



は

英語問題

はじめに、これを読みなさい。

1. この問題用紙は 22 ページある。ただし、白紙はページ数に含まない。
2. 解答用紙に印刷されている受験番号が正しいかどうか、受験票と照合して確認すること。
3. 監督者の指示にしたがい、解答用紙の氏名欄に氏名を記入すること。
4. 解答は、すべて解答用紙の所定欄にマークするか、または記入すること。
所定欄以外のところには何も記入しないこと。解答欄は裏面にもある。
5. 問題が指示する数より多くマークしないこと。
6. 解答は、必ず鉛筆またはシャープペンシル(いずれも HB・黒)で記入すること。
7. 訂正する場合は、消しゴムできれいに消し、消しくずを残さないこと。
8. 解答用紙は、絶対に汚したり折り曲げたりしないこと。
9. 解答用紙は持ち帰らず、必ず提出すること。
10. 問題冊子は、必ず持ち帰ること。
11. 試験時間は 70 分である。
12. マークシート記入例

良い例	悪い例
	

I 次の英文を読んで設問に答えよ。

The Amazing Psychology of Japanese Train Stations: Rail travel aided by subtle behavioral tricks

Every weekday morning across Tokyo, suit-clad office workers, groups of schoolchildren and other travelers walk through the city's large and busy railway stations.

It can look like chaos; commuters packed shoulder-to-shoulder amid the constant clatter of arriving and departing trains. But a closer look shows something more: a station may be packed, but commuters move smoothly through it. Platforms are a whirl of noisy activity, yet trains maintain _____ on-time performance. Indeed, the amazing punctuality of the Japanese rail system ^(A) sometimes makes international news — as on May 11, 2018, when JR West apologized after one of its commuter trains left the station 25 seconds early.

Tokyo is home to the world's busiest train stations. Its rail operators ^(B) handle 13 billion passenger trips annually. Managing this requires a clever blend ^(C) _____ engineering, planning, and psychology. Beneath the busy surface, there are often unnoticed features designed to manage passenger behavior. These use light, sound, and other means. Japan's creativity in this area reflects the importance of public transportation in the country.

This is 'nudge theory' at work. Railway stations are great places to see this. Pioneered by behavioral economist Richard Thaler, who was awarded the 2017 Nobel Memorial Prize for his work, and Harvard Law School professor Cass Sunstein, the theory says that gentle nudges, or pushes, can influence people to make better decisions about things such as signing up for private pension schemes or for organ donation. In the U.K., there's even a government office devoted to the idea, the *Behavioural Insights Team* (or nudge unit).

In London, for example, in order to move more people through busy Holborn

Station, the London Underground authorities wanted riders to stand side by side while riding on the escalator rather than stand on one side and walk on the other. To do this, simple footprints were painted side by side on the up escalators.

But when it comes to such quiet management of passenger behavior, Japan's nudges go much further. ^(D) Japanese commuters know how to stand on an escalator and can easily make it through the confusing spaces of Tokyo's rail stations. This allows rail operators to instead focus on managing other things.

The ultimate in mood lighting

Japan has a high suicide rate and a common way to commit suicide is to jump from a station platform into the path of an oncoming train. This happens ^(E) once a day, and causes huge problems across the transit system.

To address this, stations across Tokyo and the rest of Japan are installing chest-high barriers, but such barriers are expensive, and about 70 percent of Japan's largest and most-traveled stations do not have the platform space or structural strength to accommodate them, so rail operators are trying alternative approaches. If you stand at either end of a platform in Tokyo's huge Shinjuku Station, you can see a small square LED panel, which emits a pleasant, deep-blue glow. You might just think it's something to kill bugs. But these simple blue panels are designed to save lives.

The theory is that exposure to blue light has a calming effect on one's mood, and so rail stations in Japan began installing these LED panels as a suicide-prevention measure in 2009. They are located at the ends of each platform—typically the most-isolated and least-trafficked area, and the points where most platform jumps occur. Some stations, such as Shin-Koiwa Station in Tokyo, have also added colored roof panels, which allow blue-tinted sunlight to filter down on to platforms.

The approach has proven to be surprisingly ^(F). According to a study by researchers at the University of Tokyo, over a 10-year period there has been an

84 percent decline in the number of suicide attempts at stations where blue lights are installed.

Songs for a peaceful departure

Commuting during rush hour in Japan can be very stressful. The trains are jam-packed at as much as 200 percent capacity during the height of rush hour, and razor-thin connection times to transfer from one train to another leave little room to make mistakes. In the past, this stress was added to by the harsh buzzer sound that was used to signal a train's departure. Hearing this, salarymen raced down stairs and across platforms to _____ it to the train's closing doors.

