

1. 次の英文を読み、設問に答えなさい。

Today we make room for a remarkably narrow range of personality styles. We're told that to be great is to be ① bold, to be happy is to be sociable. We see ourselves as a nation of extroverts—which means that we've lost sight of who we really are. Depending on which study you consult, one (1) to one half of Americans are introverts—in other words, *one out of every two or three people you know*. (Given that the United States is among the most extroverted of nations, the number must be at least as high in other parts of the world.) If you're not an introvert yourself, you are surely raising, managing, married to, or coupled with one.

[X] these statistics surprise you, that's probably because so many people pretend to be extroverts. Closet introverts pass undetected on playgrounds, in high school locker rooms, and in the corridors of corporate America. Some fool even themselves, [Y] some life event—a layoff, an empty nest, an inheritance that frees them to spend time as they like—jolts them into ② taking stock of their true natures. You have only to raise the subject of this book with your friends and acquaintances to find that the most (2) people consider themselves introverts. [A]

It makes sense that so many introverts hide even from themselves. We live with a value system that I call the Extrovert Ideal—the omnipresent belief that the ideal self is gregarious, alpha, and comfortable in the spotlight. The archetypal extrovert prefers action to contemplation, risk-taking to ③ heed-taking, certainty to doubt. He favors quick decisions, even at the risk of being wrong. She works well in (3) and socializes in groups. We like to think that we value individuality, but all too often we admire one *type* of individual—the kind who's comfortable “putting himself out there.” Sure, we allow technologically gifted loners who launch companies in garages to have any personality they please, [Z] they are the exceptions, not the rule, and our tolerance extends mainly to those who get fabulously wealthy or hold the promise of doing so. [B]

Introversion—along with its cousins sensitivity, seriousness, and shyness—is now a second-class personality ④ trait, somewhere between a disappointment and a pathology. Introverts living under the Extrovert Ideal are like women in a man's world, discounted because of a trait that goes to the core of who they are. Extroversion is an enormously appealing personality style, but we've turned it into an oppressive standard to which most of us feel we must conform. [C]

The Extrovert Ideal has been documented in many studies, though this research has never been grouped under a single name. Talkative people, for example, are rated as smarter, better-looking, more interesting, and more desirable as friends. Velocity of speech counts as well as volume: we rank fast talkers as more competent and likable than slow (4). [D]

But we make a grave mistake to embrace the Extrovert Ideal so unthinkingly. Some of our greatest ideas, art, and inventions—from the theory of evolution to van Gough's sunflowers to the personal computer—came from quiet and cerebral people who knew how to tune in to their inner worlds and the treasures to be found there. [E]

(Adapted from Susan Cain, *Quiet*, 2012)

- [1] 下線部①～④の意味に最も近いものを選択肢1～4の中から選び、マークシートの解答欄 (1) から (4) にマークしなさい。

- | | | | |
|----------------------|-----------------|----------------|-------------------|
| ① 1. bad | 2. brave | 3. funny | 4. simple |
| ② 1. carrying around | 2. putting away | 3. showing off | 4. thinking about |
| ③ 1. calm | 2. cause | 3. caution | 4. comfort |
| ④ 1. quality | 2. quantity | 3. time | 4. tray |

- [2] 空所(1)～(4)に入る最も適切な表現を選択肢1～4の中から選び、マークシートの解答欄 (5) から (8) にマークしなさい。

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|--------------------|------------------|---------------|-------------|
| (1) 1. four | 2. fourth | 3. third | 4. three |
| (2) 1. undeserving | 2. undisciplined | 3. unfriendly | 4. unlikely |
| (3) 1. circles | 2. lines | 3. spirals | 4. teams |
| (4) 1. listeners | 2. movers | 3. ones | 4. people |

- [3] 下記の【 】内の文が入る本文中の位置として最も適切なものを選択肢1～5の中から選び、マークシートの解答欄 (9) にマークしなさい。

【The same dynamics apply in groups, where research shows that the voluble are considered smarter than the quiet—even though there's zero correlation between the gift of gab and good ideas.】

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|----------|----------|----------|----------|----------|
| 1. [A] | 2. [B] | 3. [C] | 4. [D] | 5. [E] |
|----------|----------|----------|----------|----------|

- [4] 空所[X]～[Z]に入る最も適切な接続詞を選択肢1～4の中から選び、マークシートの解答欄 (10) から (12) にマークしなさい。なお、文頭に来る語も小文字にしてあります。

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|--------------|-------|--------|----------|
| 1. therefore | 2. if | 3. but | 4. until |
|--------------|-------|--------|----------|

- [5] 次の文は英文全体の要旨を述べたものである。下記の空所(ア)～(キ)に入る表現として最も適切なものを選択肢1～4の中から選び、マークシートの解答欄 (13) から (19) にマークしなさい。

While statistics show there are a significant number of introverts in society, extroverts are often looked upon more (ア). Yet given the number of introverts, even if you're not one yourself, it is likely there is one (イ). The reason this surprises some people is that many introverts manage to (ウ) their true personality. Indeed, some introverts even manage to (エ) themselves for a time. Introversion, sensitivity, seriousness, and shyness are often seen as something between (オ) and a pathology. This bias for (カ) extroversion, which the author calls the Extrovert Ideal, has been supported in studies. Nevertheless, we shouldn't forget that some of the great (キ) to human culture and progress have come from within the ranks of introverts.

