## 旭川医科大学

# 平成31年度一般入試前期日程

# 英 語 問 題 紙

## 注意事項

- 1. 試験開始の合図があるまで、この問題紙を開いてはいけません。
- 2. 英語の問題紙は、10ページあります。
- 3. 解答用紙は4枚あります。
- 4. 受験番号は、監督者の指示に従って、全ての解答用紙の指定された箇所に必ず記入しなさい。
- 5. 受験番号および解答以外のことを解答用紙に書いてはいけません。
- 6. 解答はすべて解答用紙の指定された欄に書くこと。裏面に書かないこと。
- 7. 解答用紙のみを提出しなさい。問題紙は持ち帰りなさい。

### 問題 1 以下の英文を読み、問いに日本語で答えなさい。

#### The Deaths I Do Not See

When I was a young doctor in Mozambique in the early 1980s, I had to do some very difficult math. The math was difficult because of what I was counting. I was (1) counting dead children. Specifically, I was comparing the number of deaths among children admitted to our hospital in \*Nacala with the number of children dying in their homes within the district we were supposed to serve.

At that time, Mozambique was the poorest country in the world. In my first year in Nacala district, I was the only doctor for a population of 300,000 people. In my second year, a second doctor joined me. We covered a population that in Sweden would have been served by 100 doctors, and every morning on my way to work I said to myself, "Today I must do the work of 50 doctors."

We admitted around 1,000 very sick children each year to the district's one small hospital, which meant around three per day. I will never forget trying to save the lives of those children. All had very severe diseases like diarrhea, pneumonia, and malaria, often complicated by anemia and malnutrition, and despite our best efforts, around one in 20 of them died.

(2) That was one child every week, almost all of whom we could have cured if we had had more and better resources and staff.

The care we could provide was rudimentary: water and salt solutions and intramuscular injections. We did not give intravenous drips: the nurses had not yet acquired the skills to administer them and it would have taken up too much of the doctors' time to place and supervise the infusions. We rarely had

<sup>\*</sup>Nacala ナカラ(モザンビーク北部の都市)

oxygen tanks and we had limited capacity for blood transfusions. This was the medicine of extreme poverty.

One weekend, a friend came to stay with us — a Swedish pediatrician who worked in the slightly better hospital in a bigger city 200 miles away. On the Saturday afternoon, I had to go on an emergency call to the hospital and he came with me. When we arrived, we were met by a mother with fear in her eyes. In her arms was her baby who had severe diarrhea and was so weak that she could not breastfeed. I admitted the child, inserted a feeding tube, and ordered that oral rehydration solution should be given through the tube. My pediatrician friend dragged me into the corridor by the arm. He was very upset and angrily challenged (3) the substandard treatment I had prescribed, accusing me of skimping in order to get home for dinner. He wanted me to give the baby an intravenous drip.

I became angry at his lack of understanding. "This is our standard treatment here," I explained. "It would take me half an hour to get a drip running for this child and then there would be a high risk that the nurse would mess it up. And yes, I do have to get home for dinner sometimes, otherwise my family and I would not last here more than a month."

My friend couldn't accept it. He decided to stay at the hospital struggling for hours to get a needle into a tiny vein.

When my colleague finally joined me back at home, the debate continued. "You must do everything you can for every patient who presents at the hospital," he urged.

"No," I said. "It is unethical to spend all my time and resources trying to save those who come here. I can save more children if I improve the services outside the hospital. I am responsible for *all* the child deaths in this district: the deaths I do not see just as much as the deaths in front of my eyes."

(4) My friend disagreed, as do most doctors and perhaps most members of the public. "Your obligation is to do everything for the patients in your care. Your claim that you can save more children elsewhere is just a cruel theoretical guess." I was very tired. I stopped arguing and went to bed, but the next day I started counting.