To calm this stressful audio environment, in 1989 the major rail operator JR East commissioned the Yamaha company and composer Hiroaki Ide to create *hassha* melodies — short, ear-pleasing jingles — to replace the traditional departure buzzer.

Also known as departure or train melodies, *hassha* tunes are brief, calming and distinct; their aim is to notify commuters that a train will be leaving soon without adding to their stress. To that end, most melodies are _____ to an optimal length of seven seconds. Research shows that shorter-duration melodies work best at reducing passenger stress and stopping people from running.

The tunes feature fun titles like *Seaside Boulevard* and range from the soulful to the upbeat. Most stations have their own melodies, songs that become part of a station's identity. Tokyo's Ebisu Station, for example, is known for its departure melody — a short, stylized version of the theme from the movie *The Third Man*.

As more stations have added melodies over the years, the original thesis has proven correct. A study conducted in October 2008 at Tokyo Station found that after the introduction of *hassha* melodies on certain platforms there was a 25 percent reduction in the number of injuries from passengers rushing for trains.

The use of these jingles is not without _____, however. Shortly after their introduction, residents living near open-air rail stations, weary of hearing

endless repetitions of the same jingles all day, complained of noise pollution.

Teenager-be-gone

Despite, or perhaps because of, its reputation as a remarkably safe country, Japan pays attention to combatting youth delinquency. Train stations are particularly sensitive in this regard since large groups of young people pass through stations at all hours of the day.

To stop young people hanging out with friends in the station and damaging things, some train stations use ultrasonic deterrents — small, unobtrusive devices that emit a high-frequency tone. The particular frequency used — 17 kilohertz — can generally only be heard by those under the age of 25 (whereas older people can't detect such frequencies, thanks to age-related hearing loss). These devices — the brainchild of a Welsh inventor and also used in the U.S. and Europe to stop teens hanging around places — have been enthusiastically adopted in Japan.

Standing outside one of Tokyo Station's many exits on a recent summer day, (K) この抑止手段の効き目が作用しているのを見てとるのは容易だった。 Weary salarymen and aged *obaachan* passed under the sonic deterrent without changing pace. Among uniform-clad students, however, the reactions were evident — a suddenly quickened pace, a look of confusion or discomfort, and often a cry of *urusai!* (Loud!) None appeared to connect the noise to the deterrents in the ceiling panels above.

Pointing the best way forward

Rail employees too come under this sort of behavioral management. Perhaps most famously, Japanese train conductors, drivers, and platform attendants have to use the point and call (*yubisashikakunin*) method in doing tasks. By physically pointing at an object, and then saying what you're going to do, a greater portion of the brain is engaged, providing improved situational awareness and accuracy. Studies have repeatedly shown that this technique (J) _____ human error by as much as 85 percent. Pointing and calling is now a major workplace safety feature

in industries throughout Japan.

So, why don't train workers everywhere do this? Like so many aspects of Japanese transit culture, point and call has proved resistant to export (though pointing and calling has been adopted in modified form by New York City's Transit Authority). In this, as in so many things, Japan's rail system stands largely alone.

Adapted from citylab.com, May 22, 2018

1. 次の各問の答えを①～④の中から選び、その番号をマークせよ。なお、(K)については、その指示に従って答えること。

(A) 空欄に入れるべき最も適切なものは次のどれか。

- ① remarkable
- ② remarking
- ③ remarked
- ④ remarkably

(B) operators の意味で最も適切なものは次のどれか。

- ① 運転手
- ② 運営会社
- ③ 経営者
- ④ 電話交換手

(C) 空欄に入れるべき最も適切なものは次のどれか。

- ① at
- ② in
- ③ of
- ④ to

(D) when it comes to の意味で最も適切なものは次のどれか。

- ① when dealing with
- ② when interested in
- ③ when hoping for
- ④ when going against

(E) 空欄に入れるべき最も適切なものは次のどれか。

- ① by average
- ② in average
- ③ on average
- ④ up average

(F) 空欄に入れるべき最も適切なものは次のどれか。

- ① diminutive
- ② effective
- ③ negative
- ④ relative

(G) 空欄に入れるべき最も適切なものは次のどれか。

- ① manage
- ② escape
- ③ make
- ④ save

(H) 空欄に入れるべき最も適切なものは次のどれか。

- ① compounded
- ② compelled
- ③ conformed
- ④ composed

(I) 空欄に入れるべき最も適切なものは次のどれか。

- ① contact
- ② controversy
- ③ courtesy
- ④ consistency

(J) 空欄に入れるべき最も適切なものは次のどれか。

- ① echoes
- ② enhances
- ③ produces
- ④ reduces

(K) 下線部「この抑止手段の効き目が作用しているのを見てとるのは容易だった」を英訳すると、たとえば次のような英文になる。

it was (1) to (2) the (3) of this deterrent (4)
(5)

上記の英文には空所が5つある。適切な語で空所を補うこと。ただし、次の〔 〕内の単語は、必ず1度使うこと。なお、解答は解答用紙の(1)～(5)の場所に1語ずつ記入すること。

[action, effectiveness, in, see]

2. 本文の内容に照らし、次の各問の答えを①～④の中から選び、その番号をマークせよ。

(L) What is the main focus of this passage?