- | | | | |
|-----------------------|-------------------|-----------------|--------------------|
| (ア) 1. dynamically | 2. favorably | 3. happily | 4. successfully |
| (イ) 1. in your eyes | 2. in your life | 3. in your mind | 4. in your opinion |
| (ウ) 1. divide | 2. embrace | 3. inspire | 4. mask |
| (エ) 1. block | 2. cover | 3. deceive | 4. hide |
| (オ) 1. an appointment | 2. an opportunity | 3. a problem | 4. a surprise |
| (カ) 1. choosing | 2. classifying | 3. preferring | 4. selecting |
| (キ) 1. celebrators | 2. collaborators | 3. contributors | 4. creators |

2. 次の英文は海水の酸化について書かれたものである。これを読み、設問に答えなさい。

The internal effects of ocean acidification vary across different ① developmental stages of life. A small but growing body of research points to a variety of potential trouble.

Indeed, the very first (1) of life—fertilization—can be affected. In the lab, scientists simulate acidification by pumping extra CO₂ bubbles through seawater tanks. Sperm of the Australian sea urchin moved 16 percent less and swam 12 percent slower when experimenters lowered seawater pH by 0.4. Fertilization success dropped by 25 percent. In the wild, a 25 percent reduction could lead to significantly diminished adult populations over time. While individual sea urchins release millions of sperm and eggs, the sperm do not remain viable for very long; they have to find and fertilize an egg within a few minutes. In a big, turbulent ocean, sluggish sperm may never reach their (2) at all.

Acidification also affects early larval* stages of several species. When larvae of a temperate brittlestar* were exposed to pH reduced by 0.2 to 0.4 unit, many showed abnormal development, and fewer than 0.1 percent survived more than eight days. A change of 0.2 to 0.4 pH all at once is more ② dramatic than species in the wild are experiencing, and some species might be able to adapt to (3) change. But for others, the effects of even slight acidification come on strong and fast [A]. Scientists suspect ocean acidification explains recent ③ mortality in larval oysters along the coast of Oregon, for example, sending X (1. babies 2. enough 3. find 4. oyster growers 5. scrambling 6. some 7. to) to stay in business.

Adult animals suffer as well, especially when it comes to growth. Sea urchins and shellfish move slowly, but growing slowly is problematic [B]. One study found that a CO₂ concentration 200 ppm higher than today's value, pumped into seawater for six months, reduced growth rates for certain species of sea urchin species and shellfish. Slowed growth leaves individuals smaller for longer, making them more ④ susceptible to predators and potentially reducing their reproductive output [C].

For some creatures, ocean acidification can simply mean the (4). When a sample of copepod* species was exposed to water that was 0.2 pH below normal, half of the organisms died within a week. The fish we prefer to eat, from tuna to salmon or striped bass, depend on an abundance of specific copepods to support the fish that support them.

Several species of fish, such as the spotted wolffish*, have shown remarkable (5) in the lab, because they maintain a relatively large stockpile of buffers and store extra oxygen in their tissue, which is handy because H⁺ ions interfere with the blood's ability to absorb oxygen from the water. Even very adaptable fish, however, may struggle if their food supply decreases. Other species are not so well prepared. Highly active squid, for example, have no oxygen stores [D]. Less oxygen in their blood would limit their ability to hunt, avoid predators, and find mates.

The message of lab studies as well as the geologic record is that ocean acidification forces animals to struggle harder, which today they are already doing because of other human-induced stressors such as warming waters, pollution, and overfishing.

