

〔Ⅰ〕 次の和文の内容を英語で書き表しなさい。

紅葉が目に見え鮮やかだ。山歩きを楽しむのに一番いい季節だ。山を歩きながらの会話は楽しい。楽しむためには、安全が一番、そして、水を忘れないことだ。

〔Ⅱ〕 次の英文の (ア) ～ (コ) に入れるのにふさわしい語をそれぞれ選択肢 1 ～ 3 の中から 1 つ選び、その番号を解答欄 [A] の所定の位置に書き入れなさい。

When was the last time you sounded your horn? Many drivers rarely sound their horn at all, because they feel that it can be (ア) as being aggressive. The danger of this is that if (イ) were to occur, they may have difficulty actually finding it. On the other hand, some drivers seldom go through the day (ウ) sounding theirs.

Typical reasons drivers have for sounding the horn include, (エ) the driver in front that the traffic lights have now changed to green and they should get moving or to blast someone for pulling out in front of them. In other words, for (オ) another driver's mistakes.

In fact, the whole purpose of the horn is to warn other road users of your (カ). They may not have noticed you or simply cannot see you. Either way, this represents a risk. In the example above, where a driver pulls out in front of you, the horn should be sounded before the other driver pulls out (so that you can prevent it) rather than after they have pulled out (as a rebuke).

Ideally, you should consider sounding your horn on (キ) to any hazard. This does not mean of course that you actually have to use it each time, just consider it. Generally speaking, the best time to sound your horn is (ク) you have already adjusted your position and speed for the hazard. At this point the horn serves (ケ) a warning instrument when you have already minimized the risk.

Use your horn as you would your own voice, (コ) you won't go too far wrong.

[選択肢]

- | | | |
|--------------------|----------------|---------------|
| (ア) 1 explained | 2 interpreted | 3 threatened |
| (イ) 1 an ambulance | 2 an emergency | 3 a signal |
| (ウ) 1 by | 2 with | 3 without |
| (エ) 1 noticing | 2 remembering | 3 reminding |
| (オ) 1 alerting | 2 correcting | 3 rejecting |
| (カ) 1 impression | 2 opposition | 3 presence |
| (キ) 1 application | 2 approach | 3 preparation |
| (ク) 1 after | 2 before | 3 while |
| (ケ) 1 as | 2 at | 3 to |
| (コ) 1 and | 2 or | 3 otherwise |

【Ⅲ】 次の英文を読んで設問に答えなさい。

From time to time, leaving the American Museum of Natural History after hours, I pass the elephants in the Akeley Hall of African Mammals. They occupy the center of the room: a cluster of them, on a wide dais*, milling eternally in the state of taxidermy*. Aside from them and me and a savanna of glass-eyed ungulates*, the hall is empty. My footsteps produce the only sound, which seems somehow amplified by the elephants' great mass.

We share a regular, wordless dialogue, the elephants and I, but only lately have I come to understand what they have to say. For years now, scientists have understood that ⁽¹⁾elephants communicate at a frequency typically too low for the human ear to perceive—about twenty hertz. Propagating through the air, these vocal calls can reach an elephant five miles away. For better reception, the listening elephant spreads its earflaps forward, effectively transforming its head into a satellite dish.

As it turns out, that is only half the story. Recently a Stanford University researcher, Caitlin O'Connell-Rodwell, discovered that an elephant's vocal call actually generates ⁽²⁾two separate sounds: the airborne one and another that travels through the ground as a seismic wave. Moreover, the seismic version travels at least twice as far, and seismic waves generated by an elephant stomping its feet in alarm travel farther still, up to twenty miles. What's most remarkable, however, is how elephants presumably perceive these signals: they listen, it seems, with their feet.

Seismic communication is widespread. ⁽⁷⁾Creatures from scorpions to crocodiles rely on ground vibrations to locate potential mates and to detect (and avoid becoming) prey. The male fiddler crab bangs territorial warnings into the sand with its oversized claw. A blind mole rat pounds its head against the walls of its underground tunnels, thus declaring its dominance over the blind mole rat two tunnels over, which may or may not be listening with its own head pressed to the wall.

O'Connell-Rodwell was first inspired by the seismic songs of planthoppers, tiny insects she studied early in her career. The planthopper sings by vibrating its abdomen*; this causes the underlying leaf, and ideally all nearby planthoppers, to tremble. ⁽³⁾She observed that planthoppers in the peanut gallery* would lift a foot or two, presumably for better hearing: the other feet, bearing more weight, thus became more sensitive to vibration. Years later, O'Connell-Rodwell saw similar behavior among elephants at a water hole in Namibia. Minutes before a second herd of elephants arrived, members of the first group would lean forward on their toes and raise a hind leg, as if in anticipation. "It was the same thing the planthoppers were doing," she says.

