

1. 次の英文を読み、設問に答えなさい。

- [A] Neanderthals disappeared from the fossil record around thirty thousand years ago, leaving no descendants and no detectable contribution to the modern human gene pool. Their (1) occurred a few thousand years after the arrival of modern humans (*H. sapiens*) in Europe some forty thousand years ago. (ア) the obvious question is: did an environmental shift cause the disappearance of Neanderthals (*H. neanderthalensis*)? Or did the arrival of *H. sapiens* have something to do with it—perhaps something violent?
- [B] An abrupt, catastrophic climate change is the easier scenario to (2) out. No climatic event of great enough magnitude is associated with any of the proposed dates for the Neanderthal extinction. (イ), extreme climatic instability may have stressed Neanderthal populations and brought them to a slow decline. But climate stress alone seems an unsatisfactory explanation; after all, Neanderthals evolved in Europe and had successfully survived previous intense climatic shifts.
- [C] However, climate stress probably set the stage for intensified competition with an invading closely related species. Can we document competition? There is no evidence of aggressive interaction between *H. sapiens* and *H. neanderthalensis*—but competition is much more than aggression. Modern humans hunted the same large herbivores* that Neanderthals hunted. If this (3) in resource use was great enough, the argument for competitive exclusion might apply. Given enough time, one of the two might drive the other to extinction, even in a landmass as large as Western Eurasia.
- [D] Even so, Neanderthals had a few evolutionary advantages over our ancestors. They likely matured somewhat faster than early modern humans and thus would have taken less time to reproduce. They also had the home-court advantage: for hundreds of thousands of years, they had evolved in Ice Age Europe and thus were physically much better adapted to coping with local environmental conditions. (ウ), Neanderthals had vulnerabilities. They seem to have been specialized in their diet, depending almost exclusively on the hunting of large herbivores. Crucially, despite the proposed (4) reproductive cycle, their population size appears to have always been small, and they regularly sustained high levels of trauma* and mortality.
- [E] Modern humans were probably favored because of their more (5) diet and their superior technology. While they often ate the same large mammal species as Neanderthals, early *H. sapiens* also hunted the more elusive small mammals, birds, and fish. The more varied modern human diet probably explains how the two species were able to coexist in the same geographic region for as long as ten thousand years.
- [F] But perhaps our ancestors' greatest advantage was demographic*. People today share unique demographic features: we take even longer than the great apes and early hominins* to grow, and we have extraordinarily long lives. Unlike apes, we take a short time between births: two babies can be born to the same mother less than a year (6) in developed nations and within about three years in present-day hunter-gatherer societies. A chimpanzee mother will give birth only every six years or so. This human characteristic has been linked to our species' longer life span: older adults, especially women, by contributing to child care, allow women of reproductive age to have more children.
- [G] While we don't know whether early modern humans had shorter interbirth intervals than Neanderthals, we do see an increased survival of older adults in the fossil record for the first time with early *H. sapiens*, implying a demography similar to ours. Such a demographic feature would have supported the population increase we see in the archaeological record and would have fueled the great dispersal of our ancestors throughout the world in the last sixty thousand years. This alone would have been enough to crush the Neanderthal populations, without a single blow.

(Adapted from K. Harvati, "Extinction and the Evolution of Humankind"* in M. Brockman ed., *What's Next?: Dispatches on the Future of Science*, 2009)

*herbivore: 草食獣 *trauma: 外傷 *demographic: 人口統計学の *hominin: ヒト属の動物

*本論文の発表以降に、ホモ・サピエンスとネアンデルタール人の間に遺伝子の交配があったことが判明した。

[1] 空所 (1) ~ (6) に入る最も適切な語を選択肢 1 ~ 4 の中から選び、それぞれマークシートの解答欄 (1) から (6) にマークしなさい。

- | | | | | |
|-----|--------------|-------------------|---------------|---------------|
| (1) | 1. decrease | 2. disintegration | 3. extinction | 4. upheaval |
| (2) | 1. point | 2. rule | 3. run | 4. stand |
| (3) | 1. abundance | 2. overlap | 3. scarcity | 4. surplus |
| (4) | 1. better | 2. clearer | 3. longer | 4. shorter |
| (5) | 1. balanced | 2. different | 3. flexible | 4. nutritious |
| (6) | 1. after | 2. ago | 3. apart | 4. between |

