

# 英 語

〔理学部・工学部・農学部・水産学部〕

## 注 意 事 項

1. 「解答始め」の合図があるまでこの冊子は開かないこと。
2. この冊子は表紙を除いて15ページである。
3. 「解答始め」の合図があったら、まず、黒板等に掲示又は板書してある問題冊子ページ数・解答用紙枚数・下書き用紙枚数が、自分に配付された数と合っているか確認し、もし数が合わない場合は手を高く挙げ申し出ること。次に、学部名・受験番号・氏名を必ずすべての解答用紙の指定された箇所に記入してから、解答を始めること。
4. 解答は、必ず解答用紙の指定された所に記入すること。

1 次の英文を読み、設問に答えなさい。

Recent studies have shown that rapid improvements in food allergies can be achieved through “eating therapy,” in which the culprit — such as eggs, milk and wheat — is not completely removed but taken in small amounts under a doctor’s guidance. Is it possible to drastically reduce the number of children suffering from food allergies?

In many cases, food allergies cause symptoms immediately after eating. According to a survey conducted by Japan’s Ministry of Education, Culture, Sports, Science and Technology on public elementary, junior high and high schools in fiscal 2013, 4 to 5% of these students are said to have food allergies.

In some cases, even a ( A ) amount of food can cause life-threatening symptoms such as breathing difficulties and drops in blood pressure, and in the past, the common method of dealing with food allergies was to “completely eliminate” the allergy-triggering food from the diet.

However, in 2007, a theory was presented at an academic conference in Japan that  
(1) allergic reactions can be suppressed by taking small amounts of food under the supervision of a specialized doctor. This “oral immunotherapy” applies the human body’s mechanism of forming immune cells that suppress allergic reactions when people continue to eat the food that causes allergies.

At present, clinical studies are mainly conducted to confirm the safety and efficacy of this therapy method. In recent years, the effectiveness of treatment and preventive measures based on this mechanism has been scientifically confirmed, and evidence for its efficacy is accumulating.

For example, in a study reported in January 2021 in an international journal of pediatrics by Japan’s National Center for Child Health and Development, 43 children who had tested positive for egg allergies by the age of 2 were observed at age 6. Of the 13 children who had completely eliminated eggs from their diet, 12 continued to be allergic, but of the ( B ) children who had not completely eliminated the allergy-causing food, 16 had improved.



設 問

(1) 前後の文脈から判断して、空欄( A )に入る最も適切な単語を、以下の選択肢から選んで記号で答えなさい。

(ア) considerable

(イ) huge

(ウ) necessary

(エ) small

(2) 下線部(1)について、2007年に発表された理論とはどのようなものか、日本語で具体的に説明しなさい。

(3) 前後の文脈から判断して、空欄( B )に入る最も適切な数字を答えなさい。

(4) 下線部(2)の a research team が、食物アレルギーの発症を抑える免疫療法の詳細な仕組みに関して発見したことは何か、日本語で答えなさい。

(5) 下線部(3)の Results of a survey で明らかになったことは何か、日本語で答えなさい。

(6) 下線部(4)の国立成育医療研究センター、総合アレルギー科の科長が述べていることを、以下の選択肢から選んで記号で答えなさい。

(ア) アレルギーの原因となる食品をどれくらい摂取するとアレルギーが引き起こされるかは、子供によって異なる。

(イ) 特定の食品を過剰に摂取することは、食物アレルギーを引き起こす原因となりうる。

(ウ) アレルギーの原因となる食物を許容量より少なく摂取しても、アレルギーが抑制されうる。

(エ) 免疫療法は、安全な治療法の一つとして確立されたものである。

試験問題は次に続く。

**2** 次の英文を読み，設問に答えなさい。

著作権保護の観点から，公表していません。

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(Excerpted and adapted from *Critical Thinking: Think clearly in a world of agendas, bad science, and information overload* by Ian Tuhovsky, independently published, 2020, pp. 15-16)

(注) genetically modified food : 遺伝子組み換え食品

cons : 反対論

pros : 賛成論

painstakingly : 労を惜しまずに

stock exchange : 証券取引所

depiction : 描写, 叙述





試験問題は次に続く。

3

次の各文の( )に入る最も適切な語句を一つ選び、記号で答えなさい。

- (1) A: Do you know Tomoko decided to resign her post as team captain?  
B: Unfortunately I do. She mentioned it to me ( ) last night.
- (ア) in association (イ) in favor  
(ウ) in person (エ) in return
- (2) A: I think the spelling of this street name is correct because I used to live nearby.  
B: I know. But ( ), check it out by using Google Maps.
- (ア) because of this (イ) for instance  
(ウ) just in case (エ) thanks to
- (3) To avoid errors, I make it a rule to review ( ) my research.
- (ア) all aspect of (イ) each aspects of  
(ウ) every aspect of (エ) much aspects of
- (4) It's courage ( ) you need.
- (ア) on (イ) so that  
(ウ) that (エ) what
- (5) My father asked me ( ) my sister while he was out.
- (ア) if I take care of (イ) taking care of  
(ウ) to take care of (エ) to taking care of
- (6) She wants to borrow some books ( ) they are interesting.
- (ア) as for (イ) as long as  
(ウ) if not for (エ) so long to