Was it? Several elegant experiments by O'Connell-Rodwell demonstrate

that elephants do indeed generate long-range seismic signals. But can other elephants hear them? Early evidence from northern California's Oakland Zoo, where an elephant named Donna is being trained to respond exclusively to seismic ⁽¹⁾cues, strongly suggests that the answer is yes. "We haven't sealed* the deal," says O'Connell-Rodwell, "but it looks promising."

As a communication medium, she notes, seismic waves would offer the elephant ⁽⁴⁾several advantages. They dissipate less quickly than airborne waves, they aren't disrupted by changes in weather or temperature, and they aren't swallowed by dense jungle foliage. Complex vocal harmonics don't translate well into seismic waves. But even the simplest long-range message—"I'm here" or "Danger!"—beats a fancy one that can't be heard at all.

Air is the faster medium: an airborne elephant call will reach a distant listener before the seismic version does. ⁽⁵⁾The delay between signals may confer its own advantage, however, O'Connell-Rodwell proposes. The delay increases with distance; an astute* listener would soon learn to ^(ウ)gauge distance from the delay. Combined with its airborne counterpart, a seismic signal would enable the animal to coordinate its movements with faraway colleagues, to forage* more effectively, and to detect unseen danger. It is compass, yardstick*, and e-mail in one—an elephantine Palm Pilot.

And the elephant's palm is the key, O'Connell-Rodwell believes. It may be that the seismic vibrations propagate from the elephant's feet to its inner ear—a process known as bone conduction. That would explain ⁽⁶⁾some of the odder features of elephant anatomy, including the fatty deposits in its cheeks, which may serve to amplify incoming vibrations. In ^(エ)marine mammals, similar deposits are called "acoustic fat."

設問

- 1 下線部分 (1) を和訳しなさい。
- 2 下線部分 (2) はどのような2つの音なのか、それぞれについて解答欄 ① ② に日本語で簡潔に述べなさい。
- 3 下線部分 (ア)～(エ) の発音について次の問いに答えなさい。下に示した (ア)～(エ) の下線部と同じ発音を、同じく下線部に含む語を、それぞれ選択肢 1～3の中から1つ選び、その番号を解答欄 [A] に記入しなさい。

(ア) <u>creatures</u>	1 <u>crater</u>	2 <u>feature</u>	3 <u>recreation</u>
(イ) <u>cues</u>	1 <u>acoustic</u>	2 <u>key</u>	3 <u>queue</u>
(ウ) <u>gauge</u>	1 <u>vocal</u>	2 <u>water</u>	3 <u>wave</u>
(エ) <u>marine</u>	1 <u>medicine</u>	2 <u>perceive</u>	3 <u>vibrate</u>

- 4 下線部分（３）を和訳しなさい（但し，planthoppers はカタカナ表記，「プラントホッパー」でよい）。
- 5 下線部分（４）の具体例を同じ段落の中から３点抜き出して（順序不同でよい），それぞれ20字程度の日本語で述べなさい。
- 6 下線部分（５）について次の問いに答えなさい。
 - ① the delay between signals はなぜ生ずるのか，その理由を30字程度の日本語で説明しなさい。
 - ② its own advantage の具体的内容を15字程度の日本語で述べなさい。
- 7 下線部分（６）の一例として本文中に示されている例を日本語で述べなさい。

[IV] 次の英文を読んで設問に答えなさい。

Among themselves, the truth is that the Japanese do not like negotiation. (1) It has disagreeable connotations of confrontation, to be avoided whenever possible. The Japanese instinct is for agreements worked out behind the scenes, on the basis of give and take, harmony and long-term interest. In fact, except for a handful with extensive international experience, very few Japanese even know how to negotiate in the Western sense. (2) In everyday life in Japan, there is little experience of bargaining to buy household goods at lower prices, or even of using arguments in a debating fashion to win points. The common Western ideal of a persuasive communicator—one who is highly skilled in argumentation, who overcomes objections with verbal flair*, who is an energetic extrovert*—would be regarded by most Japanese as superficial, insincere, and, more subtly, a little vulgar. What the Japanese learn in their culture is that vagueness in discussion is a virtue. They learn to involve others, to listen to their views, and, (3) when no strongly dissenting views remain, a decision is made. It is noteworthy that nobody seems to make the actual decision, rather it just seems to “happen.” As for individual involvement as a Japanese, everyone knows that as long as you remain silent, you project a favorable impression and are assumed to be thinking deeply about the problem. Of course, you may have other reasons for keeping quiet: you may, for instance, simply have nothing to say; you may be a poor talker; the subject may be a painful one to you; or—and (4) this is very common— others may have put matters so clearly that the best you can do is keep quiet.

Finally, even if you do speak up, it will be usual for you to speak ambiguously.