(Adapted from Marah J. Hardt and Carl Safina,

"Threatening Ocean Life from the Inside Out" *Scientific American*, Vol. 303, No. 2, 2010)

*larval : 幼生の *temperate brittlestar : クモヒトデの一種 *copepod : エビに似た小型の甲殻生物

*spotted wolffish : オオカミウオの一種

[1] 下線部①～④の語と第1アクセント(第1強勢)の位置が同じ単語を選択肢1～4の中から選び、マークシートの解答欄 (20) から (23) にマークしなさい。

① de-vel-op-men-tal

1. ag-ri-cul-tur-al 2. con-tem-po-rar-y 3. cu-ri-os-i-ty 4. en-thu-si-as-tic

② dra-mat-ic

1. con-se-quent 2. dis-tur-bance 3. guar-an-tee 4. sym-me-try

③ mor-tal-i-ty

1. bu-reau-crat-ic 2. con-sci-en-tious 3. in-dus-tri-al 4. op-er-a-tor

④ sus-cep-ti-ble

1. ba-rom-e-ter 2. e-lec-tron-ics 3. mel-an-chol-y 4. mo-men-tar-y

[2] 空所(1)～(5)に入る最も適切な語を選択肢1～4の中から選び、マークシートの解答欄 (24) から (28) にマークしなさい。

- | | | | | |
|-----|--------------|----------------|---------------|--------------|
| (1) | 1. spark | 2. spoke | 3. sport | 4. spree |
| (2) | 1. baby | 2. destination | 3. house | 4. summit |
| (3) | 1. annual | 2. casual | 3. gradual | 4. usual |
| (4) | 1. end | 2. exit | 3. failure | 4. truth |
| (5) | 1. assurance | 2. emergence | 3. negligence | 4. tolerance |

[3] 下記の【 】内の文が入る本文中の位置として最も適切なものを選択肢1～4の中から選び、マークシートの解答欄 (29) にマークしなさい。

【—they use all they have all the time】

1. [A] 2. [B] 3. [C] 4. [D]

[4] [X]の()内にある語句を文法的・内容的に最も適切な順序に並べかえたとき、2番目と5番目に位置するものを選択肢1～7の中からそれぞれ選び、マークシートの解答欄 (30) と (31) に順にマークしなさい。

[5] 英文の内容に一致するものを選択肢1～9の中から4つ選び、マークシートの解答欄 (32) から (35) にマークしなさい。

1. The effects of acidification on sea creatures are noticeably worse at earlier stages of development than later stages.
2. Some species are unlikely to adapt to ocean acidification.
3. While the negative effects of acidification have been tested in laboratories, there are no concerns yet about problems in nature.
4. In the laboratory, acidification reduced the sperm count of the Australian sea urchin, leading to lower fertilization rates.
5. Slow growth is problematic not just because it makes sea creatures more physically vulnerable, but because it may lead to their having fewer babies.
6. All sea creatures struggle equally when placed in water with lowered pH levels.
7. Some sea creatures are better at coping with acidification because of their ability to store oxygen.
8. When considering the impact of acidification on any particular sea creature, we also need to think about the fate of organisms further down the food chain.
9. The author argues that acidification is caused by warming seas, pollution, and overfishing.

3. 次の対話文を読み、設問に答えなさい。

Johnny Maverick (JM) : I'm joined on the show today by Atsushi Taylor, who describes himself as—let me see if (1) this right—a food missionary.

Atsushi Taylor (AT) : Yes, that's right. It's a strange title, isn't it?

JM : Well, maybe we should start with the question of what exactly a food missionary is.

AT : Sure. (2) you're familiar with religious missionaries—those people from different religions who go about spreading their different messages. I'm kind of like them, but for me the message is food.

JM : Any food, or Japanese food (3) ?

AT : Japanese food primarily. I'm out there spreading the word through my books and lectures about what a great cuisine this island nation has produced.

JM : But why do we need anyone doing that? Isn't Japanese food more popular (4) ?

AT : It is, of course. I mean, there's never been a better time in the history of the world to buy sushi anywhere you want. But in my opinion, we're also (5) the brand. We're calling some food Japanese that I don't believe deserves the label. Have you ever tried miso soup with cheese in it?

JM : (6) ?

AT : I have lots of ideas, but one of the main things I'm promoting is the quality of authentic Japanese ingredients. When you cook Italian, don't you want to use real Italian pasta with real Italian sauces and real Italian cheeses? (7) ! But when it comes to Japanese food, many people are not as (8). The first thing I want people to know is that there are many great food products being produced in Japan. In short, great Japanese food starts with great Japanese ingredients.

[1] Complete the dialogue by choosing the most appropriate answer for each gap (1) through (8). Mark your answers on the mark sheet ((36) through (43)).

