

第 1 問から第 3 問では、問題文の中の [] 内の数字はマークシートの間番号を示している。該当する問番号の解答記入欄に答をマークしなさい。

第1問 次の問1～6の空所〔 1 〕～〔 6 〕に入れるのに最も適切なものを(1)～(4)から1つ選び、その番号をマークしなさい。

問 1. If our company [1] to raise our salaries, we are going to go on strike.

- (1) avoids (2) ignores (3) refuses (4) rejects

問 2. Isn't it about time you [2] exercising to lose weight?

- (1) have started (2) started (3) to start (4) will start

問 3. It was not very [3] of you to eat the last piece of her birthday cake.

- (1) considerable (2) considerate (3) considered (4) considering

問 4. [4] no further questions or comments from the committee members, the meeting was brought to a close.

- (1) Being (2) Having been (3) There being (4) There is

問 5. Almost [5] of the team opposed the plan to build another nuclear power plant in the region.

- (1) every member (2) few members
(3) some members (4) the member

問 6. There is something the [6] with the laptop I bought just a month ago.

- (1) issue (2) matter (3) problematic (4) wrong

第2問 次の問1～4においては、それぞれ日本語の意味に最もよく合うように下の(1)～(7)の語句を並べかえて空所を補い、適切な文を完成させなさい。解答は[7]～[14]に入れるものの番号のみをマークしなさい。ただし文頭にくる文字も小文字にしてある。

問1. 彼の下で働くぐらいなら、会社を辞めた方がはるかにましだ。

_____ [7] _____ [8] _____ work under him.

- | | | | |
|-------------|---------|----------------|------------|
| (1) company | (2) I | (3) leave | (4) rather |
| (5) than | (6) the | (7) would much | |

問2. 情報提供者は名前を明かさないでくれと言った。

The informant _____ [9] _____ [10] _____.

- | | | | |
|-----------|---------|---------------|---------|
| (1) asked | (2) be | (3) disclosed | (4) his |
| (5) name | (6) not | (7) that | |

問3. その女性がもし看護師の制服を身に着けていたら、私は彼女はこの病院で働いていると断言するだろうに。

_____ [11] _____ [12] _____, I would swear she works at this hospital.

- | | | | |
|-------------|-------------|-----------|-------------|
| (1) a | (2) nurse's | (3) the | (4) uniform |
| (5) wearing | (6) were | (7) woman | |

問4. 被災地が一刻も早く往時の賑わいを取り戻しますように。

_____ [13] _____ [14] _____ as soon as possible.

- | | | | |
|---------------------|------------|--------------|---------|
| (1) devastated area | (2) former | (3) its | (4) may |
| (5) regain | (6) the | (7) vitality | |

第3問 Read the article and answer the questions that follow.

In some places in the world right now, getting tested for COVID-19 remains difficult or nearly impossible. In Rwanda, you might just get tested randomly as you're going down the street.

"So whenever someone is driving a vehicle, bicycle, motorcycle or even walking, everyone is asked if you wish to get tested," says Sabin Nsanzimana, director general of the Rwanda Biomedical Center, which is the arm of the ministry of health that's in charge of tackling COVID-19. Health officials in personal protective equipment administer the test. Nsanzimana says the testing is voluntary, although some others say refusal is frowned upon by government health officials.

The sample collection — from a swab up the nose — and filling out the contact information paperwork takes about five minutes.

"All these samples are sent that day to the lab," Nsanzimana says. "We have a big lab here in Kigali. We also have six other labs in the other provinces."

Despite being classified by the World Bank as a low-income country, and despite its limited resources, Rwanda has vowed to identify every coronavirus case. Anyone who tests positive is immediately quarantined at a dedicated COVID-19 clinic. Any contacts of that case who are deemed at high risk are also quarantined, either at a clinic or at home, until they can be tested.

Nsanzimana says health workers call or visit every potential contact of someone who tests positive.

"We really believe that doing so is important to make sure we detect and trace where the virus could be," he says.

Comprehensive contact tracing is a task that has overwhelmed countries with far more resources than Rwanda. Rwanda's per capita income is roughly \$2,000 per year. Yet all testing and treatment for the virus is provided for free.

It costs the government between \$50 and \$100 to run a single coronavirus test, Nsanzimana says. In order to test thousands a day, Rwanda has started using a process called "pool testing." Material from 20-25 nasal swabs are all put into one vial and run through the machine. This allows them to test far more samples at once. If they get a positive result, then all the swabs that went into that initial vial are tested individually to pinpoint the person who's infected.

Nsanzimana says Rwanda's experience dealing with other infectious disease outbreaks is helping it now during the pandemic.