- ① how nudge theory was developed
- ② how managing behavior has improved Japan's rail system
- ③ how the suicide rate across Japan's rail system has been reduced
- ④ how other countries learn from Japan's rail system

(M) In general, how does the writer feel about the rail system in Japan?

- ① He admires its level of people management.
- ② He believes it is too different from other countries.
- ③ He feels it needs to do more to reduce suicides.
- ④ He thinks it is chaotic.

(N) In paragraph 5, why did the London Underground authorities want people to stand side by side?

- ① to move people quickly out of the station
- ② so they could stand on the painted footprints
- ③ to make passengers say quiet
- ④ in order to confuse passengers

(O) What is the purpose of the high-pitched sounds used at some stations?

- ① to make people feel calm
- ② to make salarymen walk more quickly
- ③ to let people know when a train is arriving
- ④ to make it uncomfortable for young people

(P) Which of the following information is not given in the passage?

- ① Short melodies played on train platforms reduce passenger stress.
- ② The number of young people hanging out in train stations has increased in recent years.
- ③ Young people can detect a wider range of sound.
- ④ Train station employees experience nudge theory.

(以下の問題Ⅱ，Ⅲ，Ⅳについては，解答用紙の裏面にマークすること。)

Ⅱ 次の英文を読んで設問に答えよ。

Waiting to make their move:

Asia struggles to match supply and demand for workers

The agencies don't have names and are difficult to find amid the glamorous hustle of Shanghai. It's better for them to stay in the shadows. They deal in an illegal but highly desirable product: people, specifically Filipina domestic workers to serve China's growing middle class. Filipina helpers, says one agent, will follow your instructions, whereas local Chinese are choosy and can often do only one thing: if they clean, for instance, they will not look after children. Filipinas are popular because they work hard. The Philippine consulate* in Hong Kong estimates that more than 200,000 undocumented Filipinas work as domestic helpers in China. On average they earn 5,000 yuan (US\$728) per month, far more than they could make back home. Agents say that the penalties for employing illegals are not so great. While fines can be large, they are rarely given. For example, one client was caught employing an illegal worker, and the worker sent home, but the client was not _____.

(A) _____
Another Filipina probably took her place. The Philippines has many people who want to work and China needs domestic workers. This demonstrates two trends in Asia. Poor, young South and South-East Asian countries have low wages and underemployment, while richer, ageing countries in the north need people for their workforces. Theoretically, this problem contains its own solution: millions of young workers should go north and east. The countries that take these workers would benefit from their labor, while their home countries would benefit from the money they send home and the skills they may eventually bring home.

However, two-thirds of intra-Asian migrants remain in their own part of the

region. South Asians migrate elsewhere in South Asia, and East Asians stay in East Asia. In practice, migration in Asia tends to be highly restricted. It's difficult to enter another country to work, and permanent settlement is discouraged.

As a result, much of this labor is illegal or unregulated. Thailand, for instance, may have as many as 5 million migrant workers, mainly from neighboring Myanmar, Cambodia and Laos. Many of them _____ visas — particularly those in construction and services. They are willing to take the risk of working illegally or semi-legally in Thailand because wages back home are so low.

China has long been able to satisfy its demand for labor by _____ rural citizens to cities. Over the past 30 years around 150 million Chinese have left the countryside to work in factories, cook in restaurants and clean homes. But with China's population ageing, foreign workers have begun filling the gap: as many as 50,000 Vietnamese illegally cross the border into the southern province of Guangxi each spring to help harvest sugar cane. In 2015, the provincial government started a program to bring Vietnamese workers into local factories.

This trend may increase. Over the next 30 years, China's working-age population will shrink by 180 million. How China handles this fall will play a large role in shaping Asian migration patterns. Manufacturers can move factories to labor-rich countries, or invest in automation. Other industries lack these options. The International Labour Organization (ILO) forecasts that China will need 20 million more domestic workers as it ages.