Together with my wife, Agneta, who managed the delivery ward, I did the math. We knew that a total of 946 children had been admitted to the hospital that year, almost all of them below the age of five, and of those, 52 (5 percent) had died. We needed to compare that number with the number of child deaths in the whole district.

The child mortality rate of Mozambique was then 26 percent. There was nothing special about Nacala district, so we could use that figure. The child mortality rate is calculated by taking the number of child deaths in a year and dividing it by the number of births in that year.

So if we knew the number of births in the district that year, we could estimate the number of child deaths, using the child mortality rate of 26 percent. The latest census gave us a number for births in the city: roughly 3,000 each year. The population of the district was five times the population of the city, so we estimated there had probably been five times as many births: 15,000. So 26 percent of that number told us that I was responsible for trying to prevent 3,900 child deaths every year, of which 52 happened in the hospital. I was seeing only 1.3 percent of my job.

(5) Now I had a number that supported my opinion. Organizing, supporting, and supervising basic community-based health care that could treat diarrhea, pneumonia, and malaria before they became life-threatening would save many more lives than putting drips on terminally ill children in the hospital. It would, I believed, be truly unethical to spend more resources in

the hospital before the majority of the population—and the 98.7 percent of dying children who never reached the hospital—had some form of basic health care.

So we worked to train village health workers, to get as many children as possible vaccinated, and to treat the main child killers as early as possible in small health facilities that could be reached even by mothers who had to walk.

This is the cruel calculus of extreme poverty. It felt almost inhuman to look away from an individual dying child in front of me and toward hundreds of anonymous dying children I could not see.

I remember the words of Ingegerd Rooth, who had been working as a missionary nurse in Congo and Tanzania before she became my mentor. She always told me, "In the deepest poverty you should never do anything perfectly. If you do you are stealing resources from where they can be better used."

Paying too much attention to the individual visible victim rather than to the numbers can lead us to spend all our resources on a fraction of the problem, and therefore save many fewer lives. (6) This principle applies anywhere we are prioritizing scarce resources. It is hard for people to talk about resources when it comes to saving lives, or prolonging or improving them. Doing so is often taken for heartlessness. Yet so long as resources are not infinite — and they never are infinite — it is the most compassionate thing to do to use your brain and work out how to do the most good with what you have.

(Adapted from Factfulness: Ten Reasons We're Wrong About the World

— and Why Things Are Better Than You Think by Hans Rosling)

- 間 1 下線部(1)の内容を本文に即して述べなさい。
- 問 2 下線部(2)を和訳しなさい。
- 問 3 下線部(3)のように筆者が処置した理由を本文に即して述べなさい。
- 間 4 下線部(4)の理由を本文に即して述べなさい。
- 問 5 下線部(5)の内容を本文に即して述べなさい。
- 間 6 下線部(6)の内容を本文に即して述べなさい。

## 問題 2 Read the following text and answer the questions in English.

The modern world is full of opportunities to meet new people. We rarely take them. We're timid about whom to date, whom to hire—even whom to schmooze with at corporate networking events. A clever study by two psychologists, Paul Ingram and Michael Morris, was built around just such an event. It was a mixer, an evening of drinks and chat for executives. Ingram and Morris invited a range of high-powered consultants, \*entrepreneurs, bankers, and other business-people to the event in New York. About a hundred showed up. Almost all had emphasized that their aim was to meet new people rather than hang around with old associates; they told the researchers they wanted to build new ties, or expand their social network.

What they actually did was rather different. The scientists were able to track exactly where people went and whom people chatted with during the party, thanks to a digital tag that each attendee had been given to wear. The tags revealed that people were making a beeline for people they already knew and then staying close to them. When they did meet strangers, they did so because those strangers were friends of friends. As a result, the new acquaintances tended to be from the same industry.

(No wonder that two other researchers, sociologists Howard Aldrich and Martha Martinez-Firestone, recently concluded that contrary to their reputation, most entrepreneurs aren't terribly creative. One reason: most entrepreneurs hang out with other people who are exactly like them.)

