和歌山県立医科大学 平 成 24 年 度

英 語

問題冊子

1 次の英文の空所を満たすのに最適の語を下の「語群」より選び、必要に応じて適当な形に直して 解答欄に書き入れよ。ただし、各括弧には一語が入る。

The sex of a child used to be a matter of chance (or, some might say, the work of God). Nowadays, however, we can find out the sex of a baby at a very early stage in the pregnancy. This opens up the possibility of being able to (1) whether to have a boy or a girl. Should this be (2)? Let's look at the pros and cons.

Proponents of sex selection claim that it would allow us to (3) the number of boys and girls that are (4) into the world. In some countries, such as China and India, parents might (5) sex selection as a way of ensuring that they have a male child, since female children are seen less (6). While these arguments for sex selection are (7) to be accepted widely, there are also medical reasons for wishing to choose the sex of a baby. For example, some genetic disorders such as hemophilia and Duchenne's muscular dystrophy (8) only boys. Couples whose children might be (9) to these diseases would have good reason to wish to have only female children.

Opponents of the practice, on the other hand, claim that it could (10) a significant imbalance in the world's population, and that serious biological and social changes could (11). Others believe that sex selection should be (12) in God's hands, and that human beings should not (13) in such matters.

Choosing our child's sex is another example of a situation in which science has increased the options (14) to us, while (15) little guidance as to how the new possibilities should be employed.

「語 群」

affect	avaîlable	balance	bring	cause
choose	desirable	interfere	leave	permit
provide	result	susceptible	unlikely	view

2 次の英文は 2005 年の新聞記事である。この記事の内容に関する下の設問への答えとして最も よく合致する選択肢をそれぞれA~Dより選び、その符号を解答欄に記入せよ。アスタリスク (*印)を付した語の意味は脚注を参照せよ。

"More will mean worse."

It was the British novelist Kingsley Amis who prophesied* that expanding universities would lower standards. At a time of year when many students are getting ready for college, it's appropriate to ask if he was right,

The opening up of higher education is a global phenomenon. Forty-five years ago, when Amis made his prediction, just 5% of British students entered higher education. Today it's closer to 45%. And college entry rates are even higher in the United States. In 1960, 45% of high school graduates enrolled in college. Now it's 65%.

Similar expansion has been going on all over the developed world and, at breakneck speed, in Asia. All told, the world has something in the region of 100 million students. So if Amis was right, and more does mean worse, then the deterioration* of higher education should be occurring on a global scale.

Of course, it isn't. Instead, what is occurring is an intensification of the competition among the world's universities.

Universities perform a number of functions. One function is to achieve economies of scale in research. Another is to ensure that the most intellectually able young people attain their full educational potential. A third is to promote the international exchange of knowledge.

On this basis, American universities are generally doing well, but they cannot be complacent*

At the top, the financial difference between American and European universities is mainly a matter of accumulated wealth. The combined investments of the colleges of Oxford and Cambridge—the richest European universities—are about \$5 billion. Compare that with Harvard's endowment* of \$23 billion—more than twice the financial assets of all British universities combined. And Harvard is not that far ahead of its American rivals. If Oxford and Cambridge were to relocate to the United States, they would rank no higher than 15th in the university wealth list.

Money matters. For one thing, it buys excellence in research. Between 1901 and 1950, the top American universities were not much richer than their European counterparts*. In that period, Americans accounted for just 28 of the Nobel Prizes awarded in the sciences. Since 1950, the top American universities have been building up their endowments through relentless* fund-raising and canny* investments.

Not surprisingly, with their bountiful* research budgets and salaries, they have come to dominate scientific research. All told, 159 of all the Nobel science prizes awarded between 1951 and 1997 went to Americans. A high proportion of the rest went to non-American academics working at American universities.

But what about educating our brightest young people? The news here is less good. Despite the increase in college enrollments, recent research shows that social mobility in the Unites States has declined markedly since the 1960s. On average, American sons are now roughly twice as likely as their Scandinavian counterparts to remain stuck in the same income band as their fathers. That's not quite as bad as socially rigid England, but it's getting there.