- (7) It is our collective responsibility to (        ) harm to the environment and preserve the Earth for future generations.
- |              |                |
|--------------|----------------|
| (ア) minimal  | (イ) minimalist |
| (ウ) minimize | (エ) minimum    |
- (8) AI, or artificial intelligence, is (        ) as a system of intelligent computer programs.
- |              |                |
|--------------|----------------|
| (ア) define   | (イ) defined    |
| (ウ) defining | (エ) definition |
- (9) Do you usually take part (        ) the Obon festival?
- |        |          |
|--------|----------|
| (ア) by | (イ) for  |
| (ウ) in | (エ) with |
- (10) I would (        ) to express my sincere gratitude for your assistance.
- |           |            |
|-----------|------------|
| (ア) enjoy | (イ) happy  |
| (ウ) like  | (エ) please |

4

次の対話の下線部(1)~(4)の日本語を英語に直しなさい。

A: You look tired. Are you getting enough sleep?

B: Actually, I stayed up playing video games last night.

A: You should get enough sleep for your health.

B: I guess you're right, but tonight I'll catch up on my sleep. So, it's no problem.

A: No! You can't make up for a lack of sleep by sleeping more on the next day. 規則的  
(1) に十分な睡眠をとることを習慣づけることが大事だよ。

B: I see. You may be right, but it's hard to stop playing video games.

A: I know, but, according to all the health experts, 睡眠不足はさまざまな病気を引  
(2) き起こす可能性があるんだよ。

B: Is that true? I guess I really should change my sleeping habits then.

A: このことは君だけではなく、日本人全員に当てはまるよ。 And an OECD  
(3) survey shows that 日本における平均的な睡眠時間は、OECD加盟国の中で最  
(4) 悪なんだ。

試験問題は次に続く。

5 次の英文を読み、設問に答えなさい。

The twenty-first century will be a time of rapid technical, political, and social change, when creative solutions to both new and old problems will be needed more desperately and more often than ever. ( A ), college instructors are confronted with the problem of devising teaching techniques that will help students think and act more creatively. The instructor, too, needs to approach teaching in a more creative fashion. The greatest challenge for educators is to develop assignments that will provide students with the opportunity to solve problems creatively.

A problem-solving act is creative if it satisfies two criteria: (1) it provides a workable solution to the problem, and (2) most people could not or would not have arrived at the same solution. In other words, it must be a (relatively) novel solution. As Hayes (1978) points out, there is no “magic” or special gift of creativity that some people have and others do not. With appropriate prodding and motivation, everyone can be more creative: “Creative acts are instances of problem solving, but  instances of problem solving are creative. The underlying psychological processes required for creative problem solving appear to be the same as those required for noncreative problem solving” (Hayes, 1978, p. 240).<sup>(1)</sup>

In developing creative problem-solving assignments, teachers should consider the motivation that will be used to get students to work on the problems. Intrinsic and extrinsic motivation offer different  for reaching the outcome of any assignment. *Intrinsic* motivation — that is, the student’s willingness to engage in the process without any external reward — offers the best avenue for generating creativity. “It appears that when people are primarily motivated to do some creative activity by their own interest in and enjoyment of that activity, they may be more creative than they are when primarily motivated by some goal imposed on them by others” (Amabile, 1983, p. 15). The<sup>(2)</sup> problem with *extrinsic* motivation is that students stop working on the problem when the extrinsic reward is no longer available. By contrast, when the only rewards that accrue to the students are the joys of creating (that is, intrinsic or internal reward), they will persist

at a task longer and the results will be more creative. Thus, creativity is enhanced best when students “own” the project that they are working on and when they are encouraged to complete the assignment because it is important for them. In particular, professors need to find ways to encourage intrinsic motivation in college classrooms where grades are often used as extrinsic motivators. We need to find ways to light a creative spark inside students so that they “own” a project or problem; then the drive to do well on the assignment will come more from a personal desire than from the need to accumulate three more credit units toward graduation.

(Excerpted and adapted from *Changing College Classrooms: New teaching and learning strategies for an increasingly complex world* by Diane F. Halpern and Associates, Jossey-Bass Publishers, 1994, pp. 64-65)

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- (注) prodding : 励まし      intrinsic motivation : 内発的動機づけ  
extrinsic motivation : 外発的動機づけ      accrue to ~ : ~に生じる  
grades : 成績      accumulate : 蓄積する  
credit units : (科目の)単位数

## 設 問

(1) 前後の文脈から判断して、空欄( A )に入る最も適切な語句を、以下の選択肢から選んで記号で答えなさい。

- (ア) All the way      (イ) For this reason  
(ウ) In contrast      (エ) What is worse

(2) 前後の文脈から判断して、  に入る最も適切な語句を、以下の選択肢から選んで記号で答えなさい。

- (ア) almost all      (イ) none of      (ウ) not all      (エ) not every

- (ア) means      (イ) judgments      (ウ) obstacles      (エ) results

(3) 下線部(1)の *those* は何を指しているのか, 本文中の英語の語句を抜き出して答えなさい。

(4) 下線部(2)の外発的動機づけの問題点を, 日本語で答えなさい。