The culturally approved use of ambiguity in Japan extends even to the business setting, where it is linked in the Japanese mind to the issue of personal trust. Whereas foreign—especially American—negotiators may develop bargaining ranges and strategic options as a matter of course in their pre-negotiation planning, this is still rare among the Japanese. This is especially true when the foreigner adopts a bargaining, or a “horse-trading*,” approach. → (a) → (b) → (c) → (d)

設問

- 1 下線部分 (1) を it が指す内容を明らかにして和訳しなさい。
- 2 下線部分 (2) を和訳しなさい。
- 3 下線部分 (3) を和訳しなさい。
- 4 下線部分 (4) this が指す内容を日本語で述べなさい。
- 5 本文末尾には (a) (b) (c) (d) の順で4つの文章が並びます。下記の英文1～4をどのような順に並べるともっとも自然でしょうか。(a) から (d) に配列するものをそれぞれ番号で解答欄 [A] の所定の位置に書き入れなさい。
 - 1 One or two counterproposals may be in order, but an invitation to “horse trade” provokes in many Japanese a certain aristocratic disdain for the merchant mind.
 - 2 When circumstances become unbearable, then an appeal of melodramatic pathos is perfectly in order, for that is not considered negotiation but an appeal to the heart that transcends crude, rational considerations.
 - 3 An Oriental gentleman should sit impassively and with Confucian* detachment before others, never appearing to be a merchant. An Oriental gentleman influences others, especially his subordinates, by subtle, indirect suggestion, relying upon their thorough indoctrination* in the hierarchical society to ensure that orders are carried out faithfully. If the necessity arises, a middleman may speak on one’s behalf.
 - 4 This disdain may become extreme when the Japanese negotiate among themselves, for there is a widespread view that if you are an Oriental you will not promote your own ideas. Rather, it is up to others to recognize your merits.

[V] Is getting outdoors good for your health? Write your answer in English in about 80 words, using specific reasons and examples to support your opinion.

[NOTES]

abdomen: *noun* 1 the part of the body below the chest that contains the stomach, bowels, etc. 2 the end part of an insect's body that is attached to its THORAX

astute: *adj.* very clever and quick at seeing what to do in a particular situation, especially how to get an advantage [SYN] SHREWED: *an astute politician / observer* • *She was astute enough to realize that what Jack wanted was her money.*

Confucian: *adj.* relating to **Confucius** (551–479 BC), Chinese philosopher

dais: *noun* a stage, especially at one end of a room, on which people stand to make speeches to an audience

extrovert: *noun* a lively and confident person who enjoys being with other people

flair: *noun* 1 [sing., U] ~ **for sth** a natural ability to do sth well: *He has a flair for languages.*

forage: *verb* ~ (**for sth**) (*written*) 1 (especially of an animal) to search for food

gallery: *noun* 3 an upstairs area at the back or sides of a large hall where people can sit

peanut gallery: *noun* [C] *AmE humorous* the cheap rows of seats at the back of a theatre or cinema

horse-trading: *noun* [U] the activity of discussing business with sb using clever or secret methods in order to reach an agreement that suits you

indoctrination: *noun* [U] *political/religious indoctrination*

>**indoctrinate:** *verb* (*disapproving*) to force sb to accept a particular belief or set of beliefs and not allow them to consider any others: *They had been indoctrinated from an early age with their parents' beliefs.*

seal: *verb* 4 (*written*) to make sth definite, so that it cannot be changed or argued about

taxidermy: *noun* [U] the art of STUFFING dead animals, birds and fish with a special material so that they look like living ones and can be displayed

ungulate: *noun* [zoology] a hoofed mammal.

yardstick: *noun* 1 (*especially AmE*) a RULER for measuring one YARD 2 a standard used for judging how good or successful sth is: *a yardstick by/ against which to measure sth* • *Exam results are not the only yardstick of a school's performance.*

(Adapted from *Oxford Advanced Learner's Dictionary* 6th ed., *Oxford Dictionary of English*, and *Longman Dictionary of Contemporary English* 3rd ed.)

[出典] [I] <http://www.mainichi-msn.co.jp/chihou/hyogo/chie/>「お知恵拝借」毎日新聞2006年11月7日/

[II] *Midweek Herald*, Tuesday 9th May, 2006, p. 16/[III] Alan Burdick, "Four Ears to the Ground",

Natural History (April 2002)/[IV] Robert M. March, *THE JAPANESE NEGOTIATOR—Subtlety and Strategy Beyond Western Logic* (Kodansha International, 1989)

平成19(2007)年度 医学部 問題訂正

科目	誤	→	正
英語	P.3 [Ⅱ]の問題指示文1行目 「…ふさわしい語を…」	→	「…ふさわしい語(句)を…」