Of course it's human nature to spend time with your friends. But what's striking about this research is that people said they intended to do exactly the opposite. People went to a networking event with the expressed intention of expanding their social networks, and they didn't even try. Those that did

<sup>\*</sup>entrepreneur 起業家

meet new people encountered only friends of friends, perpetuating old cliques.

In principle, the modern world gives us more opportunities than ever to forge relationships with people who do not look, act, or think the same way that we do. Travel is cheaper, communication is free and instantaneous, and a host of tools exist to help us reach across previously unbridgeable social divides. But what do we do with these opportunities? We keep our social networks nice and tidy by seeking out people just like us.

Consider a study of college friendships conducted by Angela Bahns, Kate Pickett, and Christian Crandall. These psychologists compared the way students formed friendships at small college campuses, of around five hundred students apiece, with the friendship structure at the University of Kansas, which has a student population of a medium-sized town. The researchers sought out pairs of people who were chatting in the student union or cafeteria, and gathered details about students' age, sexual orientation, and ethnicity along with more fine-grained information such as how much they drank, smoked, or exercised, and what they felt about issues such as abortion, and their attitudes to Arabs, gay men, and black people. And they were asked about their friendships.

With twenty-five thousand students to choose from, the University of Kansas offered a far greater range of views and lifestyles than the smaller colleges did. In principle, then, friendship networks at the large campus should be far more diverse. They weren't. On the larger campus, students were able to seek out their ideological twins; on the smaller campuses, people made friends with people very different from them. Forced by circumstance to befriend people at least somewhat different from themselves, they did so. And they made the friendships work: friendships at the smaller colleges were actually closer and lasted longer than those at the larger university. Offered a

wider choice of friends, students at larger schools chose sameness. It's astonishing how widespread this tendency to homophily can be, and it can be both deep-rooted and absurdly superficial.

But while our attraction to people who share our outlook is not new, what is new is that we're far more able to indulge that desire. Women are now far freer, better educated, and better paid, which is good news. But one unintended consequence of that freedom is what economists call "assortative mating." Executives with MBAs used to marry their secretaries; now they marry other executives with MBAs. And just as people choose ever more similar spouses, they also choose ever more similar neighborhoods in a process called "assortative migration." In the United States, neighborhoods are increasingly segregated — economically, politically, almost any way one cares to look at the data. We have an unprecedented choice of news outlets. Americans, Canadians, Australians, and Brits can easily read *The Times of India* or *The Japan Times*. But we don't. Instead, conservatives read conservative newspapers and liberal newspapers.

(Adapted from Messy: The Power of Disorder to Transform Our Lives by Tim Harford)

- Question 1. According to the people invited by Ingram and Morris, why did they join the event?
- Question 2. What did the study of college friendships reveal?
- Question 3. Why don't Americans read The Times of India or The Japan Times?
- Question 4. Read the following statements, and mark  $\underline{T}$  for true or  $\underline{F}$  for false according to the text.
  - A. Ingram and Morris found that people joining the network event never created social networks with someone they didn't know.
  - B. People exhibited consistent behavior with respect to what they said their aim of participating in the network event was.
  - C. Aldrich and Martinez-Firestone insisted that most entrepreneurs are able to produce something new because they tend to associate with similar people.
  - D. In modern societies, we have more opportunities to build relationships with people we do not know than in the past, partly because of the development of transportation and advancement of communication technology.
  - E. The study by Bahns *et al.* compared the friendship structure at the small campuses with that of the University of Kansas.
  - F. Students at the small colleges tended to form stronger friendship networks than those at the University of Kansas.
  - G. The study by Bahns et al. demonstrated the saying that birds of a feather flock together.
  - H. In the United States, each family is isolated and independent from their neighbors.

問題 3 Write a story <u>in English</u>. Start with: A child found an interesting-looking rock on a beach. Then, write about what happened. Construct a story with a beginning, middle, and end.