次の英文を読んで、以下の設問に答えなさい。

In Lake Superior* lies a remote island, Isle Royale National Park, 134, 000 acres of boreal and hardwood forests where a life-or-death struggle between wolves and moose** has been the subject of the world's longest study of predators and their prey, now in its 55th year.

Moose first appeared on this Michigan island in the first decade of the 20th century, apparently by swimming from the mainland. With no predator to challenge them, the moose population surged and devastated the island's vegetation in search of food. Then wolves arrived in the late 1940s by crossing an ice bridge from Canada, and began to bring balance to (1)<u>an ecosystem that had lurched out of control</u>.

Today, moose are essentially the only supply of food for the wolves, and wolf predation is the most typical cause of death for moose. But the wolf population is small, and decades of inbreeding have (i)<u>taken their toll</u>. The ice bridges that allow mainland wolves to infuse the island's wolf population with new genes form far less frequently because of (2)<u>our warming climate</u>. With the number of wolves reduced to little more than a handful, they face (3)<u>the prospect of extinction</u>.

The National Park Service is expected to decide this year whether to save the Isle Royale wolves — a decision that will test our ideas about wilderness and our relationship with nature. This is because the park is also a federally designated wilderness area where, (A) federal law, "man himself is a visitor who does not remain." If we intervene to save the wolf, will we be undermining the very idea of not (ii)<u>meddling</u> that has been the guiding principle behind the protection of 109 million acres of federal land?

The park service has three options: conserve Isle Royale's wolf population by taking new wolves to the island to mitigate inbreeding, an action known as genetic rescue; reintroduce wolves to the island, if and when they go extinct; or do nothing, even if the wolves disappear.

As the lead researchers in the study of wolves and moose, we favor (4)<u>conservation or</u> <u>reintroduction</u>. But more important than our view is the reasoning behind it.

Wilderness is conventionally viewed as a place where nature should be allowed to take its course, free (B) human interference. This is essentially the principle of nonintervention that has guided America's relationship with wilderness areas for roughly 50 years.

The principle of nonintervention touches on fundamental conservation wisdom. But we find ourselves in a world where the welfare of humans and the biosphere faces considerable threats — climate change, invasive species and altered biogeochemical cycles, to name a few. Where no

place on the planet is untouched by humans, faith in nonintervention makes little sense. We have already altered nature's course everywhere. Our future relationship with nature will be more complicated. Stepping in will sometimes be wise, though not always.

(5)<u>These realizations</u> have led a number of environmental scholars to consider new visions for the meaning of wilderness. One is of a place where concern for ecosystem health is paramount, even if human action is required to maintain (6)<u>it</u>.

The future health of Isle Royale will be judged (C) one of the most important findings in conservation science: that a healthy ecosystem depends critically on the presence of top predators like wolves when large herbivores, like moose, are present. (D) top predators, prey tend to become overabundant and decimate plants and trees that many species of birds, mammals and insects depend on. Top predators maintain the diversity of rare plants and insects. The loss of top predators may disturb the nutrient cycling of entire ecosystems. In addition, predators improve the health of prey populations by weeding out the weakest individuals.

(iii)<u>Given</u> that moose will remain on Isle Royale for the foreseeable future, the National Park Service should initiate a genetic rescue by introducing new wolves to the island.

In a world increasingly out of balance, Isle Royale National Park is a place with all its parts, where humans kill neither wolves nor moose, nor log its forests. Places like it, where we can witness beauty while reflecting (E) how to preserve it, have become all too rare.

