

# 平成30年度入学試験問題

## 英 語

(前期日程)

医学部医学科

### 注 意 事 項

1. 試験は90分です。
2. 試験開始の合図があるまで、この問題用紙の中を見てはいけません。
3. この問題用紙は表紙を除いて7頁あります。
4. 解答用紙は5枚あります。
5. 試験中に問題用紙及び解答用紙の印刷不鮮明、ページの落丁・乱丁及び汚れ等に気づいた場合は、手を挙げて監督者に知らせなさい。
6. 解答用紙5枚すべてに、受験番号を記入しなさい。
7. 試験終了後、問題用紙は持ち帰りなさい。





1 You are the Chief of the International Office of Miyazaki Solutions, a Japan-based online financial company. You want to hire 1 new junior officer to work with you as an assistant to help increase your international presence. There are 4 candidates who have sent their letters of introduction below. Read them and answer the questions that follow.

**a. Mona Wang**

Hi! I'm Mona! I was born and grew up in Guangdong, China but moved to the U.S. when I was 8. Now I'm 22 and have just graduated from Stanford University with a four-year degree with honours in Economics. I speak and write fluent Chinese as well as English. Well, so far, the only work I have done is just home tutoring while I was a university student so I only have part-time work experience. But my friends say that I am cheerful and energetic and I'm a lover of outdoor sports such as kayaking, surfing (yes!), and rock climbing (I have an instructor's license in the latter).

**b. Dieter Bornkopf**

Please allow me to introduce myself. I am a 35-year old citizen of Germany who has spent 10 years as a financial services officer in Munich but would like to expand my skills for the future. I have a certification in Web design and am a qualified computer programmer. I graduated with a Master's Degree in Applied Mathematics from Draisaitl Regional University in 2007. I am married, with one 3-year old child. I am fluent in English (TOEFL = 114), French, and German.

**c. Kevin Flask**

To whom it may concern:

I am writing this introduction in order to apply for the position listed above.

Name: Flask, Kevin

Birthdate: 05/06/1990

Citizenship: USA

Qualifications: PhD in Digital Technology from Washington University (2014). Assistant Communications and Technology Officer at U.S. Naval Base in Sasebo, Japan (2015-to present). Speak intermediate level Japanese.

Father: Douglas Flask Jr., President of Natcash Investments. I was raised under my father's leadership. I am disciplined and responsible.

**d. Rina Villegas**

Dear Sir,

I hope I'm not bothering you with this application but I am extremely interested in getting the job listed. I am sure that I will be a great choice.

First, I am the developer and sole owner of SAMBO, a software program that helps manage financial documents. I have also developed three apps which are available for download: MoneyGames, The Buck Stops Here, and Doohickey, all of which deal with managing money (see my website at [www.rinanotreal.org](http://www.rinanotreal.org)).

Although I did not attend university after graduating from high school two years ago, The Philippine Times newspaper recently wrote, 'She is one of the most exciting and creative Apps developers today' and I was described as a 'teenage financial genius' in the Manila Bulletin weekly magazine. Making financial apps is my first passion so I ask you to please consider me for the job. Thank you so much!

**Questions:**

1. a) Write one question that you would like to ask each of the four candidates and b) explain your reason for asking that question (all in English). Do not ask the same question twice.
2. Which one of the candidates would you be most likely to choose based on the above introductions? Explain your reasoning in English in 50-60 words.

3. Which one of the candidates would you be most likely not to choose based on the above introductions? Explain your reasoning in English in 50-60 words.
4. Three of the following statements are true based on the information in the introductions. Which three are they?
- Mona is a Chinese citizen
  - Dieter has certification of his English skills
  - Rina's apps have made a lot of profit
  - Mona is certified as a surfing instructor
  - Kevin's father works for the U.S. government
  - Rina lives in the Philippines
  - Mona has had good grades
  - Dieter and Kevin have full-time working experience
5. Based on their introductions, match the candidate's *name* with the information (a-l). All candidates have three matches.
- |               |   |
|---------------|---|
| <i>Mona</i>   | a. Immigrated to a new country                          |
| <i>Dieter</i> | b. Is trilingual  |
| <i>Kevin</i>  | c. Has a family member in a financial field             |
| <i>Rina</i>   | d. Does not mention computer skills                     |
|               | e. Is an outdoors enthusiast                            |
|               | f. Does not have a university degree                    |
|               | g. Has been praised in media                            |
|               | h. Is the oldest candidate                              |
|               | i. Is identified as female                              |
|               | j. Has a military-related background                    |
|               | k. Is a veteran in the same field as Miyazaki Solutions |
|               | l. Lives in Asia now                                    |

2 Translate the following announcement into English.

皆様

本社研修員による研修報告会を、下記のとおり開催いたします。  
10月8日に開催された国際研修フォーラム担当の、7名の研修員による活動報告となります。参加を希望される方は、事前にく問い合わせ先>までお申し込みください。皆さまのご参加を心よりお待ちしております。また、報告会の後には懇親会も予定しています。

