

英 語

90 分

注 意 事 項

1. 試験開始の合図までこの冊子を開かないこと。
2. 本問題冊子は 18 ページ，答案用紙は 2 ページである。
3. 各答案用紙の上の枠内には，受験番号を記入し，その右側の枠内には，受験番号の下 2 桁の数字を忘れずに記入すること。
4. 解答はすべて各答案用紙の所定の欄に記入すること。
5. 問題冊子および答案用紙は切りはなさないこと。
6. 答案用紙に記入する受験番号の数字の字体は，下記の例にならい，明瞭に記入すること。

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

I 次の英文を読んで，以下の設問に答えよ。(80点)

著作権処理の関係上，公開しておりません

本文は，6 ページまで続きます

- *1 veterinary pathologist 獣医病理医
- *2 methicillin-resistant *Staphylococcus aureus* メチシリン耐性黄色ブドウ球菌
- *3 *Staphylococcus pseudintermedius* 犬の皮膚や粘膜の常在菌叢を構成するブドウ球菌種
- *4 mites ダニ
- *5 311 カナダで、緊急性の高くない事件やトラブルを通報する時の電話番号

[Adapted from Becca Cudmore, “The Case for Leaving City Rats Alone,” in Hope Jahren, ed., *The Best American Science and Nature Writing 2017*. New York: Houghton Mifflin Harcourt, 2017: 59-64.]

I-1. 下線部(1)を日本語に訳せ。

I-2. 下線部(2)はネズミが何を得意とすることを指しているか。30字以内の日本語で説明せよ。(句読点も文字数に含める。)

I-3. 下線部(3)を日本語に訳せ。

I-4. 下線部(4)を英語に訳せ。

I-5. 下線部(a)から(c)について、それぞれの意味にもっとも近いものをAからEの中から選び、記号で答えよ。

(a) “could be boiled down to”

- A. could amount to
- B. could be affirmed by
- C. could be overturned by
- D. could elaborate on
- E. could merge with

(b) “Before cities were even a glimmer in our eye”

- A. When cities were constructed of mud and bricks
- B. When cities were less brightly illuminated at night
- C. When cities were not yet imagined or built
- D. When cities were places that people did not feel proud of
- E. When cities were unpleasant places to live in

(c) “usually effectively quarantined to that family”

- A. commonly well-monitored outside that family
- B. normally exclusively targeted at that family
- C. often utterly fatal to that family
- D. ordinarily well-contained within that family
- E. typically completely harmless to that family

I-6. 以下の(1)から(3)の答としてもっとも適切なものをAからEの中から選び、記号で答えよ。

(1) Choose the reason that Himsworth is concerned about MRSA, a kind of bacteria.

- A. MRSA demonstrates that harmful bacteria can be created within the bodies of and spread by rats.
- B. MRSA demonstrates that harmful bacteria can be deadly to humans as there are no effective medications to cure a person infected by them.
- C. MRSA demonstrates that harmful bacteria can be transmitted straight from household pets such as dogs to the humans they live with.
- D. MRSA demonstrates that harmful bacteria can evolve into new strains within infected human hosts.
- E. MRSA demonstrates that harmful bacteria can kill animals that humans cherish, such as their pet dogs, along with animals that they dislike, such as rats.

(2) Look at the word “trees” marked with double underlining on page 4. Choose the best description of what the word “trees” refers to in the article.

- A. An architectural sketch of burrows in which families of rats live in a particular neighborhood.
- B. A diagram of the pathways certain rats travel over the course of a set period of time.
- C. A flowchart depicting the routes along which diseases spread across the city among animals and humans.
- D. A genetic map showing multiple generations and branches of families among the rat population in an area.
- E. A geographical survey of forested sections within the city of Vancouver.

(3) Choose the statement that Himsworth would most likely agree with.

- A. The government of Vancouver has encouraged citizens to participate in community debates and policy formation on matters that affect everyone.
- B. The government of Vancouver has exhibited disagreement among various departments on crucial topics such as control of the rat population.
- C. The government of Vancouver should maintain the characteristics of local communities with different socioeconomic backgrounds.
- D. The government of Vancouver would be more concerned about rats if they infested the neighborhoods that have influence on public policy in the city.
- E. The government of Vancouver would be underfunded if they supported scientific research on subjects such as the rats that inhabit the city.

