

英語問題

(平成31年度)

【注意事項】

1. この問題冊子は「英語」である。
2. 試験時間は90分である。
3. 試験開始の合図まで、この問題冊子を開いてはいけない。ただし、表紙はあらかじめよく読んでおくこと。
4. 試験開始後すぐに、以下の5および6に記載されていることを確認すること。
5. この問題冊子の印刷は1ページから8ページまでである。
6. 解答用紙は問題冊子中央に3枚はさみこんである。
7. 問題冊子に落丁、乱丁、印刷不鮮明な箇所等があった場合および解答用紙が不足している場合は、手をあげて監督者に申し出ること。
8. 試験開始後、3枚ある解答用紙の所定の欄に、受験番号と氏名を記入すること（1枚につき受験番号は2箇所、氏名は1箇所）。
9. 解答は必ず解答用紙の指定された箇所に記入すること。解答用紙の裏面に記入してはいけない。
10. 問題番号に対応した解答用紙に解答していない場合は、採点されない場合もあるので注意すること。
11. 問題冊子の中の白紙部分は下書き等に使用してよい。
12. 解答用紙を切り離したり、持ち帰ってはいけない。
13. 試験終了時刻まで退室を認めない。試験中の気分不快やトイレ等、やむを得ない場合には、手をあげて監督者を呼び、指示に従うこと。
14. 試験終了後は問題冊子を持ち帰ること。

[I] 次の文章を読んで、下の問いに解答欄の範囲内で答えなさい。

*が付いている語句には本文の後ろに注があります。

After many years of living in Japan, our family has *acclimated and adopted many of these ways, and when we find ourselves outside Japan we often grumble and *cringe about others' *slack ways. しかし、日本で受け入れられている方法が私たちが困惑させたことが何度かあった、⁽⁷⁾ and we have dared to be defiant ... and sometimes even a *tad *deviant. Yes, we have misbehaved.

As a dentist's daughter, I tend to feel I have a good handle on tooth brushing—appropriate timing, frequency, method, and duration—but in group overnight situations for work or volunteer activities in Japan, I have sometimes been scolded for not brushing my teeth at the proper time—before eating. Not one to make waves, I have learned to fall in, fetch my tooth-brushing cup, toothbrush and toothpaste, and *queue up with others at the *spigot to dutifully⁽⁴⁾ brush my teeth—minutes prior to eating breakfast. Later, after my meal, I've been known to sneak back to the spigot to *surreptitiously brush again.⁽⁷⁾

Our family's passive approach to ear cleaning—the “never put anything smaller than your elbow into your ear” approach—has also gotten us in trouble. Our active, healthy daughter failed an elementary school health physical. The reason? We hadn't scraped the earwax out of her ears with the traditional bamboo *mimikaki* tool. We complained—mind your own *beeswax,⁽¹⁾ I wanted to say—but the school nurse was unmoved. So, we took our protest to our Japanese *pediatrician, who agreed this was a case of cultural difference, that earwax indeed protects the inner ear, and he signed the form for school.

Our son ran into trouble in elementary *P.E. class. Boys changed into gym clothes in one classroom and girls in another, so when our son undressed, he took off his pants, then his shirt, and, standing in his underwear, prepared to put on his gym clothes. Everyone yelled at him. So he tried taking off his shirt first, then his pants. Still everyone yelled at him. Finally the teacher contacted me. “Would you please teach your son the proper way to change clothes?” Then she explained: shirt off, gym shirt on, pants off, gym shorts on. Never all off, then all on. Never stand half naked in your underwear.

Our son grumbled every gym day and went on and on about how absurd it was—to have a proper way for putting on gym clothes.⁽⁴⁾ In defiance, he taught his classmates what fun it was to play his own superhero game—showing off your *biceps while standing in your underwear and shouting, “Have no fear! Half-Naked Man is ()!”⁽⁷⁾

Yes, there was another call from the teacher.