< 記 >

研修報告会

日時：10月11日(木)13:30～17:00

場所：講義棟1階 プレゼンテーションホール

懇親会

日時：10月11日(木)17:00～18:30頃まで

場所：講義棟3階 コモン・エリア

参考までに、研修員の報告書のまとめ(日本語版)を添付します。研修員の活動内容や担当国の状況を知るための資料としてご活用ください。

よろしくお願いいたします。

< 問い合わせ先 > kokusai-forum@kenshu.com

以上

3 Describe the picture below and make up a story or explanation behind it in about 70-80 English words.



4 Read the following article and answer the questions that follow it.

Exercise helps promote heart health, weight loss, and overall fitness, but it  
<sup>(1)</sup> can also make you sweat almost one liter of fluid during intense workouts. Although sweating is your body's way to help keep its core temperature cool, it can lead to the loss of important minerals, dehydration\*, and heat stroke. Isotonic drinks replace those nutrients\* and fluids quickly, helping to prevent exercise-related injuries and illness.

Sports drinks are classified three ways: as isotonic, hypotonic, and hypertonic, depending upon the amount of carbohydrates\* they contain. Isotonic fluids have six to eight percent carbohydrates, including glucose — your body's preferred energy source for exercise. Isotonic drinks have an osmolality of 280 to 330 mOsm/kg, a measure of the number of particles of carbohydrates,  
<sup>(2)</sup> electrolytes\*, sweeteners, and preservatives in a fluid. The osmolality rating of isotonic drinks best approximates that of your body's natural fluid balance, which is one reason why these drinks are so popular among runners and other  
<sup>(3)</sup> endurance athletes.

Electrolytes are essential minerals, including sodium\*, calcium, and magnesium, that help maintain the acid-base balance in your body's cells. A study from the Netherlands, published in 1998 in the *International Journal of Sports Medicine*, compared the effects of a caffeinated soft drink, a low-sodium mineral water, and an isotonic carbohydrate-electrolyte solution on elite cyclists.  
<sup>(4)</sup> (more, given, drinks, subjects, retained, sodium, much, isotonic), magnesium, and  
<sup>(5)</sup> calcium in their bodies — enough to compensate for urinary and sweating losses.

The carbohydrate's glycogen, which is converted to glucose and stored in your liver and muscles, requires less oxygen to be burned for fuel than protein or fat. In a typical male athlete, for example, the liver stores 90g of glycogen and the muscles store 400g. During hard exercise, carbohydrate storage can be reduced at a rate of three to four grams per minute, which can almost exhaust



your body's supplies in exercise sustained at two hours or more. It would ordinarily take 24 to 48 hours for your body to naturally replenish\* those supplies, but an isotonic drink can return the glycogen balance to your body much more quickly.

<sup>(6)</sup> It would seem logical to consume water during exercise when you're sweating, but water can cause bloating\* — and it doesn't contain carbohydrate or electrolytes. The higher the carbohydrate level in a drink, the slower the rate of stomach emptying. Isotonic drinks empty from the stomach at a rate similar to water, reducing urine output, and encouraging fluid retention\* to prevent dehydration.

Researchers at the University of Edinburgh measured the effects of isotonic sports drinks on young athletes during exercise who consumed the drinks before and during games. The results, published in the *European Journal of Applied Physiology* in 1990, found that the isotonic hydration allowed the athletes to continue high-intensity, stop-start activity (than, longer, who, up, 24, drank, to, percent, those) <sup>(8)</sup> a placebo\* solution.

Adapted from <http://www.livestrong.com/article/442094> Jun 15, 2015

(*本文語句注) dehydration 脱水(症) nutrients 栄養素 carbohydrate 糖質 electrolyte 電解質 sodium ナトリウム replenish 補給する bloating 腫脹 retention 滞留 placebo 気休めの薬
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**Questions:**

1. Translate the sections marked (1), (2), and (7) in the article into Japanese.
2. Explain the sections marked (3), (4), and (6) in Japanese.
3. The words listed in the sections marked (5) and (8) are scrambled. Put them in the correct order. Write the 2nd and 7th words as your answers.
4. Based on the information contained in the article, match the first half of the sentences (listed 'a' to 'h' below) with the second half (listed 1-8 below).
  - a. The contents of isotonic drinks ...
  - b. Sportspeople who use isotonic drinks ...
  - c. Intense workouts are fine but ...
  - d. One advantage of glycogen is that it ...
  - e. It usually takes 1 or 2 days to replace carbohydrates, but isotonic drinks ...
  - f. A small percentage of sports drinks contain glucose because this ...
  - g. If isotonic drinks contain a lot of carbohydrates they ...
  - h. Consuming isotonic drinks ...
  1. can lengthen their workout by almost  $\frac{1}{4}$  more
  2. can keep liquids in your body
  3. can speed up the process
  4. can help balance the amount of fluids lost in sweating and peeing
  5. come close to copying the body's normal level of liquids
  6. can lead to multiple medical problems
  7. can reduce the amount of oxygen needed
  8. is what the body likes in order to do a workout
5. Summarize this article in English in 40-50 words.