Statistics like these periodically prompt liberals* to demand improved "access" to elite universities. Yet the reality is that declining social mobility has less to do with American universities than with its high schools. It is the patchy* quality of state secondary education that is the problem, combined with the rising cost of private education.

In the United States, 83% of high school graduates from families in the top fifth in income go to college, compared with just over a third from the bottom fifth. The best explanation for that disparity* is that rich families can afford the private schooling that more or less guarantees their children will go to college.

The third role that universities play is international. Here too there are grounds for concern. It used to be that most Asian students who wanted to study abroad opted for the United States. But last year—partly because of visa restrictions and partly because of America's tarnished* international image—there was a 45% drop in the number of Chinese graduates coming to the United States. By contrast, there are about 38,000 Chinese students in British universities, and that figure appears to be rising.

No, despite Amis' prophecy, more has not meant worse. But American colleges cannot sit on their laurels if they are to remain what they tend to consider themselves: the very best.

(Los Angeles Times, August 22, 2005, 一部改变)

.[注]

^{*}prophesy: to use special knowledge or experience to say that something will happen in the future

^{*}deteriorate: to become worse

^{*}complacent: pleased with a situation, especially something you have achieved, so that you stop trying to improve or change things

^{*}endowment: a sum of money that is given to a place such as a college or hospital to give it an income over a long period of time, or the giving of this money

*counterpart: someone or something that has the same job or purpose as someone or something else in a different place *relentless: someone who is relentless never stops being strict, cruel, or determined *canny: smart, careful, not easily deceived, and understanding of a situation very well, especially in business or politics *bountiful: if something is bountiful, there is more than enough of it *liberals: people who support or allow changes in political, social, or religious systems that give people more freedom *patchy: happening or existing in an irregular way in a number of small separate areas *disparity: a difference between things or people, especially an unfair difference *tarnished: worsened [設 問] What the author wants to emphasize in this article is that _____. A: American universities may be overwhelmed by Asian students if they do not increase investments in their own students B.: American universities should not be satisfied with what they are today C: British universities have been raising their status in recent years D: there should be some reform in American secondary education 2. The levels of the world's higher education A : are rising in some parts of the world but falling in other parts B: have been falling C: have been rising D: once declined, but have been improving recently 3. Kinsley Amis' prediction about the size and quality of the university _____. A: has never been correct about American universities B: has regained its credibility after a few decades

D: may have been correct when he made it about a half century ago

C: is applicable to the universities in Asia today

- 4. Which of the following is NOT mentioned as the functions of universities?
 - A: to collect money for research funds
 - B: to do basic research private firms do not undertake
 - C: to give opportunities to promising youth
- D: to spread knowledge all over the world
- Choose the correct statement concerning the wealth and investments of British and American Universities.
- A: Harvard University is by far the wealthiest among its rival universities.
- B Harvard University's investments are about the same size as those of all British universities combined.
- C: Oxford and Cambridge Universities would barely be ranked in the top ten in wealth if they were in the United States.
- D: The combined investments of Oxford and Cambridge Universities are about a half of the financial assets of all British universities combined.
- 6. Choose the best statement about college entry rates.
- A : About 50 years ago, the ratio of students advancing to university in Britain was about one tenth of that in the U.S.
- B: In the U.S. today, about twice as many high school students go on to university as did 50 years ago.
- C: The number of university students all over the world today is about a half the entire population of Japan today.
- D: The ratio of high school students going on to university in China is approaching those of advanced European countries.
- 7. Choose the best statement about academic levels.
- A: Since 1950, top American universities have been actively raising money in order to attract excellent brainpower to their universities.
- B: Since 1950, top American universities have been actively inviting Nobel Prize scholars to work for their universities.
- C: The number of American Nobel Prize winners in the sciences in the latter half of the 20th century is about ten times that in the former half of the same century.
- · D: Until 1950, the average academic level of American universities was much lower than that of European universities.