(注)
 *Lake Superior スペリオル湖(米国とカナダとの国境にある湖)
 **moose ヘラジカ

設問(1) 本文中の空所(A)~(E)を埋めるのに最も適当な語を、(イ)~(へ)から一つ選び、 記号で答えなさい。ただし、同じ語を二度選んではいけません。

(1) against	(ロ) at	(ハ) of
(<i>二</i>) on	(ホ) under	(\uparrow) without

設問(2) 本文中の下線部(i)~(iii)の語句に最も意味の近いものを、(イ)~(ニ)から一つ選び、記号で答えなさい。
(i)taken their toll
(イ)added up
(ロ)caused damage
(ハ)passed quickly
(ニ)strengthened them
(ii)meddling
(イ)being neutral (ロ)interfering
(ハ)resolving
(ニ)treating

(iii)Given

設問(3) 島の環境が本文中の下線部(1)のようになった事情を、順を追って 50 字以内の 日本語で述べなさい。ただし、字数には句読点を含みます。

		• • •	-		
					50

設問(4)本文中の下線部(2)our warming climate と下線部(3)the prospect of extinctionの関連 を説明する上で重要な要因を、本文に即して(イ)~(ホ)から一つ選び、記号で答えなさ い。

- (イ)氷が溶けて住むところがない。
- (ロ)干ばつにより食糧が不足する。
- (ハ) 伝染病が蔓延する。
- (二) 島へ渡ることが難しくなる。
- (ホ)暑さで体力が弱まる。

設問(5) 本文中の下線部(4)の conservation と reintroduction の主な違いは何ですか。本文 に即して日本語で簡潔に説明しなさい。

設問(6) 本文中の下線部(5)These realizations に含まれるものとして最も適切なものを (イ)~(ホ)から一つ選び、記号で答えなさい。

- (1) Fundamental wisdom has been successfully established.
- (\square) No place on earth is unaffected by humans.
- (n) We should not change nature's course.
- (=) The welfare of humans is opposed to that of the biosphere.
- (\mathbf{x}) Faith in nonintervention is reasonable.

設問(7)本文中の下線部(6)itが指し示す箇所を、英語のまま抜き出しなさい。

(東京大 1997)

次の英文の内容を100~130字の日本語に要約せよ。ただし、句読点も字数に含める。

Until a few years ago, the common idea among archaeologists was that early human beings began to practice farming because they had no choice. Experts claimed that population growth led people to push some of their group members out of the most productive areas where it was easy to hunt and gather plenty of food from the wild.

Living on the poorer edges of the rich environments, according to the old thinking, these people noticed that seeds of gathered wild plants often began to grow where they had been thrown away or accidentally dropped. They then realized that planting crops intentionally in these poor areas provided a more plentiful and reliable source of food than hunting and collecting wild plants that could be eaten. As a result, according to the traditional idea, temporary camps in the poor areas developed into permanent settlements. Recent research, however, suggests it didn't happen quite that way.

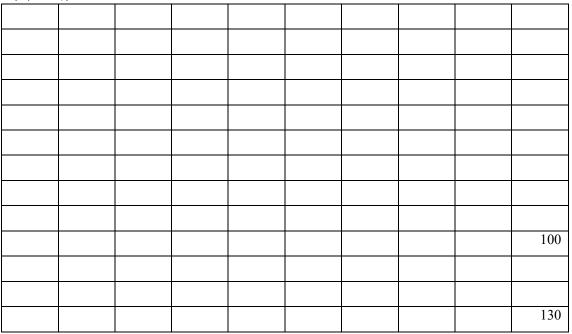
Archaeologists now think that agriculture might not have begun just by accident. Instead, it might have begun because early humans did some scientific research. They say that because ancient peoples had experienced occasional bad years when wild foods were not easily available, people thought they should look for ways of making sure they always had enough food. So they experimented with particular wild plants, and eventually chose to grow the ones that seemed the best. Archaeologists say now that necessity was not necessarily the mother of the invention of agriculture. Instead, human creative ability was.

