

## 英 語

1. 監督者の指示があるまで開いてはいけない。
2. 解答は別紙の解答用紙に記入しなさい。
3. 問題用紙は各科目の試験終了後持ち帰ってもよい。  
ただし、試験途中では持ち出してはいけない。

I. 次の(1)～(4)において、意味が通じるように、それぞれの ( ) に与えられた文字で始まる英語を 1 語ずつ書きなさい。

- (1) *Nancy*: James won the election, but only (j ).

*Tommy:* You mean he was elected mayor by a narrow margin?

- (2) Susan: Junko is working (a ) alone in the office preparing for the presentation.

Jim: Doesn't anybody help her with her work?

- (3) Sarah wears two (h       ) — one as mother and one as physician. She usually returns from the hospital around 7 o'clock and prepares dinner for her children.

- (4) My aunt fainted at the sight of blood, but she soon recovered (c ) and asked me to call the police.

II. 次の(1)～(4)において、語法、文脈から判断して ( )に入る最も適当なものを(a)～(d)より1つ選び、その記号を書きなさい。

- (1) I know he is a good doctor, but that's beside the ( ).



- (2) The ( ) are the minutes of the assembly in New York.



- (3) The director strongly ( ) that they were our mistakes.

- (a) maintained      (b) forgave      (c) released      (d) punished

- (4) Those two doctors ( ) over the new treatment for AIDS.

- (a) crashed      (b) crutched      (c) clashed      (d) crushed

III. 次の(1)～(4)のそれぞれの英文に余分な語が 1 語あれば、解答欄に該当する語を書きなさい。余分な語がない場合は None と書きなさい。

- (1) There is no coffee, so you will have to make do with green tea.
- (2) Amy was heard my dad had been in the hospital and called me to ask about his condition.
- (3) Dick was a great boxer, and in you he finally met with his match.
- (4) Some newspapers have mentioned about the troubles at the tower in Shimbashi.

IV. 左の(1)～(4)につづく英語として、語法、文脈から判断して最も適当なものを右の(a)～(d)より 1 つ選び、その記号を書きなさい。なお、(a)～(d)はそれぞれ 1 回ずつしか使えません。

- |  |                                    |
|--|------------------------------------|
| (1) Some leaves sprouted                   | (a) to light some startling facts. |
| (2) It may be wise to err                  | (b) on the side of caution.        |
| (3) The trainee still hasn't come to grips | (c) quickly but soon withered.     |
| (4) Our study brought                      | (d) with her problems.             |

V. 次の(1)～(3)の各組の英文のうち、最も適當なものを1つ選び、その記号を書きなさい。

- (1) (a) The driver load his ship of appliances to transportation from Tokyo to Osaka.  
(b) The driver was loaded his shipment of appliances to transport from Tokyo to Osaka.  
(c) The driver was loaded his ship of appliances for transport from Tokyo to Osaka.  
(d) The driver loaded his shipment of appliances for transport from Tokyo to Osaka.
  
- (2) (a) The cost of living has rise at an alarming rate over the last few year.  
(b) The cost of living has raises at an alarm rate in the last few years.  
(c) The cost of living has risen at an alarming rate over the last few years.  
(d) The cost of living has raised at an alarm rate in the last few year.
  
- (3) (a) For the way to Kyoto the trucker made on stop to fill into the gas tank.  
(b) On the way to Kyoto the trucker made one stop to fill up the gas tank.  
(c) For the way to Kyoto the trucker made one stop to fill into the gas tank.  
(d) In the way to Kyoto the trucker made on stop to fill up the gas tank.

## VI. 次の英文を読み、設問に答えなさい。

Warm-bloodedness is a misleading term. It means that the temperature of the blood, and with it the body, is maintained at a stable temperature above that of the surroundings. But many so-called 'cold-blooded' creatures, such as lizards, are really warm-blooded in this sense, for they maintain a higher temperature than their surroundings through behavior. They bask in the sun. ( A ) While this sounds inherently inefficient, at least in England, many reptiles succeed in regulating their body temperature within tightly specified limits at a similar level to mammals — around 35 to 37°C (although <sup>(1)</sup>it usually falls at night). The distinction between reptiles, such as lizards, and birds and mammals lies not in their ability to regulate temperature, but to generate heat internally. Reptiles are said to be 'ectothermic', in that they gain their body heat from the surroundings, whereas birds and mammals are 'endothermic' — they generate their heat internally.