- 8. Choose the correct statement about social mobility.
 - A: It is implied that Scandinavian sons are likely to become twice as rich as their fathers while American sons are likely to remain as rich or as poor as their fathers.
 - B: Liberals believe that the primary cause for declining social mobility in the U.S. can be found in the disparity in the chance of access to better schooling.
 - C: The decline in social mobility in the U.S. is mainly due to the lowering quality of American high schools in general.
 - D: The social mobility rate in the U.S. today is almost the same as that in Britain.
- 9. Choose the correct statement concerning America's secondary education.
- A: In the U.S. today, offspring from the richest 20% families are more than twice as likely to go on to university as those from the poorest 20% families.
- B: In the U.S. today, private schooling plays little part in high-school graduates being accepted by the best universities.
- C: Liberals in the U.S. are unlikely to believe that graduation from elite universities promises a bright future for the person's life.
- D: The U.S. has lost its position as the most popular country among foreign students who want to study aboard.

10. This article can most largely be	e divided into two parts before the paragraph beginning
with the words	
A: "On this basis,"	B: "At the top,"
C: "Money matters."	D "But what about"

3 次の英文は2005年の新聞記事である。この記事の内容に関する下の設問への答えとして最も よく合致する選択肢をそれぞれA~D(6.のみA~G)より選び、その符号を解答欄に記入せ よ。アスタリスク(*印)を付した語の意味は脚注を参照せよ。

In urgent telephone calls and worrying e-mail messages, scientists in the United States are expressing increasing concerns that the world's first partial face transplant, performed in France on Nov. 27, may have been undertaken without adequate medical and ethical preparation.

Some scientists say they fear that if the French effort fails, it could not only threaten the life of the transplant recipient, a 38-year-old French woman, but also jeopardize* years of careful planning for a new leap in transplant surgery.

"We've been working on the ethics and the science for some time, going slowly while we figure out immunology* and patient selection criteria* and indications," said Dr. L. Scott Levin, chief of plastic and reconstructive surgery at Duke University Medical Center. "This flies in the face of everything we've tried to do."

The scientists' worries come in part from the execution of the surgery and in part from news reports over the weekend that called into question the patient's emotional state.

Dr. Maria Siemionow, director of plastic surgery research at the Cleveland Clinic, who has been preparing to perform a full face transplant, said the way the transplant was conducted appeared to conflate* two experimental protocols*: the transplantation of facial tissues and the infusion of stem cells from the donor's bone marrow* into the patient in an attempt to prevent rejection of the new face.

The first procedure, although untried until now, has been well studied, and the microsurgical techniques involved are commonplace.

But the second has been successful in human subjects only rarely and only recently. While pilot studies do suggest that infusion of stem cells from the donor can help produce "chimerism," in which foreign tissue is tolerated by the body with little or no suppression of the immune system, it is far from standard practice in transplantation.

The decision of the French team to perform two novel procedures simultaneously means that it may be difficult to determine the cause of success or failure of the transplant, Siemionow said.

Speaking by telephone Monday, Dr Jean-Michel Dubernard, the surgeon whose team performed the ground-breaking operation, in which the patient received lips, a chin, and a nose from a brain-dead donor, defended the infusion of bone marrow stem cells and said the procedure was not a step into uncharted territory.

The psychological issues are as complex as the surgical ones. The Sunday Times of London reported that the patient had admitted that she sustained her injuries during a suicide attempt. According to the newspaper, the woman said she was mauled* by her family's Labrador retriever* after she took an overdose of sleeping pills and fell down. She believed the dog was trying to revive her, the newspaper said.

The reports generally alarmed some experts in the field. Experimental protocols devised by both the Cleveland Clinic and the university of Louisville explicitly preclude* emotionally unstable candidates.

Patients with a history of depression sometimes do not comply with the complicated drug regimens* necessary to prevent organ rejection.