(注) archaeologist:考古学者

(草稿用)

(-1-104)					
					100
					130

(解答用)



(東京大 2003)

次の英文の内容を、60~70字の日本語に要約せよ。句読点も字数に含める。

There are estimated to be about 5,000 languages currently spoken in the world today, depending on which you count as dialects and which as distinct languages. To these, you can perhaps add a handful of 'dead' languages that are still taught in schools (ancient Greek and Latin) or used in religious services (Sanskrit and Ge'ez). Linguists expect that well over half of all these languages will become extinct, in the sense of having no native speakers, within the next half-century. They are mostly languages which currently have fewer than a thousand native speakers, most of whom are already elderly. The time may come, it has even been suggested, when the world will be dominated by just two languages; on present performance, these will almost certainly be English and Chinese. The loss of all these languages will, of course, be a pity. As we lose them, we lose fragments of our past, for languages represent the history of peoples, the accumulation of their experiences, their migrations and the invasions they have suffered.

But this observation overlooks one curious feature of human behaviour: our tendency to generate new dialects as fast as we lose others. English has spread around the globe to become the common language for trade, government and science, as well as the national language of countries on every continent; yet, at the same time, many local dialects have developed whose speakers can hardly understand each other. Most linguists now recognize Pisin (the 'pidgin English' of New Guinea), Black English Vernacular (a form of English mainly spoken by blacks in the major cities of the US), Caribbean Creoles (the English of the various Caribbean islands) and Krio (the Creole of Sierra Leone in West Africa) and even Scots (the English spoken in the Scottish lowlands) as distinct languages.

(草稿用)

				60
				70

(解答用)

				60
				70

(慶應大・医 2016)

次の英文は、2015 年末の「気候変動枠組み条約第 21 回締約国会議(COP21)」の開催に 先立ち、ある企業の最高経営責任者が発表した見解である。英文を読んで設問に答えな さい。

Representatives of the world's nations will gather in Paris later this year to set a course that could determine whether we will be able to avoid the worst potential effects of global climate change. If (1)<u>succeed</u>, the 2015 Paris Climate Conference, also known as COP21, will result (\mathcal{T}) a new, legally binding global agreement to combat climate change, charting a course toward a low-carbon, green economy (2)<u>power</u> by renewable energy.

The government policymakers, diplomats and (3)<u>elect</u> officials who will gather in Paris in December know that the consequences (1) doing nothing will be severe, including more floods, intense heat waves, droughts, hurricanes, and tornadoes. <u>They know climate change does not respect borders</u>. Their goal is to limit global average warming (?) no more than a 2°C increase this century; the challenge is how to do that. Reaching a global, binding agreement will not be easy, but the business community recognizes the need for an orderly, (4)<u>predict</u>, and planned transition.

The country-by-country commitments that comprise the Paris agreement will not be enough by themselves to reduce greenhouse gas emissions (\pm) a level that limits global warming. The support of the business community is essential. And let's be clear: the transition to a low-carbon economy will occur one way or another. It will either be an orderly transition (\pm) the next two to three decades, or a disorderly one spurred by crises and human hardship. Further delay in (5)take global action will only ensure (2)the latter.

Many business leaders have already recognized the commercial and economic benefits of immediate action against climate change. In the auto industry, for example, there has been considerable innovation and investment (\mathcal{T}) zero-emission vehicles, although more is (9)<u>need</u>. Today there are about 800 million vehicles on the world's roads, and it's (10)<u>estimate</u> this number will grow to more than 2 billion in the next 35 years or so. If we are to avoid the worst effects of climate change, we cannot continue to rely only on fossil fuels to power those vehicles and supply the bulk of our energy. (3)<u>The auto industry already has proven and affordable solutions to cure drivers of their addiction to fossil fuels</u>. The most prominent, ready, and affordable solution is the electric vehicle, the only zero-emissions vehicle that can run entirely (\mathcal{I}) renewable energy.