[2] 次の ① と ② の文を英文の内容と一致させるために、それぞれの空所に入る最も適切なものを選択肢 1 ~ 4 の中から選び、それぞれマークシートの解答欄 (7) から (8) にマークしなさい。

- ① Neanderthals reached maturity _____ the *H. sapiens* of the time.
1. at the same rate as 2. later than 3. more rapidly than 4. no later than
- ② As explained in this article, an important advantage of modern humans' longer life span for reproduction is that _____ .
1. there is more time to educate children
2. there is more time to reproduce if children die
3. mothers who live longer can have more children
4. there remain a larger number of older adults who can look after children

[3] 英文中の (ア) ~ (ウ) に入る接続詞の組み合わせ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 (9) にマークしなさい。

- | | |
|-----------------------------------|------------------------------------|
| 1. So - Nonetheless - Nonetheless | 2. But - Nonetheless - Nonetheless |
| 3. So - Therefore - Nonetheless | 4. But - Nonetheless - Therefore |

[4] [A] から [G] の 7 つのパラグラフから構成される英文は、内容的に 3 つのグループに分けられる。最も適切な区切り方を選択肢 1 ~ 4 の中から選び、マークシートの解答欄 (10) にマークしなさい。

- | | | | |
|------------------|------------------|------------------|------------------|
| 1. A / BCDEF / G | 2. AB / CDE / FG | 3. A / BCD / EFG | 4. AB / CD / EFG |
|------------------|------------------|------------------|------------------|

[5] 英文の内容に一致するものを次の 1 ~ 9 の中から 4 つ選び、マークシートの解答欄 (11) から (14) にマークしなさい。

1. This article claims that *H. sapiens*, on their arrival in Europe, killed all Neanderthals.
2. No sudden catastrophic climate shift seems to have caused Neanderthals to die out.
3. Given enough time, *H. sapiens* were always going to exterminate the Neanderthals.
4. Climate stress may have increased the competition for resources between *H. sapiens* and Neanderthals.
5. One advantage Neanderthals had over *H. sapiens* was that they were better suited to living in a cold environment.
6. Another advantage Neanderthals had over *H. sapiens* was that they had better technology.
7. *H. sapiens* successfully coexisted with Neanderthals for thousands of years by avoiding the large mammals Neanderthals hunted.
8. The fossil record suggests we may have had similar birthing patterns to our ancestors'.
9. On average, mothers in developed nations can give birth to fewer children within the same time span than those in hunter-gatherer societies.

2. 次の英文は身体的苦痛について述べたものである。これを読み、設問に答えなさい。

When one hears about another person's physical pain, the events happening within the interior of that person's body may seem to have the remote character of some deep subterranean* fact, belonging to an invisible ^(a) geography that has no reality because it has not yet ⁽¹⁾ manifested itself on the visible surface of the earth. Or alternatively, it may seem as distant as the interstellar* events referred to by scientists who speak to us mysteriously of not yet detectable intergalactic screams. [A]

Physical pain happens, of course, not several miles below our feet or many miles above our heads, but within the bodies of persons who ^(b) inhabit the world through which we each day make our way, and who may at any moment be separated from us by only a space of several inches. [B] The very ⁽²⁾ temptation to invoke analogies to remote cosmologies* is itself a sign of pain's triumph, for it works in part by bringing about this absolute split between one's sense of one's own reality and the reality of other persons.

Thus when one speaks about one's own physical pain and about another person's physical pain, one might almost appear to be speaking about two completely different things. For the person whose pain it is, it is effortlessly grasped; while for the person outside the sufferer's body, what is effortless is *not* grasping it. So, for the person in pain, "having pain" may come to be thought of as the most striking example of what it is to "have ^(c) certainty," while for the other person, "hearing about pain" may exist as the ⁽³⁾ primary model of what it is to "have doubt." [C]

Whatever pain achieves, it achieves in part through its unsharability*, and it ensures this unsharability through its resistance to language. "English," writes Virginia Woolf*, "which can express the thoughts of Hamlet and the tragedy of King Lear has no words for the shiver or the headache.... The merest schoolgirl when she falls in love has Shakespeare to speak her mind for her, but let (1. a pain 2. a sufferer 3. describe 4. in 5. to 6. try) his head to a doctor, and language ⁽⁴⁾ at once runs dry." True of the headache, Woolf's account is of course more radically true of the severe and prolonged pain that may accompany cancer or burns or stroke, as well as of the severe and prolonged pain that may occur unaccompanied by any nameable disease. [D] Physical pain does not simply resist language but actively destroys it, bringing about an ^(d) immediate reversion* to the sounds and cries a human being makes before language is learned.