East Asia as a whole would have to import 275 million people between the ages of 15 and 64 by 2030 to keep the same share of its population at working age. There are also differences in the need for workers within South-East Asia. Singapore, Malaysia, Vietnam and especially Thailand need workers, while Myanmar, Indonesia and the Philippines have too many. South Asia, meanwhile, could afford to lose 134 million workers — India alone could send more than 80 million abroad — without worsening its dependency ratio.

Some countries have become more flexible. Foreign workers are around 40%

of Singapore's workforce, with slightly less than half of those on restrictive domestic-work and construction visas. To prevent foreigners from hurting domestic wages, employers must pay a tax for each foreign worker they hire.

Such financial incentives can help regulate inflows of foreign workers. They can also help encourage workers to leave. In 2003, South Korea introduced a program allowing small firms, mostly in labor-intensive manufacturing, to employ foreigners from poor countries for limited periods of up to four years and ten months. To make sure that these workers do not overstay their welcome, they are charged in advance for the cost of returning home. Their employers also deduct a percentage of their salary, which is given back to them only as they leave the country. These temporary workers account for about a quarter of the 962,000 foreigners now working in South Korea.

Japan has long preferred exporting capital to importing labor. Its multinationals have set up plants across South-East Asia to make Japanese goods, bringing factories to foreign workforces, not the other way around. But this approach has its limits. For the sort of non-tradable services especially in demand in ageing countries, such as domestic care and nursing, it is useless. Japanese companies can build their cars in Vietnam, but their executives don't want to send their mothers to Vietnam when they get old.

Hong Kong has opened its borders to foreign nurses, nannies and maids. It introduced a scheme to import domestic workers in 1974. This was the same year that the Philippines adopted its ^(E)_____ of encouraging people to find jobs overseas. By the end of 2015, Hong Kong had over 340,000 foreign domestic "helpers" — one for every 7.3 households. Over half still come from the Philippines. Their employers must provide food, board, travel to Hong Kong and wages of at least HK\$4,310 (US\$556) a month.

By the mid-2000s, over half of married mothers with a college degree in Hong Kong employed foreign domestic help, making it easier for many local women to pursue careers outside the home.

Governments often worry that immigrants will be a substitute for native employment, rather than a complement to it. Hong Kong's foreign maids were both. They "displaced" local women from unpaid employment in the home. But in so doing, they provided a powerful complement to the women's paid employment.

Foreign domestic workers may have other beneficial side effects. A study of the United States showed that immigrant inflows lowered the cost of childcare and led to a small increase in American women with college degrees having babies. Immigration may therefore have a triple benefit for Asia's ageing societies. Foreign workers add to the labor force themselves, they help native women take fuller part in it, and they help them bear the workers of tomorrow. What a pity Asia does not make more use of them.

consulate* 領事館

Adapted from *The Economist*, Feb 11, 2017

1. 次の各問の答えを①～④の中から選び、その番号をマークせよ。

(A) 空欄に入れるべき最も適切なものは次のどれか。

- ① fired
- ② fined
- ③ fixed
- ④ filed

(B) 空欄に入れるべき最も適切なものは次のどれか。

- ① get
- ② have
- ③ hold
- ④ lack

(C) 空欄に入れるべき最も適切なものは次のどれか。

- ① assisting
- ② encouraging
- ③ moving
- ④ persuading

(D) itが指すものとして最も適切なものは次のどれか。

- ① automation
- ② China
- ③ International Labour Organization
- ④ Asia

(E) 空欄に入れるべき最も適切なものは次のどれか。

- ① amenity
- ② capability
- ③ policy
- ④ subsidy

2. 次の各問の答えを①～④の中から選び、その番号をマークせよ。

(F) What is the main point of the article?

- ① East Asian governments have policies to encourage the movement of labor.
- ② East Asia needs to further restrict the movement of people.
- ③ Asian countries could solve two problems by letting people migrate for work.
- ④ Asian economies are growing quickly and will need more workers in future.

(G) What is the writer's opinion?

- ① Immigrants often do harm by taking the jobs of local workers.
- ② Workers should be freer to move from one part of Asia to another for work.
- ③ People employing migrant workers should pay large fines.
- ④ Asian countries need to do more to encourage workers to go home.

(H) What is NOT mentioned as a way that Chinese companies can cope with fewer workers?

- ① They can move factories to other countries.
- ② They can make the workplace more open to female workers.
- ③ They can use more robots.
- ④ They can have foreign workers come to China.

(I) On page 11, what is meant when the writer says, "South Asia, meanwhile, could afford to lose 134 million workers."