設問 問1下線部分(1)~(10)の単語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。 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

問2(ア)~(コ)の空欄に入れるのに最もふさわしい前置詞を選びなさい。

(\mathcal{P})	1 for	2 from	3 in	4 on
(1)	1 for	2 of	3 to	4 with
(ウ)	1 for	2 of	3 on	4 to
(エ)	1 at	2 on	3 to	4 until
(才)	1 by	2 over	3 until	4 to
(カ)	1 Before	2 For	3 Like	4 With
(キ)	1 in	2 to	3 toward	4 up
(ク)	1 by	2 in	3 on	4 until
(ケ)	1 about	2 by	3 in	4 on
(コ)	1 across	2 by	3 into	4 on

問3下線部分①はどのようなことを言っているのか、日本語 30 字以内で説明しなさい。

				30

問4下線部分②の内容を日本語 30 字程度で説明しなさい。

				30

問5下線部分③を日本語に訳しなさい。

Read the passage below and answer the questions that follow it.

Even after a depression that has wiped out a quarter of its economy, Greece's population is still not the worst off in the Eurozone*. GDP* per person (a very [1]rough indicator of living standards) in Greece remains higher than it is in Latvia, and is roughly level with Estonia, Portugal, Slovakia and Slovenia. And income per head is also still much higher than in Brazil, India and China. So why, then, are the Greeks complaining so much? Why did they have to be rescued when, in a global context, they are still reasonably well off? Part of the answer is that expectations matter. Research shows that it's psychologically much more painful to go from something to nothing than it is to go from nothing to nothing. Thus, (A) has made the Greeks so angry is the [2]huge downward shift in their country's national income in the past five years: it's the change in income, not the absolute level, that matters.

We all have expectation reference points, and this psychology helps to explain a [3]<u>wide</u> range of economic and social phenomena. Some argue that it's meaningless to talk about "poverty" in [4]<u>advanced</u> countries such as Britain. Those classified as "poor" are not starving or barefoot, as they were in former times. (a)<u>彼らは、過去の貧しい人たちなら所有することを夢見ること</u> <u>さえなかっただろう車やコットンのシャツのような商品を持っている</u>。 They also have access to technologies like smartphones and satellite television that were literally unimaginable to their ancestors. But the expectation reference point for "poor" people is not the living standards of [5]<u>previous</u> generations of poor people, but the living standards of other people in the country (B) they live (or actually, those of other people in that country (C) they come into contact). And changing people's reference points—as the British government is currently attempting to do by adjusting the technical definition of [6]<u>poverty</u>—isn't easy.

Before they vote to change the definition of poverty, MPs* might like to consider that, with their £67,000 annual salary, they are [7]<u>objectively</u> better off than most of the population. But the expectation reference point of MPs is the pay of company executives and [8]<u>senior</u> bureaucrats—in other words, those (D) they consider their peers. That's why they feel desperately poor and demand higher salaries.

The expectation reference point also explains why migrants from poor countries are prepared to do jobs that workers in rich countries aren't particularly keen on. Picking apples for the minimum wage in Britain seems preferable to unemployment in Eastern Europe. Their reference point differs from that of the native-born population.

An example from history: the living standards of British settlers in America in the late 18th

century were higher than those of the inhabitants of any other British colony, but it was these Americans and not, for example, the Indians, who rebelled in 1773 and demanded independence. How can we explain this? The reference point is the answer. (b)彼らは、英国の植民地の臣民 よりもむしろ、母国に住む人たちと自分たちとを比較した。

Reference points aren't economically "rational". Classical economic models assume we make decisions based on an objective understanding of (E) will make us better or worse off in financial terms. So in classical economic models, recessions should be short and self-correcting. The kind of prolonged slump and mass unemployment seen in Greece recently, and also in America during the Great Depression of the 1930s, should not happen. Wages should fall until companies are able to start [9]hiring people again, after which unemployment should disappear. But that doesn't usually happen, because the psychological reference point makes people strongly resist taking a pay [10]cut, even when this increases the risk that their company will go bankrupt and they will lose their job. Their reference point of a certain salary takes on a massive importance. It's not just about money, but dignity: their cash salary is the personal reference point (F) they judge how well off they are. It is important to understand how these reference points affect people's behavior, but unfortunately, there is sometimes no choice but to brutally introduce people to the real world.

