

山形大学 一般 前期

平成 23 年度入学者選抜試験問題

医学部医学科

外 国 語

(英 語)

前 期 日 程

注 意 事 項

- 1 試験開始の合図があるまで、この問題冊子の中を見てはいけません。
- 2 この問題冊子の本文は、1 ページから 6 ページまでです。
- 3 解答用紙 2 枚と下書き用紙 1 枚は別刷になっています。試験が開始されたら、最初に外国語(英語)【問題Ⅰ】と外国語(英語)【問題Ⅱ】の 2 枚の解答用紙があることを確認しなさい。
- 4 試験中に問題冊子の印刷不鮮明・落丁・乱丁、解答用紙の汚れ等に気付いた場合は、手を挙げて監督者に知らせなさい。
- 5 監督者の指示にしたがって、2 枚の解答用紙の指定された欄に学部名と大学受験番号を正しく記入しなさい。大学受験番号が正しく記入されていない場合は、採点できないことがあります。
- 6 試験終了後、問題冊子および下書き用紙は持ち帰りなさい。

※ 裏面から問題冊子の本文が始まります。

問題 I 次の英文を読み設問に答えなさい。

For more than 70 years, chimpanzees have played a role in scientific studies. Over the last decade, however, the U.K., Belgium, Austria, Sweden, Holland, New Zealand, Australia and Japan have all ① banned or limited chimpanzee research.

According to the Canadian Council on Animal Care, the body that oversees research on animal subjects, Canada has no law specifically banning chimpanzee research, but no chimpanzees are currently in publicly funded or university research projects. In the United States, a new bill, the Great Ape Protection Act, was introduced to Congress* in early 2009. If passed, it would ban invasive* research on great apes — chimpanzees, bonobos, orangutans and gorillas. It would also (A) end federal funding for research on great apes inside or outside the United States. Plus, the bill ② seeks relocation to sanctuaries* for the (B) 1000 chimpanzees still in federal custody.*

③ The issue polarizes the scientific and animal rights communities. Some researchers, such as John VandeBerg, say that chimpanzee-based medical research can be done ethically* and without cruelty — and that banning it would critically delay important medical findings. Others, like primatologist* Jane Goodall, believe it's time to stop all invasive medical research using chimpanzees. 'Chimpanzees are our closest cousins, sharing 98.7% of our DNA,' says Goodall.

That biological closeness has made chimpanzees frequent research substitutes for humans — and has made such research ethically controversial. Like humans, chimpanzees have close family and social bonds, and spend years ④ raising their young. They are also (C) intelligent: some have been taught limited forms of American Sign Language.* ⑤ In addition, they have reliable long-term memories and a full range of psychological responses that mirror human emotions.

This closeness may mean that ⑥ some research conducted from the 1940s to the mid-1990s that used chimpanzees is imperfect, says VandeBerg. 'Some chimpanzees were kept in ⑦ horrible conditions — isolated, kept in tiny cages. We know today that stressed humans and animals have very different immunological and hormone profiles.* For good research results, you must have an animal that is healthy and happy.'

Gloria Grow, the founder of a chimpanzee sanctuary in Quebec, tells of a man who used to work for an animal-testing laboratory. He developed a strong bond with some of the chimpanzees that were used for experimental medicine and surgery. He came to visit them after they had settled into the Quebec sanctuary, then spent two days crying in the chimpanzee house there. Grow was amazed that the chimpanzees greeted the man (D) like an old friend, ⑧ although he had subjected them to various cruel experiments.

'Chimpanzees are the most forgiving animals, and ⁽⁵⁾they do not judge,' says Grow. 'I have learned from them not to be judgmental.'

(注) Congress アメリカ合衆国議会

invasive 侵襲的な(侵襲:対象となる生体を傷つけること)

relocation to sanctuaries 保護区域へ移すこと

federal custody 政府による管理

ethically 倫理的に

primatologist 霊長類学者

American Sign Language アメリカ式手話言語

immunological and hormone profiles 免疫やホルモンの特徴

(出典) この文章は, *Reader's Digest Asia* (2010年4月号)からの抜粋です(一部変更していません)。

[問 1] ①~⑤の語句について, 最も近い意味のものを, それぞれの選択肢(a)~(d)から1つずつ選び, 記号で答えなさい。

① (a) practiced

(b) prohibited

(c) promoted

(d) prompted

② (a) calls for

(b) calls into

(c) makes for

(d) makes into

③ (a) bringing down

(b) bringing off

(c) bringing on

(d) bringing up

- ④ (a) Anyway
(b) Meanwhile
(c) Moreover
(d) Nevertheless

- ⑤ (a) different
(b) dirty
(c) similar
(d) terrible

[問 2] (A) ~ (D) の空欄に入れるのに最も適切な語を、次の選択肢(ア)~(エ)から1つ選び、記号で答えなさい。それぞれの選択肢の使用は1回のみとします。

- (ア) approximately
(イ) completely
(ウ) highly
(エ) warmly

[問 3] 下線部(あ)で筆者は、「科学者や動物の権利を擁護する人々は、その問題をめぐって対立している」と述べていますが、特に科学者の間ではどのような対立があるのかを、本文の内容に即して80字以内の日本語で説明しなさい。

[問 4] 下線部(い)を日本語に訳しなさい。

[問 5] 下線部(う)と同じ意味となるよう、次の空欄に適切な単語を1つずつ入れなさい。

in spite () his () subjected them

[問 6] 下線部(え)の日本語訳として最も適切なものを、次の選択肢(a)~(d)から1つ選び、記号で答えなさい。

- (a) チンパンジーは、相手を裁こうとしない。
(b) チンパンジーは、決断を下さない。
(c) チンパンジーは、思慮分別を示さない。
(d) チンパンジーは、善悪を判断できない。

問題Ⅱ 次の英文を読み設問に答えなさい。

Getting people out of cars and onto bicycles, a much more sustainable form of transportation, has long worried environmentally conscious city planners. Although bike lanes painted on streets and ① automobile-free 'greenways' have increased ridership* over the past few years, the proportion of people relying on bikes for transportation is still less than 2%, based on various studies. An emerging body of research suggests that a superior strategy to increase cycling could be had by asking the old question: What do women want?