(出典 Holly Thompson, “There's Always a Way” in *Wingspan*, November 2016)

Notes

acclimate: to become accustomed to a new climate or new conditions; adjust.

cringe: to feel and show distress in one's face.

slack: doing something poorly because one is not putting enough care or effort into it.

tad: a very small amount.

deviant: different from what most people consider to be normal and acceptable.

queue: to stand or wait in a line.

spigot: a device that controls the flow of water from a pipe.

surreptitiously (*adv.*) < surreptitious (*adj.*): done secretly or quickly, in the hope that other people will not notice.

beeswax: a yellow sticky substance that is produced by bees and is used especially for making candles and polish for wood.

pediatrician: a doctor who studies and treats the diseases of children.

P.E.: physical education (sport and exercise that is taught in schools).

biceps: 上腕二頭筋, 力こぶ.

(1) 下線部 (ア) を英訳しなさい。

(2) 筆者が下線部 (イ), 下線部 (ウ) のようにした理由をそれぞれ日本語で述べなさい。

(3) 下線部 (エ) は “mind your own business” という慣用句を基にした表現である。ここでは筆者のどのような感情を表わしているのか, 日本語で具体的に説明しなさい。

(4) 下線部 (オ) で示されている手順とはどのようなものか, 日本語で具体的に説明しなさい。

(5) 下線部 (カ) の空欄に入れるのに最も適切なものを, 次の選択肢から一つ選び, スーパーヒーロー登場の決まり文句を完成させ, 番号で答えなさい。

1. there

2. me

3. coming

4. here

〔 II 〕 次の文章を読んで、下の問いに解答欄の範囲内で答えなさい。

*が付いている語句には本文の後ろに注があります。

In March 2016, Zipline, a U.S. *startup, partnered with the Rwandan government to launch the world's first commercial drone delivery service, ferrying vital medical supplies to *far-flung hospitals by air. Since October of that year, the company has dispatched more than 7,000 units of blood products to 21 hospitals, including red blood cells, platelets and plasma that would have otherwise needed to travel by a *treacherously *tangled road network, losing precious hours in the race to save lives.

"Before, it took at least three hours to get blood in an emergency," says Dr. Roger Nyonzima, head surgeon at Nyanza Hospital's maternity *ward, which is about 60 miles from Kigali. "Three hours can make the difference between saving or losing a life. Now we get blood in 15 minutes. Fifteen minutes, we can work with."

The success of Zipline in Rwanda has inspired the company to grow. Zipline is now expanding into neighboring Tanzania, with plans to launch the world's most extensive drone delivery service providing blood-*transfusion supplies, emergency vaccines, HIV medications, antimalarials and basic surgical supplies to more than 1,000 health facilities.

A Latin America launch is in the works as well, says Zipline co-founder Keller Rinaudo. "The reality is, moms die in every country in the world for [lack of blood]," he says. "Rwanda was just the first country to do something about it."

The inspiration to form Zipline came from a list of lives lost⁽⁷⁾ in rural parts of Africa due to a shortage of essential medicines. Robotics expert Rinaudo and aviation consultant Will Hetzler, former roommates at Harvard, met a computer programmer and public-health researcher, Zacharia Mtema, in Tanzania. Mtema had developed a *text-messaging system for doctors to *log cases in which they had lacked the medical supplies that were needed to save the lives of patients who were suffering from easily solvable *afflictions⁽¹⁾ like postpartum hemorrhages, snake bites and bites from rabid animals.

"It was essentially a database of death," says Rinaudo, who recalls scrolling through thousands of heartbreaking entries. To him and Hetzler, drone deliveries seemed like an obvious solution.

On any given day, scores of drones launch and land at Zipline's Rwanda headquarters, a former cornfield in the city of Muhanga, about an hour's drive from Kigali. The steady rhythm of packing, launching, collecting and charging the drones *belies the groundbreaking technological advances in robotics, *autonomous navigation and aerospace management that *underpin the business. That's the way the founders want it. "Zipline isn't a drone company,"

says Rinaudo. “Zipline is a health care *logistics company.”

