

[ I ] 次の英文を読んで設問に答えなさい。

Something many visitors to Japan ( A ) is the abundance of overhead power lines. ① Whether you're in the suburbs, a city center, or even a rural area, you can rarely look up at the sky or towards the horizon without finding your view obstructed by thick, black cables.

Why does Japan have so many overhead power lines when most countries have (ア : **put**) theirs underground? The simple answer is cost, but some claim there are also advantages to (イ : **string**) cables up on poles; the Japanese are far from reaching a consensus on which is the better option.

( B ) the budgetary point of view, underground systems are certainly a lot more expensive. Once you have (ウ : **dig**) the ditches and properly installed the lines and conduits\*, costs can be ten times ( C ) of comparably sized networks of above-ground utility poles.

② Whatever the costs, though, some contend that this isn't the place to cut corners. Since the mid-1980s, the Japanese government has been enacting initiatives to replace the existing poles ( D ) underground systems. Such moves please those who are tired of seeing the scenery (エ : **spoil**) by power lines, of course, but there are also benefits ( E ) of cost and durability: underground power grids are protected from the elements\*, making them less ( F ) to the wind, rain and snow that can damage above-ground equipment.

There are also safety benefits, according to the NPO\* Non-Pole Community, which asserts that during the massive earthquake that (オ : **strike**) Kobe in 1995, neighborhoods with above-ground power lines were much ( G ) damaged. In a recent interview, the organization's Secretary also (カ : **refer**) to fallen poles blocking roads and preventing emergency vehicles from swiftly reaching victims of the disaster.

But most of Japan's power grid still (キ : **remain**) above ground. One argument against underground systems has been put forward by the Tokyo Electric Power Company, or TEPCO. While the company itself has acknowledged the superior aesthetics and durability achieved by (ク : **put**) power lines underground, it has also pointed out that keeping the lines above ground offers certain advantages. "In the event of flooding or landslides, it's harder to isolate the damaged areas in an underground system," the company says. "That can increase the amount of time ( H ) to restore power to damaged areas."

TEPCO also mentions other useful roles (ケ : **play**) by power poles, such as providing housing for street lights, and space for maps and address markers, which can be extremely helpful for people trying to navigate towns in Japan, where only a tiny ( I ) of streets have names.

Regardless of whether the Japanese can reach a consensus on this issue, though, with only about 7% of the land in Tokyo's central 23 wards currently (コ: **have**) underground power networks, and even smaller percentages elsewhere in the country, power lines, like vending machines and *ramen* shops, ( J ) a conspicuous part of the Japanese landscape for some time to come.

設問

問1 (A)～(J)の空欄に入れるのに最もふさわしい語句を選び、その番号を解答欄に書きなさい。

- |                   |                   |                    |                    |
|-------------------|-------------------|--------------------|--------------------|
| (A) 1 comment on  | 2 complain of     | 3 discuss about    | 4 notice about     |
| (B) 1 As          | 2 From            | 3 In               | 4 On               |
| (C) 1 more        | 2 more than that  | 3 that             | 4 those            |
| (D) 1 by          | 2 from            | 3 to               | 4 with             |
| (E) 1 by example  | 2 by means        | 3 in support       | 4 in terms         |
| (F) 1 likely      | 2 resistant       | 3 susceptible      | 4 unlikely         |
| (G) 1 extensively | 2 less severely   | 3 more extensively | 4 severely         |
| (H) 1 needed      | 2 passed          | 3 requiring        | 4 taking           |
| (I) 1 amount      | 2 number          | 3 part             | 4 volume           |
| (J) 1 are         | 2 are going to be | 3 were             | 4 were going to be |

問2 下線部分①を日本語に訳しなさい。

問3 (ア)～(コ)の動詞をこの場所に入れるのにふさわしい形(1語)に変えなさい。

問4 下線部分②を日本語に訳しなさい。

[Ⅱ] 次の英文を読んで設問に答えなさい。

Older people represent a vast well of productive and creative potential. Veteran workers can bring deep knowledge to the table, together with well-developed interpersonal skills, better judgment than the less experienced, and a more balanced perspective. <sup>(1)</sup>They embody a growing natural resource: the social capital of millions of healthy, educated adults. Yet as a result of a network of attitudes and institutional practices, well over one and a half million Americans aged over 50, people with decades of life ahead of them, are unable to find work.