In the U.S.A., men's cycling trips surpass* women's by at least 2:1. This ratio stands in sharp contrast to cycling in European countries, (A) urban biking is a way of life and attracts about as many women as men — sometimes more. In Holland, where 27% of all trips are made by bike, 55% of all riders are women. In Germany 12% of all trips are on bikes, 49% (B) are made by women.

'If you want to know if an urban environment supports cycling, just ② { are / cyclists / female / measure / of / the proportion / who },' says Jan Garrard, a professor at Deakin University in Melbourne, Australia, and author of several studies on biking and gender differences.

③ Women are considered an 'indicator species' for bike-friendly cities for several reasons. First, various studies have shown that women are less likely to take risks than men. In the field of cycling, this attitude toward risk translates into increased demand for safe bike infrastructure* as a prior condition for riding. Women also do most of the child care and household shopping, which means these bike routes need to be organized around practical urban destinations.

'Despite our hope that gender roles don't exist, ④ they still do,' says Jennifer Dill, a transportation and planning researcher at Portland State University. Dealing with women's concerns about safety and convenience 'will go a long way' toward increasing the number of people on two wheels, Dill explains.

So far, few cities have taken on the challenge. In the U.S.A., most cycling facilities consist of on-street bike lanes, (C) require riding in heavy traffic, notes John Pucher, a professor of urban planning at Rutgers University. According to him, when cities do install traffic-protected off-street bike paths, they are almost always along rivers and parks rather than along routes leading to the supermarket, the school or the day care center.*

Although researchers have long examined the bike infrastructure in Europe, they have only just started to do so for the U.S.A. In a study conducted last year, Dill examined the effect of different types of bike facilities on cycling. The project, which recorded individual cycling trips

in Portland, compared the shortest route with the path cyclists actually took to their destination. Women were less likely than men to try on-street bike lanes and more likely to go out of their way to use quiet residential* streets with special traffic-calming features* for bicycles. 'Women avoided the shortest routes more often,' Dill says.

Other data support those findings. In New York City, men are three times as likely to be cyclists as women. Yet a bicycle count found that an off-street bike path in Central Park* had 44% female riders. 'Within the same city you find huge differences in terms of gender,' Pucher remarks.

(注) ridership 自転車の利用者数

surpass ～を上回る

bike infrastructure 自転車を快適に利用するための基本的設備(自転車専用道路など)

day care center 保育所

residential 住宅街の

traffic-calming features 車やオートバイなどの走行速度を抑制するための設備

Central Park セントラルパーク(ニューヨーク市マンハッタン区の中心部にある大公園)

(出典) この文章は、*Scientific American* (2009年10月号)からの抜粋です(一部変更していません)。

[問 1] 下線部①で使用されている free と最も近い意味の free を含む用例を、次の選択肢(a)~(d)から1つ選び、記号で答えなさい。

- (a) Do you expect people to work for free?
- (b) Please feel free to interrupt me if you want to say anything.
- (c) We want to create a society free of discrimination.
- (d) What do you like to do in your free time?

[問 2] (A)~(C)の空欄に入れるのに最も適切な語句を、次の選択肢(ア)~(オ)から1つずつ選び、記号で答えなさい。ただし、それぞれの選択肢の使用は1回のみとします。

- (ア) how
- (イ) of which
- (ウ) where
- (エ) which
- (オ) who

〔問 3〕 下線部②の〔 〕内の語句を並べ替えて、「女性の自転車利用者の割合を調べなさい」という意味の英文を完成しなさい。

〔問 4〕 下線部③において、「女性という種(species)は、都市が自転車に優しいか否かを判定する際にその指標(indicator)として機能する」という主旨の考えが述べられています。この考えの根拠について、本文を参照し次の表の空欄を埋めなさい。

	キーワード	内容説明
根拠 1	safety	女性は(ア)傾向がある。 したがって、女性の自転車利用者が多いことは、自転車用の設備が整備され安全に自転車を利用できる環境が整っていることを示す。
根拠 2	convenience	女性は(イ)傾向がある。 したがって、女性の自転車利用者が多いことは、(ウ)ことを意味する。

〔問 5〕 下線部④の they が指すものを本文中から英語で抜き出しなさい。

〔問 6〕 ポートランド市とニューヨーク市の両都市に共通に見られることがらとして、本文の内容に一致するものを、次の選択肢(a)~(e)から1つ選び、記号で答えなさい。

- (a) 女性は男性に比べて、車道に設けられた自転車専用レーンの利用を避ける傾向にある。
- (b) 男性は女性に比べて、閑静な住宅街を自転車で通行する傾向にある。
- (c) 女性は男性に比べて、目的地までの最短ルートを利用する傾向にある。
- (d) 自転車を利用する人数は、男性が女性の3倍である。
- (e) 自転車に乗る目的を見ると、男女間で違いが認められる。