The design of their electric aircraft, called Zips, *diverges wildly from the quad-copters that are currently being used by most drone companies. Instead, they look like small propeller airplanes, enabling them to fly faster and longer—100 miles—on a single charge, in any weather short of a hurricane. The Zips navigate to their preprogrammed destinations using GPS and drop their *payloads via parachute, instead of landing, to minimize the number of people who need to be trained on how to interact with a drone. All the hospitals need is someone who can send an order and pick up the box when it lands.

Once an order arrives in Zipline’s computer database, blood-bank technicians pull the required stock from *state-of-the-art blood-storage facilities and pack it into *sturdy cardboard boxes that are already fitted with parachutes. The drones can carry up to 3.9 *lb. of blood products at a time. Drone operators load the boxes into Zips, which can reach more than half of all Rwandan territory. A second facility that will cover the rest of the country is under construction.

The operator loads the Zip onto a *catapult-type launch mechanism and enters the destination on a tablet, and with a high-pitched whine, the Zip is *airborne. The whole process takes about a minute from order to launch. Once the Zip nears its destination, it sends an automated text message to the hospital, announcing the exact arrival time. Then it swoops down toward the designated landing zone, drops its payload and circles back toward home base.

Blood and medical-supply shortages affect rural hospitals in the U.S. just as they do in Rwanda, and Zipline, after an invitation from the White House in 2016, is now working with the U.S. Federal Aviation Administration to launch a similar service in parts of the U.S. later this year.

(出典 Aryn Baker, “These Drones Are Saving Lives” in *Time*, June 11, 2018, 一部省略)

Notes

startup: a newly established business.

far-flung: a long distance away.

treacherously (*adv.*) < treacherous (*adj.*): dangerous, especially when seeming safe.

tangled: complicated and confused.

ward: a separate room or area in a hospital for people with the same type of medical condition.

transfusion: the process of putting blood from one person’s body into the body of someone else as a medical treatment.

text-messaging: sending a written message with a mobile phone.

log: to make a systematic recording of events, observations, or measurements.

affliction: something that causes pain or suffering.

belie: to give a false impression of somebody or something.

autonomous: free to govern or control itself.

underpin: to give strength or support to something and to help it succeed.

logistics: the practical organization that is needed to make a complicated plan successful when a lot of people and equipment is involved.

diverge: to differ.

payload: the passengers and goods on a ship or an aircraft for which payment is received.

state-of-the-art: using the most modern or advanced techniques or methods.

sturdy: strong and not easily damaged.

lb.: a pound in weight, equal to about 454 grams.

catapult: a machine used for sending planes up into the air.

airborne: in the air after taking off.

- (1) 今後 Zip が輸送を計画しているものを、本文から英語で3つ抜き出さない。
- (2) Zipline 社を共同で立ち上げた3人の職業を、本文から英語で抜き出さない。
- (3) Zip が通常の drone と異なる点を、構造、機能に分けて日本語で具体的に説明しなさい。
- (4) 下線部 (ア) の言い換えを、本文から英語4語で抜き出さない。
- (5) 下線部 (イ) を和訳しなさい。
- (6) 下線部 (ウ) のような輸送手段をとる理由はなぜか、本文に即して日本語で説明しなさい。

〔Ⅲ〕 次の文章を読んで、下の問いに解答欄の範囲内で答えなさい。

*が付いている語句には本文の後ろに注があります。

Listening to the speech that President John F Kennedy never gave on November 22, 1963, is *uncanny, *sobering and *thought-provoking. It is uncanny because, digitally created in Kennedy's own voice and with his familiar *cadences, それは古びたアナログ(analogue)録音かと思うくらい、本物らしく聞こえる。 It sounds, in other words, authentic, even though Kennedy was *assassinated minutes before he was due to read it.