NOTES

Eurozone	The group of countries that use the Euro as their currency
GDP	Gross domestic product: the total value of goods produced and services
	provided in a country during one year
MPS	Members of Parliament (equivalent to members of Japan's House of
	Representatives)

Questions

1 For each of the underlined words marked [1] to [10], give an English word with the <u>opposite</u> meaning. Your answers should reflect the context in which each word is used.

]

- [4] [5] [6]
- [7] [8] [9]

[10]

- Select from the following to fill the blank spaces marked (A) (F). Individual options may be selected once, more than once, or not at all. On the answer sheet, enter the <u>numbers</u> corresponding to the options you select.
 1 by which 2 by whom 3 in which 4 in whom 5 what 6 which 7 whom 8 why
 9 with which 10 with whom
- 3 Translate the Japanese sentences marked (a) and (b) into English.

- 4 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.
 - (1) Those who have never been rich will find poverty more difficult to tolerate than those who have.
 - (2) Perceptions of what it is to be poor vary from place to place and from generation to generation.
 - (3) MPs earn around three times more than the average Briton.
 - (4) MPs earn more than business executives and senior bureaucrats.
 - (5) The willingness of people from poor countries to do low-paid jobs in rich countries can be explained by expectation reference points.
 - (6) One reason classical economic models are often wrong is that people don't necessarily behave in their own best interests.

(東京医科歯科大 2013)

次の英文は Los Angeles Times 新聞 (2011 年 7 月 18 日) に掲載された "Service dogs are beyond fetching" (Karen Ravn)の記事を一部改変したものです。この文章をよく読んで、 医学科と歯学科の受験者は問題3,4,5,6に答えなさい。保健衛生学科と口腔保健学科 の受験者は問題1,2,3,5,6に答えなさい。 *印のついている語句の注は本文のあとに示されています。

One moment 15-year-old Glen Gregos was a happy-go-lucky kid riding a motorcycle. The next he was the lucky-to-be-alive victim of a terrible accident, paralyzed from the chest down.

Now 54, Gregos has built a rewarding life — college, marriage, a successful banking career, a daughter who just graduated from college.

Still, for decades after the accident, Gregos faced challenges every day from simple things most of us take for granted — going to the grocery store, going out the front door. And then six years ago, his life took another dramatic turn. He met Beulah — also known as Miss Bo — a black Labrador retriever who has been at his side, 24/7, ever since — to open doors, carry bags, pull his wheelchair, pick up anything he drops on the floor and cheer up any black mood he falls into.

Miss Bo is not considered a pet. She's a service dog, a concept first introduced with guide (or seeing-eye) dogs for the blind, perhaps as far back as the 16th century, though it wasn't until 1929 that the first guide dog training school in the U.S. opened up. By the 1970s, people had started training dogs to help with other disabilities, and that trend has continued.

Service dogs now include dogs that can open cupboards and drawers, *alert* someone to a ringing telephone, assist someone during a disorienting seizure, help someone keep their balance or get back up after a fall, not to mention dogs that can sniff allergens in the air or low blood sugar on someone's breath.

"Here in the U.S. we have a highly individualistic culture — creative, experimental," says Lynette Hart, director of the Center for Animals in Society at UC Davis. "(1)<u>It</u>'s like a cauldron* for coming up with new things that dogs can do for us. And dogs love to work. It's a very natural marriage for them to help people."

This has been a *boon* for many who, like Gregos, have had their lives changed by some extraordinary dogs. But potential pitfalls abound. "There's almost no regulation," Hart says. "And everyone wants to do what they want to do."

Sometimes people want to call their dogs service dogs even though they're really not. And sometimes people want to believe dogs can do things even though there's no real proof they can.

Many dogs have a natural *knack* for providing comfort, companionship and emotional support to their people, who often consider that a pretty big service. But it doesn't make those dogs service dogs. Neither does a capacity for warding off crime by looking or sounding formidable.

According to the 1990 Americans With Disabilities Act and new regulations put in place in March, a service dog must be trained to perform a service for a person with a disability that is directly related to the person's disability — turning lights on and off for someone who's paralyzed, for example, or alerting someone who's deaf that a smoke alarm is blaring.