The country is using systems and equipment it already had in place to address HIV.

"The main machines we are using for COVID testing are the HIV machines that were (already) there," he says. "We are using the same structure, same people, same infrastructure and laboratory diagnostics, but applying it to COVID testing."

Since recording its first case in mid-March, the country of 12 million has recorded just over 1,200 cases. Ohio has a similar size population and has recently been reporting roughly 1,200 cases a day.

"Rwanda did a few things that are quite smart," says Sema Sgaier, the head of the Surgo Foundation, which has just launched a new data tool to analyze trends around COVID-19 across Africa. "One is they

responded really early. They put some of the most stringent lockdowns in place compared to every other African country. In fact, we've been monitoring physical distancing data across the continent and Rwanda fares, I think, second; they've physical distanced the second most across Africa" — a conclusion based on mobile phone movement data. South Africa is No. 1.

Rwanda mobilized community health care workers and police and college students to work as contact tracers. It set up national and regional command posts to track cases. It's even using human-size robots in the COVID-19 clinics to take patients' temperatures and deliver supplies.

Tolbert Nyenswah, who ran the Liberian ministry of health's response to Ebola in 2014, gives Rwanda high marks for how it has been handling COVID-19, even if at times it's heavy-handed.

"Rwanda, from all indications, is a success story for Africa," Nyenswah says. The strong leadership from President Paul Kagame, which Nyenswah says can even be authoritarian, has been effective during this crisis. Kagame demands accountability from his health ministry.

Whether the people trust or fear the government, Rwandans listen to their government and have been following the orders regarding masks, washing hands and staying home.

Nyenswah worries that the worst is yet to come in Africa with this pandemic.

"No country is out of the woods yet," he says. However, he adds that Rwanda is an example to other low-income countries that even with limited resources, this virus can be (《B》). "So what needs to be done is to follow the (prevention and containment) measures. Political leadership is very, very crucial. Rwanda should continue what it is doing now. And other countries should emulate Rwanda."

<https://www.npr.org/sections/goatsandsoda/2020/07/15/889802561/a-covid-19-success-story-in-rwanda-free-testing-robot-caregivers> (改変あり)

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|--------------------------|----------------------|--------------------|
| 注 arm: 部門 | swab: 綿棒 (での拭き取り) | vow: 誓う |
| quarantine: ～を隔離する | deem ～ ...: ～を…だと考える | per capita: 1人当たりの |
| nasal: 鼻の | vial: 小瓶 | |
| in place: すぐ使える状態で、実施されて | | stringent: 厳重な |
| fare: やっていく | command post: 指揮所 | heavy-handed: 強権的な |
| authoritarian: 独裁主義的な | emulate: ～を見習う | |

問 1. Choose the most accurate description of «A» “frowned upon,” and write the number of your answer in [15].

- (1) accepted (2) criticized (3) praised (4) preferred

問 2. Choose the most appropriate word to fill in the blank for («B»), and write the number of your answer in [16].

- (1) contained (2) ignored (3) protected (4) spread

問 3. Which of the following statements is the closest to what the article states about Rwanda? Write the number of your answer in [17].

- (1) According the World Bank, Rwanda is an affluent country.
- (2) Rwanda and Ohio have a similar number of coronavirus cases.
- (3) Rwanda’s HIV equipment is being utilized to test for COVID-19.
- (4) Rwanda’s leadership is often characterized as passive.

問 4. Which of the following statements is the closest to what the article mentions about contact tracing in Rwanda? Write the number of your answer in [18].

- (1) Contact tracing is much more complicated in Rwanda than in other countries.
- (2) Despite having limited resources, Rwanda has been doing extensive contact tracing.
- (3) Rwanda has modeled its contact tracing efforts on those of wealthier countries.
- (4) Rwanda needs many more resources in order to be able to contact trace effectively.

問 5. Which of the following is the closest to what is mentioned in the article about measures Rwanda has taken to combat COVID-19? Write the number of your answer in [19].

- (1) About two dozen test samples are first tested together in one container.
- (2) Health care workers are being forced to be tested at random for COVID-19.
- (3) Rwanda’s COVID-19 efforts focus on protecting medical staff, police and students.
- (4) The country has been using robots to test samples in laboratories.

問 6. Which of the following best describes the main point of this article? Write the number of your answer in [20].

- (1) Rwanda has been unexpectedly successful in handling the COVID-19 pandemic.
- (2) Rwanda has developed cheaper COVID-19 testing than other African countries.
- (3) Several African countries have helped Rwanda deal with the COVID-19 pandemic.
- (4) The large size of Rwanda's labs has enabled COVID-19 testing to be done quickly.