(Adapted from E. Scarry, *The Body in Pain*, 1985)

*subterranean: 地下の

*interstellar: 恒星間の

*cosmology: 宇宙論

*unsharability: 非共有性

*Virginia Woolf: 英国の作家

*reversion: 逆戻り

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

- | | | | |
|-----------------|--------------|-------------|------------------|
| ① 1. appeared | 2. exhausted | 3. perished | 4. vanished |
| ② 1. allurement | 2. attempt | 3. effort | 4. tendency |
| ③ 1. ancient | 2. chief | 3. perfect | 4. sophisticated |
| ④ 1. blends | 2. fails | 3. helps | 4. rehearses |

[2] 下線部 (a) ~ (d) の語と第1アクセント (第1強勢) の位置が同じ語を選択肢1~4の中から選び、マークシートの解答欄 (19) から (22) にマークしなさい。

(a) ge-og-ra-phy

1. ep-i-dem-ic 2. nec-es-sar-y 3. prob-lem-at-ic 4. sig-nif-i-cant

(b) in-hab-it

1. com-pe-tent 2. in-ter-fere 3. in-ter-pret 4. sym-me-try

(c) cer-tain-ty

1. fac-ul-ty 2. nom-i-nee 3. per-va-sive 4. vol-can-ic

(d) im-me-di-ate

1. at-mos-pher-ic 2. de-fi-cien-cy 3. fas-ci-nat-ing 4. sym-pa-thet-ic

[3] 本文に題をつけたい。選択肢1~4の中から最もふさわしいものを選び、マークシートの解答欄 (23) にマークしなさい。

1. The Origin of Physical Pain 2. Physical Pain and Cosmology
3. Physical Pain in English Literature 4. The Inexpressibility of Physical Pain

[4] 下記の引用符中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 (24) にマークしなさい。

“Thus pain comes into our midst as both that which cannot be denied and that which cannot be confirmed.”

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

[5] Xの()内にある語(句)を文法的・内容的に適切な順序に並べかえたとき、2番目と5番目に来るものを選択肢1~6の中からそれぞれ選び、マークシートの解答欄 (25) と (26) に順にマークしなさい。

[6] 次の文(1)~(7)を本文の内容と照らし合わせたとき、一致する場合は選択肢1を、一致しない場合は選択肢2を、本文に判断の根拠となる記述がない場合は選択肢3を、マークシートの解答欄 (27) から (33) にマークしなさい。

- (1) 地表の出来事は、科学者が言及する恒星間の事象と同じくらい縁遠く思われる。
(2) 科学者は「銀河間の叫び」を探知し、それについて神秘的に語る。
(3) 身体的苦痛を遠い宇宙の事象と類比したくなること自体、人間が苦痛に屈していることの証拠である。
(4) 人間は往々にして他人の痛みに対して無関心である。
(5) リア王が経験した悲劇を表現できる英語をもってしても、頭痛すら他人に伝えることはできない。
(6) シェイクスピアは英文学史上、恋愛感情を最も見事に表現した文学者である。
(7) ヴァージニア・ウルフの記述は、癌や発作などに伴う激痛には当てはまるが、原因不明の病気に伴う激痛には当てはまらない。

3. 次の対話文を読み、設問に答えなさい。

Chuck Bailey (CB): Our guest today is Aaron Matthews, an academic and popular culture specialist who recently started turning his scholarly attention to the South Korean pop music scene, often referred to as K-pop. Aaron, (ア)

Aaron Matthews (AM): Well actually, I was inspired by my daughter. I asked her what she wanted for Christmas last year and she said a CD by *2NE1*, a Korean girl group. At the time, she didn't even know a (イ) of Korean!

CB: So what got her interested in the group?

AM: YouTube.

CB: Ah yes, the power of YouTube.

AM: Tell me about it! (ウ), as someone who studies popular culture and globalization for a living, I had to find out what was going on here.

CB: And (エ)

AM: In short, that the K-pop phenomenon is an extension of what many scholars today are calling the (オ) of "cool Asia." Whether it's K-pop or J-pop, manga or movies, there are networks of young people finding each other, often on the internet but also in real life, to (カ) their love of East-Asian popular culture.

CB: And (キ)

AM: Absolutely. My daughter has now started studying Korean and wants to travel to the country one day—an interesting example of soft power at work.