Many organizations train one or more kinds of service dogs, and in general their programs follow a pattern set by the early guide dog training organizations: careful breeding followed by puppy-raising by volunteers who begin the basics of obedience and socialization, and finally intensive training by professionals. (Potential human recipients also are carefully *screened*, trained and matched to dogs.)

Guide Dogs for the Blind, the first guide dog training school on the West Coast, relies solely on Labrador retrievers, golden retrievers and crosses of the two. Training organizations for other types of service dogs often do too. "They have wonderful temperaments," says Katie Malatino, public relations coordinator for one such organization, Canine Companions for Independence, headquartered in Santa Rosa. "They're a good size for the tasks they have to do, and they have an instinct to *retrieve*, which comes in handy for picking things up off the floor."

Canine Companions for Independence provided Miss Bo to Gregos in November 2005. These days she is always on call if Gregos needs her, which is not to say that she never has any fun. "She has toys," he says. "We play ball. But once she gets vested up" — wearing the vest that identifies her as a service dog — "she knows, 'OK, I'm ready to work.' " (And people who see the vest should know and respect that too.)

Like any good service dog, when she's working, Miss Bo is unperturbed by loud or unexpected noises ("bomb proof," Malatino calls it) and undistracted by other animals or people — unless Gregos gives her special *dispensation*. Which he often does.

"I put her in a 'sit' and let people pet her," he says. "I want to create more awareness about these special dogs. I wasn't aware of them myself for a long time. I'd think, 'What can a dog do for a guy in a wheelchair?' "

The Americans With Disabilities Act says service dogs get to go wherever their people go: grocery stores, restaurants, libraries, amusement parks, boats, buses, trains, planes and no-petsallowed hotels. New regulations issued this spring establish two exceptions: Service dogs can be *banished* if (2)<u>they</u> get out of control or if they transact certain business indoors that should have been seen to outside.

Not everyone knows the rules. Gregos once spent several hours convincing officials at a hotel with a no-pets policy that they were *obligated* to let Miss Bo in.

 $[\mathcal{P}]$ Even beyond the issue of ignorance, service dog use is not without controversy. One problem is cheaters.

"A lot of people try to skirt the system," Gregos says. Some will claim that their pet dogs are service dogs that help them with disabilities they don't really have — and they can get away with that, because the law doesn't require people to present proof of their own disability or their dog's capacity to deal with it. (It doesn't help that service dog vests are readily available online.) Proprietors may deny entrance to dogs that arouse their skepticism, and that's fine if they're right. If (3)**they** are wrong, it can lead to a fine of a very different kind.

Another problem is that there are no industry-wide standards for trainers or dogs, leaving disabled people on their own to determine how much they should trust an organization's claims. "Guide Dogs for the Blind — they're very *reputable*," says Dr. Melissa Bain, chief of the Behavior Service at the UC Davis Veterinary Medical Teaching Hospital. "If (4)<u>thev</u> graduate a dog, OK, I trust it." But not every organization has the same long history of success.

Of course, some claims are easier to *validate* than others. It's easy to see if a dog can pull a wheelchair or open a refrigerator door. But seizure prediction? "The trouble," Bain adds, "is if people rely on the dog and nothing else, that could be dangerous."

Sometimes the question isn't whether a particular dog can perform a task but whether some tasks are even canine-ly possible. Take seizure detection again. "Is (5)<u>that</u> legitimate?" Bain says. "Maybe."

In 1999, a British epilepsy* specialist and a behavioral scientist/animal trainer reported that by giving dogs a reward every time their owners had seizures, they had been able to train some dogs to warn of oncoming seizures as much as 15 to 45 minutes before the seizures occurred. Their paper in the journal *Seizure* inspired a demand for such dogs.

Today, the Epilepsy Foundation says on its website, "while some people have been very pleased with their new canine friends, others have been disappointed." The foundation "recommends that people take great care in reviewing trainer claims and results, especially when thousands of dollars are involved."