I-7. 次の1から10の文から、本文の内容に一致するものを3つ選び、番号で答えよ。

1. Himsworth is well-known to the citizens of Vancouver for her research on rats and diseases in the city.
2. Before the launch of the Vancouver Rat Project, there were only a few minor research studies conducted on rats in that city.
3. Historically speaking, the number of rats dramatically increased after human beings began constructing and living in urban environments.
4. Rat families generally fear going out of their territory for a while after a family member is killed.
5. Rats do not engage in fights with unfamiliar rats unless humans drive them out of their residential areas.
6. The Rat Project scientists purposefully leave used experimental syringes out in places where they set up rat traps.
7. Even if humans do not directly touch the rats that live near them, they can catch diseases from them.
8. An experimental procedure of the Vancouver Rat Project was to identify the illnesses and the mites that rats carry in different areas of the city.
9. Vancouver City officials believe urban development is beneficial for creating rat-free urban spaces for the human population.
10. People in East Vancouver were blamed for feeding birds and growing vegetables in their neighborhood as this was believed to have attracted rats to their local park.

Ⅱ 次の英文を読んで，以下の設問に答えよ。(70点)

著作権処理の関係上，公開しておりません

本文は，15ページまで続きます

著作権処理の関係上，公開しておりません

*1 pelvis 骨盤

[Adapted from Yao-Hua Law, “Rock-a-Bye Baby’s Rocky Roots,” *Discover* (June 2017): 66-68.]

II-1. 下線部(1)を日本語に訳せ。人名はアルファベット表記のままでよい。

II-2. 下線部(2)のような状態が進化の上で生じたのはなぜか。その理由を本文にそって 50 字以内の日本語で説明せよ。(句読点も文字数に含める。)

II-3. 下線部(3)を英語に訳せ。

II-4. 下線部(4)を日本語に訳せ。人名はアルファベット表記のままでよい。

II-5. 文中の空欄 [①], [②]に入れるのもっとも適切なものをそれぞれ
AからEの中から選び, 記号で答えよ。

- ① A. a lot of conflict
B. a tendency for self-sacrifice
C. much room for evolution
D. plenty of compassion
E. scarcely any contradiction

- ② A. a declining trend
B. a human universal
C. a status-building endeavor
D. a vicious circle
E. an educational activity

II-6. 以下の(1)および(2)の答としてもっとも適切なものをAからEの中から選び、記号で答えよ。

- (1) Look at the underlined part (a). Which of the following does “an evolutionary arms race” refer to?
- A. competition among infants of the same growth stage for gaining the largest favor from adults
 - B. competition among groups of humans over bodily strength, a factor that determined which groups flourished and which perished
 - C. competition among parents, their younger and older offspring, in acquiring and developing vocalization skills
 - D. the idea that humans who could most efficiently distribute their attention among offspring while carrying out crucial tasks had the strongest chance of survival
 - E. the idea that parents and their infant offspring competed to increase chances of individual survival, according to their contrasting interests or needs
- (2) Look at the underlined part (b). According to the text, which of the following is true about the statement, “infants are very attentive to that particular signal”?
- A. A range of stimuli created by parents could influence how infants will respond to future infant-directed songs.
 - B. An infant senses the extent of the caregiver’s attention to herself or himself from the vocalization.
 - C. If a caregiver is producing complex sounds, it is enough to soothe the infant regardless of to whom it is directed.
 - D. Infants can distinguish between their mother’s voice and a stranger’s voice in the quality of their lullabies.
 - E. Simple vocalization signals a high level of focus on the infant, which allows the parent to engage in different tasks.

II-7. 次の1から8の文から、本文の内容に一致するものを2つ選び、番号で答えよ。

1. In times of trouble, parents console themselves as well as their children through song and music.
2. Infant-directed song did not raise the probability of each generation's survival above the level of the preceding one.
3. Singing has been an important tool for adults in their tug of war with infant offspring over a precious resource.
4. Infants are highly selective in the ways that they respond to singing by their mothers as distinct from vocalization by other adults.
5. Krasnow and Mehr's theory has put an end to the debate about how human vocalizations evolved into lullabies.
6. Krasnow and Mehr continue to seek various means to verify their theory.
7. The research by Krasnow and Mehr has unexpected benefits for people with genetic conditions that affect their ability to respond to lullabies.
8. There is now broad agreement that infant-directed song is likely to have been the very first form of music making.