The problem is ageism — discrimination ( あ ) the basis of age. <sup>(2)</sup>雇用における年齢差別は不法であるにもかかわらず、年配の求職者の三分の二はその経験

があると報告している。The 51-year-old driver taking me to the airport at dawn a few weeks ago is a typical example. He told me about a marketing position he thought he was eminently qualified ( い ). <sup>(a)</sup> He did his homework and nailed the interview. But on his way out of the building he overheard one of the interviewers say, “Yeah, he’s perfect, but he’s ( A ) old.”

Another example is JK Scheinberg, the Apple engineer who led the effort that moved the Mac to Intel processors. <sup>(3)</sup> A little restless after retiring in 2008 at 54, he figured he’d be a great fit for a position at an Apple Store Genius Bar\*, despite being twice as old as anyone else at the group interview. “As I was leaving, all three of the interviewers singled me ( う ) and said they’d be in touch,” he said. ( え ) his disappointment, he didn’t hear anything immediately, and he says that he called to follow ( お ). Though he did get an email from a recruiter some days ( B ) to set up a second interview, he stopped pursuing the opportunity.

It’s not unusual for recruiters to say that people who have more than three years of work experience need not apply. Job advertisements call for <sup>(4)</sup> “digital natives,” as if playing video games as a kid is proof of competence. Submitted résumés often go unread, as Christina Economos, a science educator ( か ) more than 40 years of experience in curriculum development has learned. <sup>(5)</sup> 「返事すらもらえないか、あるいは、先方が『より適任の方が見つかりました。』と言ってよこすだけなのです」と彼女は言った。「私の経験や、知識や技能、勤労意欲は、私の年齢のせいだけで無視されてしまうのです。」 She added, “This is really a blow, since I still feel like a vital human being.”

A 2016 study by the National Bureau of Economic Research found clear evidence that age discrimination in the workplace begins even ( C ) for women and never relents: by the time they are 32, they start getting passed ( き ) for promotion, and the pay gap between the sexes becomes more and more evident. Discouraged and diminished, many older Americans stop looking for work entirely. <sup>(6)</sup> They become economically dependent, contributing to the misperception that older people are a burden to society. But it’s not ( く ) choice. How are older people supposed to remain self-sufficient if they’re forced ( け ) the job market?

<sup>(b)</sup> Not one negative stereotype about older workers holds up under scrutiny. <sup>(7)</sup> Abundant data show that they are reliable and capable of mastering new skills, that they handle stress well, and that they are the most engaged of all workers when offered the chance to grow and advance on the job. It may be true that older people take longer to accomplish a given task, but they make ( D ) mistakes. They may take longer to recover from injury, but they hurt themselves ( E ) often. What really counts when it comes to productivity is motivation and effort, not age.

Ageism — assuming that someone is too old or too young to handle a task or take ( こ ) a responsibility — damages the prospects of everyone, old or young. Millennials\* have an unfair reputation for having “no work ethic” and “needing to have their hands held,” so they have trouble getting a foothold in the job market. Unless we tackle age bias, (8) they too are likely to become less employable through no fault of their own, and earlier than they might think. The Age Discrimination in Employment Act\* doesn't apply to people under 40.

Progressive companies know the benefits of workplace ( 9a ), of course, and the so-called “shoe test” can be used to tell whether a company has a problem: look under the table; if everyone's wearing the same kind of shoes, there's a problem! In fact, it's obvious that age should be placed alongside race, gender, ability, and sexual orientation as a criterion for ( 9b ) — not only because it's the ethical path but also because age discrimination hurts productivity and profits.

#### 設問

問1 下線部分(1)について、筆者がこのように考える理由を日本語50字程度で説明しなさい。

問2 (あ)～(こ)の空欄に入れるのに最もふさわしい語を選び、その番号を解答欄に書きなさい。

- |              |             |           |           |
|--------------|-------------|-----------|-----------|
| (あ) 1 in     | 2 of        | 3 on      | 4 to      |
| (い) 1 by     | 2 for       | 3 to      | 4 under   |
| (う) 1 in     | 2 forward   | 3 out     | 4 over    |
| (え) 1 By     | 2 On        | 3 To      | 4 With    |
| (お) 1 down   | 2 in        | 3 out     | 4 up      |
| (か) 1 during | 2 including | 3 through | 4 with    |
| (き) 1 before | 2 between   | 3 over    | 4 through |
| (く) 1 by     | 2 for       | 3 of      | 4 with    |
| (け) 1 into   | 2 onto      | 3 out of  | 4 under   |
| (こ) 1 off    | 2 on        | 3 out     | 4 to      |

問3 下線部分(2)の日本語を英語に訳しなさい。

問4 下線部分(a)の意味を説明する文を選択肢から選んで、その番号を解答欄に書きなさい。

- 1 Although he prepared well, his performance in the interview was poor.
- 2 He did his assignment and took it to the interview.
- 3 He finished his assignment and explained the contents at the interview.
- 4 He prepared thoroughly for the interview and did very well in it.