CB: Well I guess if it can help build (ク) bridges like this, it must be a good thing. Thanks for being on the show today.

[1] 空所 (ア) ~ (ク) に入る最も適切なものを選択肢 1 ~ 4 の中から選び、それぞれマークシートの解答欄 (34) から (41) にマークしなさい。

- | | | | | |
|-----|---|---|---------------|-----------------|
| (ア) | 1. how did you become interested in this topic? | 2. what exactly is K-pop? | | |
| | 3. what inspires you? | 4. why should we be interested in this topic? | | |
| (イ) | 1. grammar | 2. language | 3. vocabulary | 4. word |
| (ウ) | 1. At any rate | 2. By the way | 3. Moreover | 4. Nevertheless |
| (エ) | 1. so please continue. | 2. what did you find? | | |
| | 3. what is going on here? | 4. why is that? | | |
| (オ) | 1. demise | 2. elevation | 3. plateau | 4. rise |
| (カ) | 1. complain about | 2. debate | 3. denounce | 4. share |
| (キ) | 1. do you see this as a good thing? | 2. how is this a good thing? | | |
| | 3. when is this a good thing? | 4. why is this a good thing? | | |
| (ク) | 1. cultural | 2. economic | 3. geographic | 4. musical |

[2] 次の文 (1) と (2) の空所に入る最も適切なものを選択肢 1 ~ 4 の中から選び、それぞれマークシートの解答欄 (42) から (43) にマークしなさい。

- (1) Aaron Matthews' main field of study is best described as ().
1. East-Asian culture 2. K-pop 3. popular culture 4. YouTube
- (2) Aaron Matthews ().
1. agrees that YouTube is influential
2. believes his daughter watches too much YouTube
3. knows little about YouTube
4. wants Chuck Bailey to tell him more about the power of YouTube

4. 次の(1)～(7)の文において下線部に文法上の誤りがあれば、その箇所の番号を、また誤りがなければ9を、それぞれマークシートの解答欄 から にマークしなさい。

(1) The committee's advice was to postpone to make an early reservation.
1 2 3 4 5

(2) We had better cut it out before it started raining.
1 2 3 4 5 6

(3) It was eager to discuss the progress whenever he had a chance.
1 2 3 4 5

(4) I missed the English class yesterday. May I borrow your notes?
1 2 3 4 5

(5) The doctor was running to the direction of the accident.
1 2 3 4 5

(6) Since Kim is good at English, she always writes right English.
1 2 3 4 5 6

(7) He promised me not forgetting to buy me a loaf of bread.
1 2 3 4 5

5. 次の(1)～(5)の文の()内の語を適切な語形に書き直しなさい。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、枠外にはみ出した場合は、採点されません。

(1) My mother always advised me, "Be firm but not aggressive; be polite but not (submission)."

(2) The chimpanzee is a creature of immense (significant) to the understanding of humans.

(3) Before you can (appreciation) a suspense story, you must understand the characters involved.

(4) She does not think her city is worthy of receiving (finance) support from the government.

(5) Angry at the accusation, he calmly but (indignation) demanded to see his lawyer.

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。解答は下記の例に従って、解答用紙(記述式)に記入しなさい。判読が困難であったり、枠外にはみ出した場合は、採点されません。

例：(問題) To do your best in this exam, stay calm and (f).
この試験で全力を発揮できるように、落ち着いて集中しなさい。

(解答)

The rapid dissemination of information after a big event is extremely important to warning systems for tsunamis and recovery efforts for earthquakes. Information ① (n) to be collected on a global ② (s), since local systems often fail during a natural ③ (d). This requires good coordination between agencies in different countries. In the case of an emergency, they can exchange information and ④ (t) immediate action. The field of seismology is rapidly ⑤ (a) its methods for data collection and ⑥ (a) so that we can ⑦ (i) the way we deal with emergencies. But at the end of the day, we have to prepare for the ⑧ (u). (Adapted from *Caltech Features*, 03/31/11)

大きい事象が起きた後、即座に情報を配信することは、津波警報システムと震災復旧のためにはきわめて重要である。また、現地のシステムは自然災害時に破綻することが多いので、情報を地球規模で収集することが必要だ。このためには、各国の関連機関同士の協調が肝要である。非常時には情報を交換してすぐに行動を起こすことができる。地震学の分野では、非常事態への対応方法を改善するために、データ収集および分析の手法が急速に進歩している。とはいえ、結局、私たちは予期せぬ事態に備えなくてはならない。