It is sobering because of the contrast it provides in tone and substance with contemporary US leadership. The syntax is formal, the phrasing lean, the message one of peace through strength at a time of threats to global security that were even more serious than those the world faces now.

It is thought-provoking as a counterfactual; a "what if?" The speech, which *The Times* has brought to life with the help of cutting-edge technology, repeatedly asserts the need for learning alongside leadership. It echoes President Theodore Roosevelt's preference for *steeliness over *swagger on the world stage: "If we are strong, our strength will speak for itself," Kennedy says. And it *prefigures today's anxieties about fake news, even if the context was Kennedy's more personal anxiety over criticisms of his domestic policies. To these he responded: "We can hope that fewer people will listen to the nonsense."

But the most *intriguing passage is one that makes the case for containing Soviet expansion in southeast Asia not with US troops but by channelling aid and funds to local allies, primarily on grounds of cost. Such assistance, Kennedy says, "makes possible the stationing of 3.5 million allied troops along the communist frontier at one tenth the cost of maintaining a comparable number of American soldiers."

Had he lived, would Kennedy have resisted escalating the Vietnam conflict as his successor did? Events arguably forced President Johnson's hand, but this speech is at the very least a timely reminder that individual judgment still plays a paramount role in determining the direction of world affairs, no matter how powerful the vast, impersonal forces that seem to *mould them.

Some will reject the lessons of this piece of *resurrected history. The current occupant of the White House may be among them, but Kennedy's Trade Mart speech still offers hope to another group, namely sufferers of motor neurone disease and other *degenerative conditions that gradually and cruelly deprive them of their natural voices.

Stephen Hawking, the most famous motor neurone disease patient in history, refused to surrender to silence but had to make do with a synthetic voice that might not have blended

with other personalities as well as it did with his. The technology used to breathe life into Kennedy's last speech can be used much less laboriously to help others.

Because Kennedy was dead it took two months of work on 831 voice recordings to recreate his voice. The recordings had to be *painstakingly *disassembled into nearly a quarter of a million sounds or "halfphones" that were then matched to the text. For anyone still capable of talking, four hours of audio data are enough to create a synthesised version of a voice, ready to take over as the real one fades. If we are a species of compulsive communicators, as David Attenborough suggested in his original *Planet Earth* series, this technology is far from surreal. On the contrary, it's the most natural thing in the world.

(出典 "JFK Revived: The Times has helped President Kennedy to deliver his final speech" in *The Times*, March 16, 2018)

Notes

uncanny: strange or mysterious.

sobering: making one feel serious.

thought-provoking: making one think a lot about a subject.

cadence: the regular rise and fall of the voice.

assassinate: to kill someone famous or important.

steeliness (*n.*) < steely (*adj.*): like steel in color, brightness or strength.

swagger: a way of walking or behaving that seems very confident and self-important.

prefigure: to show or suggest that something will happen in the future.

intriguing (*adj.*) < intrigue (*v.*): to interest someone a lot, especially by being strange, unusual and mysterious.

mould: to shape a soft substance into a particular form.

resurrect: to bring someone back to life or revive something.

degenerative: getting worse as time passes.

painstakingly (*adv.*) < painstaking (*adj.*): done with great care and effort.

disassemble: to separate something into its different parts.

- (1) 下線部 (ア) に関して、ケネディ大統領の演説が実現しなかった理由を、日本語で簡潔に説明しなさい。
- (2) 下線部 (イ) を英訳しなさい。
- (3) 下線部 (ウ) の具体的な内容を、本文より英語で抜き出しなさい。
- (4) 下線部 (エ) を和訳しなさい。
- (5) 下線部 (オ) に属する人物の姓名を、本文より英語で抜き出しなさい。
- (6) 下線部 (カ) の内容について、日本語で具体的に説明しなさい。