問5 文中の(A)～(E)に入れるのに最もふさわしい語を選択肢から選び、その番号を解答欄に書きなさい。同じ単語を複数回使用してはならない。

- 1 earlier    2 enough    3 fewer    4 later    5 less  
6 longer    7 more    8 much    9 shorter    10 too

問6 下線部分(3)の日本語を英語に訳しなさい。固有名詞は英語のままで構わない。

問7 下線部分(4)のdigital nativesとはどのような人のことを指して言うのか、この段落から読み取って、日本語40字以内で説明しなさい。

問8 下線部分(5)の日本語を英語に訳しなさい。

問9 下線部分(6)を日本語に訳しなさい。

問10 下線部分(b)の意味を説明する文を選択肢から選んで、その番号を解答欄に書きなさい。解答欄は設問4の解答欄の並びにある。

- 1 All of the negative images people have about older workers turn out to be wrong when they are examined closely.
- 2 None of the negative images people have about older workers can be said to be wrong when they are examined closely.
- 3 The acceptance of older workers in the workplace is delayed by all of the negative perceptions people have of them.
- 4 The negative perceptions people have of older workers do nothing to prevent them from being accepted in the workplace.

問11 下線部分(7)をtheyの指すものを明らかにして、日本語に訳しなさい。

問12 下線部分(8)の状況は当事者のどのような事情で起きると筆者は考えているか、日本語40字以内で説明しなさい。

問13 文中の空欄(9a)と(9b)には同じ単語が入る。文脈から考えて最もふさわしい単語を選択肢から選び、その番号を解答欄に書きなさい。解答欄は設問4の解答欄の並びにある。

- 1 assessment    2 conditions    3 diversity    4 productivity  
5 prospects    6 uniformity

[III] Read the passage below and answer the questions that follow it.

Air pollution takes years off people's lives. It causes substantial pain and suffering among adults and children alike. And it damages food production at a time when we need to feed more people than ever. This is not just an economic issue; it is a moral one.

Air pollution can be produced both outdoors and indoors. For the poorest families, indoor smoke from old-fashioned heating and cooking stoves is typically the more serious problem. As economies develop and start to electrify, motorize and urbanize, outdoor air pollution becomes the bigger issue.

Cleaner technologies with the potential to improve air quality are available. But politicians tend to focus short-sightedly on the costs of action, rather than the costs of inaction. With economic growth and rising energy demand set to fuel a steady rise in emissions of air pollutants and rapidly rising concentrations of particulate matter (PM) and ozone in the coming decades, this approach is untenable.

A new OECD\* report, *The Economic Consequences of Outdoor Air Pollution*, estimates that outdoor air pollution will cause 6 million to 9 million premature deaths annually by 2060, compared with 3 million in 2010. That is equivalent to a person dying every four to five seconds. Cumulatively, more than 200 million people will die prematurely in the next 45 years as a result of air pollution.

There will also be more pollution-related illness. New cases of bronchitis\* in children aged 6 to 12 are forecast to soar to 36 million per year by 2060, from 12 million today. For adults, 10 million new cases per year are predicted by 2060, up from 3.5 million today. Children are also being increasingly affected by asthma\*. All of this will translate into more pollution-related hospital admissions, which are projected to rise to 11 million in 2060, from 3.6 million in 2010.

*Question 1*

On average, individuals would be prepared to pay around \$30 to reduce their annual risk of dying prematurely by 1 in 100,000. Using well-established techniques, these "willingness-to-pay" figures were converted into an overall value of premature deaths caused by outdoor air pollution, as illustrated, for example, in the OECD's *Mortality Risk Valuation in Environment, Health and Transport Policies*.

By that measure, the global cost of premature deaths caused by outdoor air pollution would reach a staggering \$18 trillion to \$25 trillion a year by

2060. Arguably, this is not “real” money, as the costs are not related to any market transactions. But it does reflect the value people put on their very real lives — and the value they would put on policies that would help to delay their very real deaths.