The news reports were rejected Monday by Dubernard, who responded, "No, no and no!" when asked if his patient had attempted to take her own life. He said the woman had taken only two sleeping pills for insomnia* after a family argument

(International Herald Tribune, April 22, 2005, 一部改变)

[注]

- *jeopardize: to risk losing or spoiling something important or valuable
- *immunology: the scientific study of the prevention of disease and how the body reacts to disease
- *criteria: standards which are established so that a judgment or decision, especially a scientific one, can be made
- *conflate: to combine two or more things to form a single new thing, whether it is correct or not
- *protocols: the rules that are followed when treating or dealing with a particular illness or a medical problem
- *bone marrow: the soft substance in the hollow center of bones
- *maul: to injure someone badly by tearing their flesh, often by an animal
- *Labrador retriever : a kind of dog
- *preclude: to prevent something or make something impossible
- *regimen: a set of diet, exercise etc. that is intended to improve your health
- *insomnia: the condition of not being able to sleep

[設 問]

- 1. American surgeons are upset at the world's first facial transplant performed by the French team. Which of the following is the greatest cause of their concern?
- A: That the French team was not very careful in choosing the recipient of the operation.
- B: That the operation challenges years of their preparation for a facial transplant operation.
- C: That there was a great risk for the recipient to die in the operation.
- D: That they have failed to become the world's first to succeed in a facial transplant operation.
- 2. Which of the following shows the greatest gap between the news reports and Dr. Dubernard's explanation?
 - A: The patient had been bitten by a dog.
 - B: The patient had been involved in a family quarrel.
 - C: The patient had taken sleeping pills.
 - D: The patient had tried to commit suicide.
- 3. The immediate reason for the woman receiving a face transplant operation was probably because _____.
- A: she had been bitten by her family's dog
- B: she had been depressed about her face
- C: she had injured herself during a suicide attempt
- D: she had not been able to sleep after a family argument
- 4. According to this article "chimerism" is necessary to _____.
- A: activate immune system
- B: infuse stem cells
- C: prevent rejection
- D: suppress the immune system
- If Dr. Dubernard's surgery had failed, they would not have been able to tell what was wrong because _____.
- A: he did not have a clear protocol for the surgery
- B: he was confusing two procedures for the surgery
- C: he was performing two uncertain experiments at the same time
- D: the patient would have died

- 6. Choose two correct statements.
- A: A full face transplantation had been prepared by American surgeons before the French operation was reported.
- B: American surgeons consider this French surgery a failure.
- C: American surgeons tend to put science above ethics.
- D: Dr. Dubernard believed that the technique for infusion of bone marrow stem cells had already been established.
- E: In the French operation, the entire face was transplanted from a brain-dead donor.
- F: Patients with depression tend to fail to follow medication instructions.
- G: The woman who received the facial transplant operation believes the dog bit her because she had an argument with her family.
- 7. The underlined sentence "This flies in the face of everything we've tried to do." most closely means that _____.
- A: being equally careful about immunology and patient selection slows the speed of our research
- B: the recent execution of a facial transplant surgery may jeopardize our plans for future surgeries
- C: the recent French facial transplantation discourages our efforts because it has proved that their techniques are far more advanced than ours
- D: working on sciences and ethics are contradictory to each other, so we sometimes lose sight of what we have tried to do
- 8. Choose the correct statement.
 - A: American surgeons think French surgeons are confusing medical issues and ethical issues.
 - B: Carefully selecting patients who are psychologically stable enough to tolerate facial transplant is the main issue of what they call 'ethical preparation' in the third line of this article.
 - C: The full face transplant performed in France this time was not the first trial in the world.
 - D: Transplantation of facial tissue is rather an easy procedure in terms of surgical technique.

4 次の日本語文の下線部(1)~(4)を英語で表現せよ。

最近の学生は試験の前になると何人かの友人に授業のノートを借り、おいしいところをつなぎ(1) 合わせて完璧なノートを作る。しかしそんなノートも試験が終われば簡単に処分されてしまう。 高度情報化社会を迎えて、大学の授業で提供される情報の価値が相対的に低下し、陳腐化の速度 も速いからだろう。

一見のどかに見えるこうした風景も、学生の内面世界にまで目を向けると、意外にドロドロし (3) ている。本当はノートを貸すのがイヤなのだが、貸すのを断るとケチなやつだと思われ、イジメ (4) の対象になりかねないからだ。