More questions arose in 2007 when four of the seven seizure-alert dogs in a study in the journal *Neurology* were found to be warning people of psychological, not epileptic, seizures. Psychological seizures, caused by mental stress, can often be eliminated through counseling —

without drugs — making warnings beside the point. And in one case in that study, a dog's "warning behaviors" were found to set the seizures off.

Service dogs for children with autism* have inspired a debate all their own, with some districts reluctant to allow the dogs into their schools because, they argue, the dogs cause too much trouble — other children may be scared or allergic; child and dog may require extra supervision.

But, in fact, the value of service dogs to children with autism is less controversial than it is for seizures. "One of the main things our dogs do is provide safety," says Kati Rule-Witco, executive director and placement specialist for Autism Service Dogs of America. "Often children with autism will run off. Parents have trouble just going to the grocery store. Our dogs provide a way for families to go out safely."

A 2008 study in the journal *Qualitative Health Research* looked at what happened when service dogs were brought into 10 families with children with autism and found that they did, indeed, enhance safety and facilitate public outings. When the child and dog go out into the community together, the dog is tethered to the child but also connected to the adult caregiver since that's who holds the dog's leash. Autism service dogs are also trained to keep their cool no matter what their young charges do (hug, squeeze, lie on top of the dog) and to take positive steps to cope with negative behavior (nudge or lean against the child, maybe even stop the child from hurting himself).

Bain notes that research so far has not compared service dogs to ordinary family dogs, and she suggests the latter might do just about as well. "Maybe a child feels better sitting next to the dog," she says. "There's no way to tell if special training does any good."

Gregos has no such questions about the good that Miss Bo's special training has done for him. But she'll be 8 in August, and the time is coming when she'll need to retire and he'll need to get a new service dog. [1]<u>Then Miss Bo will change from service dog to pet dog and spend the rest of</u> <u>her days with the man who says that having her has been "magical since Day One."</u>

注 cauldron 沸騰する大釜 epilepsy てんかん autism 自閉症

保健衛生学科および口腔保健学科

1 The following words appear in bold italics in the text. On the answer sheet, <u>circle the letter</u> indicating the best definition for each word (based on how the word is used in the text). alert

aleri		
(a) bring	(b) connect	(c) help
(d) save	(e) warn	
boon		
(a) benefit	(b) companion	(c) reward
(d) treatment	(e) trend	
knack		
(a) appearance	(b) aptitude	(c) desire
(d) gene	(e) limit	
screened		
(a) evaluated	(b) fielded	(c) instructed
(d) oriented	(e) watched	
retrieve		
(a) bend	(b) catch	(c) fetch
(d) navigate	(e) practice	
dispensation		
(a) circulation	(b) medication	(c) permission
(d) training	(e) treats	
banished		
(a) ejected	(b) endangered	(c) fired
(d) harmed	(e) troubled	
obligated		
(a) allowed	(b) educated	(c) mistaken
(d) required	(e) told	
reputable		
(a) dependable	(b) regulated	(c) standardized
(d) trusting	(e) useful	
validate		
(a) confirm	(b) estimate	(c) predict
(d) realize	(e) understand	

保健衛生学科および口腔保健学科

2 What do the following words, which are underlined in the text, refer to? <u>Answer using one</u> to five English words that can replace the underlined text.

(1) It	(2) they	(3) they
(4) they	(5) that	

<u>全</u>学科

3 According to the text, decide whether the following statements are true (T) or false (F). For each statement circle the correct answer on the answer sheet.

- 1. Glen Gregos has not been able to move his arms and legs since he was 15 years old.
- 2. Glen Gregos met Miss Bo more than twenty years after his accident.
- 3. Guide dogs for the blind are considered service dogs.
- 4. Lynette Hart implies that there would not be so many different kinds of service dogs now if

the U.S. did not have such an individualistic culture.