It is time for governments to stop fussing about the costs of efforts to limit air pollution and start worrying about the much larger costs of allowing it to continue unchecked. Their citizens’ lives are in their hands.

### Questions

1 The four paragraphs marked (A) – (D) below belong in the box marked *Question 1* in the passage. Indicate on the answer sheet the order in which you think they should appear.

- (A) Massive as they are, however, the dollar figures do not reflect the true costs of air pollution. Premature deaths from breathing in small particles and toxic gases, and the pain and suffering from respiratory and cardiovascular diseases, do not have a market price. Nor does the experience of constantly inhaling foul-smelling air, or forcing your child to wear a face mask just to play outside. These burdens weigh far more heavily on people than any price tag can represent.
- (B) Nonetheless, the truth remains that politicians tend to respond more to hard figures than to abstract experiences. So the OECD examined numerous economic studies on air pollution to quantify what people’s health is worth to them.
- (C) The impact of air pollution is often discussed in dollar terms. By 2060, 3.75 billion working days per year could be lost due to the adverse health effects of dirty air — what economists call the “disutility of illness.” The direct market impact of this pollution — lower worker productivity, higher health spending, and lower crop yields — could exceed 1 percent of GDP, or \$2.6 trillion, annually by 2060.
- (D) These health problems will be concentrated in densely populated areas with high PM concentrations, especially in cities in China and India. Mortality will also reach high levels in Eastern Europe, the Caucasus and other parts of Asia, such as South Korea, where aging populations are highly vulnerable.

2 According to the passage, are the following statements true or false? On the answer sheet, indicate those you consider to be true with an A, and those you think are false with a B. If you think it is impossible to tell from the passage whether a particular statement is true or false, indicate this with a C.

- (a) Air pollution adversely affects not only the health of people, but also the health of crops, and the economies of entire nations.
- (b) Air pollution inside the home tends to be a bigger issue in developed countries than it is in developing countries.
- (c) The costs of using clean technologies to reduce air pollution tend to make governments lose sight of the costs of not using them.
- (d) In 45 years or so, the number of premature deaths caused every year by air pollution is expected to be two or three times the 2010 level.
- (e) Teenagers are predicted to be more severely affected by pollution-related bronchitis over the coming years than adults.
- (f) In 45 years or so, annual hospitalizations for illnesses resulting from air pollution are expected to be more than four times the current number.
- (g) Japan is one of the countries expected to be especially severely affected by air pollution-related illnesses.
- (h) The true costs of the effects of air pollution on human health can now be measured in dollar terms.
- (i) It is clear from the OECD's findings that people put little monetary value on preventing premature deaths caused by air pollution.
- (j) Governments worldwide will soon start taking action to limit air pollution.

[IV] How careful are you about what you eat for breakfast? Write 80 words or so in English to describe your habits regarding what many consider to be the most important meal of the day, making sure you give appropriate reasons and explanations.

## NOTES

<b>Act</b>	law
<b>Apple Store Genius Bar</b>	a section in an Apple Store where customers can receive assistance from Apple experts
<b>asthma</b>	a medical condition of the chest that makes breathing difficult
<b>bronchitis</b>	an illness that affects the lungs
<b>conduit</b>	a small tunnel, pipe, or channel through which water or electrical wires run
<b>the elements</b>	bad weather, especially wind and rain
<b>millennials</b>	people reaching adulthood around the year 2000
<b>NPO</b>	non-profit organization
<b>OECD</b>	Organization for Economic Cooperation and Development

Adapted from *Oxford Dictionary of English* (2nd ed. rev.), etc.

[出典] 以下の資料に基づく

[I] Casey Baseel "Why does Japan have so many overhead power lines?" *Japan Today* 26 Sep. 2014.

[II] Ashton Applewhite, "You're How Old? We'll Be in Touch." *The New York Times* 3 Sep. 2016.

[III] Simon Upton, "Can we afford the true cost of air pollution?" *The Japan Times* 20 Aug. 2016.

2017(平成29)年度 医学部 一般入学試験問題 訂正

教科・科目	ページ	設問	誤	→	正
生物	23	Ⅱ-問1	[語群] b:DNA	→	[語群] b:核DNA
外国語	8	Ⅱ-問6	問題文 ・・・の日本語を英語に訳しなさい。	→	問題文 ・・・の英語を日本語に訳しなさい。