- ① South Asian economies have money to spend on more workers.
- ② South Asia needs to import many workers.
- ③ South Asia has many more workers than it needs.
- ④ South Asia is expected to create tens of millions of new jobs by 2030.

(J) Why are immigrant workers in South Korea charged in advance for their journey home?

- ① because they do not earn enough to buy a ticket home
- ② to help smaller companies employ foreigners
- ③ so companies can regulate the number of their employees
- ④ to discourage them from settling in Korea

Ⅲ 以下の空欄に入れるべき最も適切なものは次のどれか。

(A) I'm sorry Ms. Blythe has just stepped away _____ her desk. May I ask who's calling?

- ① for
- ② from
- ③ off
- ④ out

(B) His estimate of the cost was not far off the _____.

- ① guess
- ② dollars
- ③ mark
- ④ saying

(C) I'm sorry, Ms. Jones is not in at the moment. Can I _____ a message?

- ① have
- ② put
- ③ take
- ④ say

(D) I'm afraid something suddenly came up, can I put _____ our meeting until tomorrow?

- ① off
- ② on
- ③ out
- ④ over

(E) They changed the schedule _____ the last moment.

- ① at
- ② in
- ③ on
- ④ to

(F) I'm afraid my hands are _____. There's nothing more I can do.

- ① across
- ② decided
- ③ set
- ④ tied

(G) Since _____ his job, Mr. Smith hasn't seemed to know what to do with his time.

- ① losing
- ② loss
- ③ lost
- ④ the loss

(H) The team has been working around the _____ to finish the project on time.

- ① clock
- ② hours
- ③ schedule
- ④ shift

(I) Outsourcing our shipping has been a great cost _____.

- ① discount
- ② item
- ③ saving
- ④ source

(J) A: Will you have any time for some sightseeing?

B: I'm afraid not. I've got to _____ to the airport right after the meeting.

- ① land
- ② run
- ③ stay
- ④ visit

(K) A: How's your hotel?

B: Great location and a comfortable bed — that's all you _____, isn't it?

- ① are needing
- ② need
- ③ needed
- ④ will need

(L) A: Can I speak to Ms. Smith please?

B: Certainly. Could you _____ the line please? Let me get her.

- ① wait
- ② hold
- ③ stay
- ④ tag

(M) A: Is there any way you can lower your offer? Even a two dollar reduction would be very helpful.

B: Please give us some time to _____ this. I'll need to talk with head office.

- ① conduct
- ② consider
- ③ consult
- ④ consume

(N) A: Did you hear the news? Poots, the drugstore, is pulling out of the Japanese market.

B: Yeah, I heard that. They never really took off here. If they _____ better market research before entering this market, perhaps it wouldn't have come to this.

- ① do
- ② had done
- ③ have been doing
- ④ were doing

(O) A: I'm afraid I'm meeting with some clients out of town on Thursday afternoon... How about Thursday morning?

B: Unfortunately, I'm seeing _____ else on Thursday morning. Are you doing anything on Friday morning?

A: No, it looks like I'm free then.

- ① anyone
- ② everyone
- ③ no one
- ④ someone

IV 次の(A)~(E)の空欄に入れるものとして①~⑧の中から適切な文を選び、その番号をマークせよ。ただし、同じ文を2度以上使ってはならない。

In the cafeteria, Mehtu, an exchange student from Malaysia, sees Yuki, a student she hasn't seen in a year.

Mehtu: Yuki? Yuki? Is that you?

Yuki: Mehtu!! Yes, yes! Wow! _____!

Mehtu: It really has! I'm sorry, I almost didn't recognize you at first with the short hair and the glasses...

Yuki: Ah the glasses... Yeah, I had these back in high school. It's just that I lost my contact lens the other day so I'm back to using these.

Mehtu: Ah, I see... Love the hair by the way! It really suits you!

Yuki: Thanks! _____. But, let's hear about you! What have you been doing?

Mehtu: Me, oh you didn't know? I was in Canada for a year.

Yuki: _____! Really? Wow!

Mehtu: Yeah, one year study abroad.

Yuki: Wow! Fantastic! So that's why I haven't seen you around! Huh!

Mehtu: Yeah.

Yuki: And so?

Mehtu: Well, it was pretty fantastic though a little tough at first. You know, there were times when _____ what the professors were saying. But I really feel like I've grown from the experience. And Canada's a pretty cool country!

Yuki: Sounds great! Hey, do you want to get together later? _____.

Mehtu: Sure! That sounds like a great idea!

- ① I just wanted a change
- ② I'm up for that
- ③ We can catch up on stuff
- ④ I couldn't work out
- ⑤ I was beside myself
- ⑥ It all depends
- ⑦ No way
- ⑧ It's been ages

