日本語で簡潔に説明しなさい。

問 3 空欄(A)～(C)を補うのにもっともふさわしい単語を下の(1)～(4)から一つ選び、それぞれ番号で答えなさい。

(A) (1) for (2) in (3) off (4) on

(B) (1) about (2) for (3) from (4) in

(C) (1) before (2) of (3) on (4) with

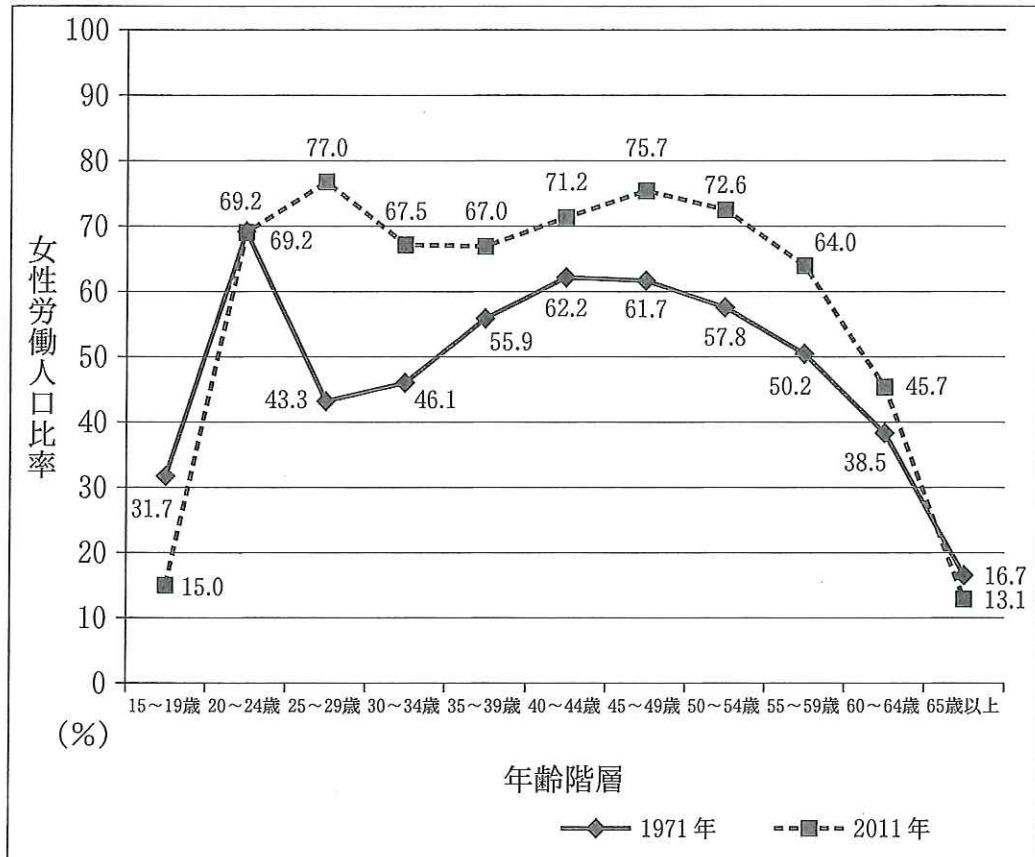
問 4 次の英文のなかで本文の内容と一致するものを下の(1)～(4)から一つ選び、番号で答えなさい。

- (1) Most people have a clear image of how we can preserve our environment.
- (2) Some students cannot walk down the toilet paper aisle of a store for fear that the rolls might fall over them.
- (3) The National Science Foundation financed Stanford and Harvard University to research how much of our environment has been destroyed.
- (4) The researcher who manages the Decision Theatre Lab believes it important to have people understand climate change facts.

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〔V〕 下の問いに答えなさい。

〔A〕 次のグラフが示す 1971 年と 2011 年における、我が国の女性の労働人口比率の特徴を、100 語程度の英語で簡潔に書きなさい。コンマやピリオドは語数に含めません。解答欄の最初の()に使用した語数を記入しなさい。



(総務省統計局 労働力調査)

〔B〕 我が国の女性の就労は今後どうあるべきだと考えますか。その理由を含めて 90 語程度の英語で書きなさい。コンマやピリオドは語数に含めません。解答欄の最初の()に使用した語数を記入しなさい。