- | | | | | |
|-----|-----------------------------------|--|-------------------|------------------|
| (1) | 1. I believe | 2. I feel | 3. I have | 4. I hold |
| (2) | 1. I assert | 2. I assume | 3. I doubt | 4. I proclaim |
| (3) | 1. in close | 2. in detail | 3. in only | 4. in particular |
| (4) | 1. than ever | 2. than now | 3. than these | 4. than those |
| (5) | 1. digressing | 2. diluting | 3. disarming | 4. disputing |
| (6) | 1. So what are other people doing | 2. So what do you suggest we do | | |
| | 3. So what has been done | 4. So what should we definitely not do | | |
| (7) | 1. Of course you do | 2. Of course you don't | | |
| | 3. Of course you will | 4. Of course you won't | | |
| (8) | 1. discounting | 2. discouraging | 3. discriminating | 4. disproving |

[2] In (I) below, choose the statement that most closely matches the view expressed by Atsushi Taylor and mark your answer on the mark sheet in space (44). Do the same for (II) in space (45).

- (I)
1. Italian ingredients are better than Japanese ingredients.
 2. Japanese ingredients are better than Italian ingredients.
 3. Many people don't care about using Italian ingredients when preparing Italian food.
 4. Many people don't care about using Japanese ingredients when preparing Japanese food.
- (II)
1. Ingredients produced in Japan are superior to those produced in other countries.
 2. Japanese ingredients are great because Japan is an island nation.
 3. Japanese ingredients are recommended when preparing Japanese dishes.
 4. Mixing Japanese and foreign ingredients has the potential to create exciting new dishes.

4. 次の(1)～(4)の文の2つの()に入る語の組み合わせとして最も適切なものを選択肢1～8の中から選び、マークシートの解答欄(46)から(49)にマークしなさい。

- (1) Misleading graphs and diagrams () the underlying data and encourage readers to accept () arguments.
(2) Only if our industry continues to expand can it () enough new jobs to make up for those that will be () by outsourcing.
(3) While many companies are looking for employees () in English, that doesn't mean they're () about Japanese skills.
(4) By creating more () in the system, it is hoped that we can encourage more students to take () of opportunities to study abroad.

- | | | |
|----------------------------|----------------------------|------------------------|
| 1. flexibility / advantage | 2. time / benefit | 3. invent / discussed |
| 4. create / eliminated | 5. distort / false | 6. talented / ignoring |
| 7. obscure / legitimate | 8. competent / unconcerned | |

5. 次の(1)～(5)の文の()内の語を最も適切な語形に書き直しなさい。ただし、語尾に“-ed”と“-ing”の付くものは不可とします。解答は解答用紙(記述式)に記入しなさい。判読が困難であったり、枠外にはみ出したりした場合は、採点されません。

- (1) Try to minimize (expose) to strong sunlight as much as possible during the hot summer months.
(2) He looks quiet, but he has an (explode) personality.
(3) Many old people in society today live in (isolate) and poverty.
(4) It is now possible to (identification) entire strands of DNA.
(5) How much of your intelligence is (genetic) determined?

6. 和文の内容とほぼ同じ意味になるように、指定された文字から始まる適切な1語を空所①～⑧に入れて、英文を完成させなさい。解答は解答用紙(記述式)に記入しなさい。判読が困難であったり、枠外にはみ出したりした場合は、採点されません。

The space elevator was first ①(p) in the 1960s as a ②(m) of getting into space. The ③(i) studies of a space elevator outlined the basic concept of a cable strung between Earth and space but concluded that no material ④(a) at the time had the required ⑤(p) to feasibly construct such a cable. With the discovery of carbon nanotubes in 1991 it is now possible to realistically discuss the construction of a space elevator. ⑥(A) currently produced only in small quantities, carbon nanotubes appear to have the strength-to-mass ratio required for this endeavor. However, fabrication of the cable required is only one of the ⑦(c) in construction of a space elevator. Powering the elevators and surviving micrometeor impacts, ⑧(l) strikes, and low-Earth-orbit debris collisions are some of the problems that are now as important to consider as the production of the carbon nanotube cable.

(Adapted from Bradley C. Edwards, "Design and Deployment of a Space Elevator"
Acta Astronautica, Vol. 47, No. 10, 2000)

宇宙エレベーターは、宇宙に進出する手段として1960年代に初めて提案された。宇宙エレベーターの初期の研究は、地球と宇宙の間にケーブルを張るという基本構想を打ち出したものの、当時入手可能な素材にはそのようなケーブルを実現するのに必要な特性がないと結論づけた。1991年のカーボンナノチューブの発見により、今や宇宙エレベーター構築の議論は現実味を帯びてきた。カーボンナノチューブは現時点では少量しか生産できないが、この計画の遂行に必要な強度質量比を有するように見える。しかしながら、要件に見合うケーブルの製作は、宇宙エレベーターを構築する上での難題の一つでしかない。エレベーターに動力を供給したり、微小隕石の衝撃や落雷や地球低軌道上の宇宙廃棄物との衝突に耐えられるようにしたりすることも、今やカーボンナノチューブケーブルの製造に匹敵するくらい重要な課題である。