この後の第4問と第5問は記述用解答用紙に解答しなさい。

第4問 次の英文を読み、後の問いに答えなさい。

Epidemiologists like to say, “《A》If you’ve seen one pandemic, you’ve seen ... one pandemic.” But behind each outbreak lie core principles that help explain why the outbreak began, why it grew, why it peaked when it did and why it ended. In *The Rules of Contagion*, mathematician and epidemiologist Adam Kucharski of the London School of Hygiene & Tropical Medicine outlines those principles and shows how they apply beyond infectious disease, to the spread of ideas, financial crises, violence and more.

Kucharski hardly mentions the novel coronavirus sweeping the globe. He was just wrapping up final edits when the first cases of COVID-19 appeared in Wuhan, China. But the book still feels extraordinarily prescient. Kucharski provides context for readers to understand the current pandemic, as well as a framework for thinking about other types of contagious spread. The interviewer spoke with Kucharski about the principles of contagion, disease modeling and misinformation. The following conversation has been edited for length and clarity.

— *Your book looks at the principles of contagion and how they apply beyond infectious diseases. Why is it useful to transport those ideas to other fields?*

Kucharski: I’ve noticed that the same mistakes get made repeatedly across fields. For example, after the 2008 financial crisis, a lot of people realized that the network structure between banks and loans and exposure to risk was very similar to a lot of the network features that caused problems with sexually transmitted infections in the 1970s and ’80s. If there are a lot of “loops” in the network, with people connected to each other in multiple ways, it makes it harder to stop the spread. If the network is structured so that highly connected individuals are disproportionately linked to less-connected individuals, it can result in an outbreak that spreads slower at first, but eventually reaches more of the network. Pre-2008, the financial network had both of these features.

It’s also important to understand the underlying network. When looking at violence, it might be tempting to think the events are random, but there is often a series of connections that link them, and targeting these links with interventions can help prevent future incidents.

— 【 あ 】

Kucharski: There are four factors that are worth bearing in mind. The first one is duration — how long people are infectious for. The second is what people do while they’re infectious: the opportunities for contagion. Another feature is what I call the transmission probability — the chance something actually gets across during an interaction. Then the final important one is susceptibility. If you have the virus or if you try to spread an idea, what is the chance that someone is susceptible?

— 【 い 】

Kucharski: It helps to get away from the idea that all of them are trying to make an exact forecast of what will happen in a month’s time or two months’ time. I see models as a way of clarifying our thinking about

how the process works. Every time you see someone in the media claiming they have a solution to COVID, they are implicitly relying on a model. They might not outline what that model is, but they are making assumptions about how transmission functions, and they're making assumptions about how their proposed measure will influence transmission. The advantage of a model is it lays out those steps very clearly, and it means that people can criticize them.

—— 【 う 】

Kucharski: We've seen ^{《B》} some quite dramatic changes in terms of what's being limited. A few years ago, the focus was on attempting to remove all the harmful content. The problem with trying to reactively remove all harmful content is that online outbreaks spread so quickly — it's difficult to keep up with transmission. A more effective approach may be preemptive messaging. If you type COVID into a search bar on most tech platforms, you will have a huge amount of credible information before you find anything that might lead you down some sort of rabbit warren into unreliable information. This is one of the first times that we've really seen that level of blanket preempting across multiple platforms — Google, Instagram, Twitter, Facebook.

—— 【 え 】

Kucharski: If you look at countries in Asia that have been very good at it, often the surveillance data is far more detailed. In Korea, they have access to people's credit card transactions, to their cell phone locations. We haven't seen anything near that scale in Europe or the U.S. If we're talking about learning from these countries, we have to look at what they've done and then decide what elements of that we do or don't want to introduce. Do you want to give up more data in the possibility that disease control could work better and you could get back to elements of normality quicker, or do you want to protect privacy with the knowledge that it may mean that we'd need some additional physical distancing in place? We need to have a really frank public discussion about what we think of appropriate ^{《C》} trade-offs.

<https://www.sciencenews.org/article/new-book-covid-19-coronavirus-violence-outbreaks-principles> (改変あり)

From All kinds of outbreaks, from COVID-19 to violence, share the same principles by Cassandra Willyard from Science News for Students, July 7, 2020. Copyright © 2020 Society for Science and the Public. Used with permission.