Even the word endothermic needs some clarification. Many creatures, including some insects, snakes, crocodiles, sharks, tuna fish, even some plants, are endothermic: they generate heat internally, and can use this heat to regulate their body temperature above that of their surroundings. All of these groups evolved endothermy independently. ( B ) Such animals <sup>(2)</sup>generally use their muscles to generate heat during activity. The advantage of this is related directly to the temperature in the muscle. All biochemical reactions, including the metabolic rate, are dependent on temperature. The rate of metabolism roughly doubles for each 10°C rise in temperature. Along with this, the aerobic capabilities of all species [ X ] with higher body temperature (at least up to the point that the reactions become destructive). Speed and endurance are therefore enhanced at higher body temperature, and this clearly offers many <sup>(3)</sup>advantages, whether in the competition for mates or in the battle for survival between predators and prey.

Birds and mammals stand apart in that their endothermy is not dependent on muscle activity, but on the activity of their organs, such as liver and heart. ( C ) In mammals, muscles contribute to heat generation only during shivering in intense cold, or during vigorous <sup>(5)</sup>exercise. When at rest, the body temperature of all other groups falls (unless they maintain it by basking in the sun) whereas the mammals and birds maintain a constant and high temperature even at rest. The difference in resource use is profligate and shocking. If an equally sized reptile and mammal maintain the same temperature, through behavioral and metabolic means, respectively, the mammal needs to burn six to ten times as much fuel to maintain this temperature. ( D ) At 20°C, a reptile uses only about 2 or 3 per cent of the energy needed by a mammal, and at 10°C barely 1 per cent. On 'average', in the wild, a mammal

uses about thirty times more energy to stay alive than an equivalent reptile. In practical terms, this means that a mammal must eat in one day the amount of food that would sustain a reptile for a whole month.

〔Adapted from Nick Lane, *Power, Sex, Suicide: Mitochondria and the Meaning of Life*, 2005.〕

問 1. 下線部(1), (3), (5), (6)の各語の本文中での意味と最も近い意味を表す語句を, それぞれ1～4の中から1つずつ選び, 番号で答えなさい。

- |                |                          |               |                         |             |
|----------------|--------------------------|---------------|-------------------------|-------------|
| (1) stable     | 1. steady                | 2. principal  | 3. distinct             | 4. average  |
| (3) evolved    | 1. brought               | 2. developed  | 3. regained             | 4. rotated  |
| (5) exercise   | 1. physical activity     |               | 2. physical examination |             |
|                | 3. physical organization |               | 4. physical strength    |             |
| (6) profligate | 1. bottomless            | 2. generative | 3. unlikely             | 4. wasteful |

問 2. 下線部(2)の it が表す内容を, 本文中の英語で答えなさい。

問 3. 空所[ X ]に入れるのに最も適当な語を, 1～4の中から1つ選び, 番号で答えなさい。

1. impair                    2. improve                    3. inhibit                    4. interrupt

問 4. 次の文を本文中の( A ), ( B ), ( C ), ( D )のいずれかに挿入する場合, どこが最も適当な箇所か。1つ選び, 記号で答えなさい。

If the surrounding temperature falls, the distinction becomes even greater, because the temperature of the reptile will fall, whereas the mammal strives to maintain a constant temperature of 37°C, by increasing its metabolic rate.

問 5. 本文の内容と矛盾する内容を持つ文を, 次の1～8から2つ選び, 番号で答えなさい。なお, 解答の順序は問わない。

1. Lizards are, in a sense, warm-blooded creatures.
2. Lizards bask in the sun to maintain a higher temperature than their surroundings.
3. Lizards are ectothermic and human beings are endothermic.
4. Insects and plants cannot generate heat internally.
5. Endothermy of birds is dependent on the activity of their organs.
6. When at rest, body temperature of birds is constant and high.
7. By shivering in intense cold, human beings generate heat.
8. The energy sustaining a reptile can sustain 30 equivalent mammals.

問 6. 下線部(4)を日本語に訳しなさい。

VII. 次の日本語の下線部を英語に直しなさい。

海外で活躍しているスポーツ選手を見てください。日本にいた頃は、自分の意見を強く持つてい  
て、下手したら生意気といわれる人も多かったかもしれない。メジャーリーグへ行った野茂英雄  
も、イチローも、自分の意見をはっきりと持ち、制度的なものに馴染まないという意味で、日本で  
はアウトロー的な選手だった。

〔田嶋幸三(著)『「言語技術」が日本のサッカーを変える』(2007)からの文をもとに作成〕