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|-----------------------|----------------------------|---------------------|
| 注 epidemiologist: 疫学者 | contagion: (接触) 感染 | wrap up: ～を終える |
| prescient: 先見の明がある | disproportionately: 不釣り合いに | susceptibility: 感受性 |
| preemptive: 先制的な | rabbit warren: 迷宮 | surveillance: 監視 |
| in place: 実施されている | | |

問 1. 下線部《A》が言いたいことは何か、本文の内容に即し日本語で説明しなさい。

問 2. 本文の内容に即し、伝染病の流行と同じ原理で説明できるものの例を 3 つ日本語で挙げなさい。

問 3. 下線部《B》が指すのは何から何への変化か、本文の内容に即して日本語で述べなさい。

問 4. 下線部《C》が指すのは何と何の trade-off か、本文の内容に即して日本語で述べなさい。

問 5. 空所【あ】～【え】には、それぞれ次の 4 つの質問のどれを入れるのが最も適切か、(1)～(4)の記号で答えなさい。

(1) *After the 2016 U.S. presidential election, the spread of misinformation gained a lot of attention. How have social media platforms tried to combat this in response to COVID-19?*

(2) *Modeling, which is the focus of your book, has played an important role in the coronavirus response. But models aren't perfect. How do we prevent inaccurate predictions from eroding people's confidence in modeling?*

(3) *Technologies like contact tracing apps could help curb the spread of coronavirus, but they also raise privacy concerns. How do we strike a balance?*

(4) *You write that we need to separate the features that are specific to a particular outbreak from the underlying principles that drive contagion. What are those principles?*

注 app: アプリ

curb: ～を抑制する

contagion: (接触) 感染

第5問 次の英文を読み、下線部 (1) ～ (4) の日本語の内容を英語にしてください。

Faced with a shrinking domestic workforce, Japan has increasingly looked overseas for help. The country is currently hosting 1.5 million foreign workers and the government is gearing up efforts to bring in even more.

Policymakers say they are crafting measures that will create an inclusive society, one in which Japanese and foreign workers can coexist in a safe and comfortable environment. But their efforts are coming up against a new problem: an increasing number of foreign laborers are fleeing their places of employment.

The disappearance of foreign workers has long been a challenge for Japan. But the problem has grown more acute in recent years. The Immigration Services Agency says 9,052 foreign trainees went missing in 2018, nearly double the figure from 2014.

Every single one of them arrived in the country as part of the state-sponsored Technical Intern Training Program. The idea behind the policy, introduced in 1993, was to bring in labor from developing countries and send the workers home three years later, equipped with valuable technical skills.

As of June of last year, more than 367,000 laborers are in Japan as part of the program. (1)彼らは建設、製造、食料生産など、さまざまな産業で活躍している。

For the trainees, the program is not only a chance to immediately earn several times what they could back home. It also offers them hope for a future filled with opportunity, thanks to the skills they acquire during their time in the country.

But the number of trainees who have disappeared tells a different story.

Three young men from a Southeast Asian country who asked not to be identified, fearing harassment back home, were sent to a farm in Nagano Prefecture in 2018 as part of the program. They had been contracted after hearing they could save thousands of dollars by working in Japan.

But (2)夢を叶える前に極度の疲労で倒れてしまうだろうと彼らが悟ったのは、農場で働いてわずか数日のことだった。 They told NHK they were forced to work from 2 a.m. to 5 p.m. while in season, and their overtime pay was well below what they had been told.

After six months of these conditions, the three could take no more. They decided to run away.

In November, the Immigration Agency said it would be tightening measures on businesses and supervisory organizations. It also said companies from which many trainees had fled would be suspended from the program.

But according to Yoshihisa Saito, associate professor at Kobe University's Graduate School of International Cooperation Studies, these measures will not solve the problem. Saito has tracked the working and living conditions of Vietnamese trainees for many years.

Saito says (3)現行制度の最大の欠点の1つに、外国人実習生は最初に契約した業界で働くことしか認められていないことが挙げられる。 This makes it hard for them to find alternative work. It forces them to confront a Hobson's choice: stay and suffer, or flee and take your chances with illegal work.

Japan recently revised its immigration law with a view to accepting even more foreign workers.

(4) しかし、この法案は、外国人労働者の権利や生活状況が十分に配慮されないまま可決されたように思われる。

International criticism of Japan's human rights record with regard to foreign workers is growing. Mariko Yamaoka, Director of Not for Sale Japan, a human rights watchdog group, says Japan could be labeled a modern slave state.

If Japan is to shed this troubling reputation, it will have to improve conditions for foreign trainees — and quickly — while also tackling the issues at the root of the increasing number of disappearances.

<https://www3.nhk.or.jp/nhkworld/en/news/backstories/810/> (改変あり)

As foreign workers disappear, Japan puts in measures to improve working conditions (NHK WORLD-JAPAN / 2020年1月15日掲載)

注 gear up: ～を促進する

craft: ～を作り込む

inclusive society: 共生社会

Hobson's choice: えり好みの許されない選択