- 5. Lynette Hart implies that the relationship between service dogs and people like Glen Gregos is similar to a marriage.
- A very scary dog which can frighten away criminals is a type of service dog in the United States.
- 7. Each type of service dog is trained by an organization that specializes in the related disability.
- 8. Training organizations rely on volunteers to find newborn puppies which might make good service dogs.
- 9. The vest which service dogs wear protects them from bombs and other dangers.
- 10. The article implies that loud noises and the presence of other animals or people do not bother good service dogs when they are working.
- 11. Miss Bo exercises her duty as a service dog when Glen Gregos gives her special dispensation.
- 12. Glen Gregos lets people pet Miss Bo in order to test the dog's ability to concentrate on her job.
- 13. Glen Gregos admits that he used to be ignorant about the usefulness of service dogs for disabled people like himself.
- 14. Based on the information in the article, it is reasonable to assume that Glen Gregos can see a movie in an American theater accompanied by Miss Bo.
- 15. It is implied in the article that anyone can order a service dog vest over the Internet.
- 16. Dr. Melissa Bain is convinced that service dogs can detect seizures.
- 17. A study published in the journal *Seizure* suggests that it may be possible to train service dogs to warn of oncoming seizures by giving them a reward every time their owners have seizures.
- 18. The Epilepsy Foundation is responsible for the quality of seizure-alert dogs.
- 19. Some of the seven seizure-alert dogs in a study in the journal *Neurology* were found to be able to differentiate between types of seizures.
- 20. Even though service dogs may be able to help children with autism, some school districts are hesitant to let these dogs into their schools.
- 21. Kati Rule-Witco implies that service dogs keep children with autism near their parents when a family goes out.
- 22. As children with autism may hug, squeeze, or lie on top of service dogs, these dogs have to be trained to keep themselves from overheating.
- 23. The article implies that autism service dogs are able to identify inappropriate or harmful behavior by children with autism.

- 24. The results of the 2008 study in the journal *Qualitative Health Research* suggest that the use of service dogs would help children with autism and their families go to more places together.
- 25. According to Dr. Bain, the special training that service dogs receive may not be necessary to help children with autism; an ordinary dog might provide as much or nearly as much benefit.
- 26. The article implies that service dog training organizations in the United States want more governmental regulation of their industry.

医学科と歯学科のみ

4 Briefly (in 10 to 25 words) answer the following questions in your own words, using complete English sentences. Base your answers on the information presented in the article. 1. Why are Labrador retrievers and golden retrievers often used as service dogs?

- 2. Why are service dogs perhaps not needed for people suffering from psychological seizures?
- 3. Why have cheaters been able to take advantage of the Americans with Disabilities Act where service dogs are concerned?

<u>全</u>学科

5 下線部[ア]と[1]を日本語に訳しなさい。

全学科

6 介助犬の役割と有用性について、次のキーワードを用いて日本語で 400 字以内にま とめなさい: 障害 (disability)、けいれん発作 (seizure)、自閉症 (autism)

100
200
200
300
400
400

(大阪大 2013)

次の英文(A)と(B)を読み、それぞれの下線部の意味を日本語で表しなさい。

(A) The fundamental reason why exceptional creativity and genius tend to elude institutional training is that they arise from many elements, such as motivation and personality, whereas schools, colleges, and universities focus chiefly on only one element: intelligence. Whatever intelligence consists of — and there is still no consensus after a century of intelligence testing — it does not appear to be the same as creativity. Intellectual skills and artistic creativity surely do not mutually exclude each other, but neither do they necessarily accompany each other.

(B) Like Galileo, Newton stressed the importance of comparing theories and model with experiments and observations of the real world, and always carried out relevant experiments himself, whatever possible, to test his ideas. This is so deeply ingrained as part of the scientific method today that it may seem obvious, even to non-scientists, and <u>it is hard to appreciate the extent to which, even into the seventeenth century, many philosophers would speculate about the nature of the physical world in an abstract way, without ever getting their hands dirty in experiments. The classic example is the argument about whether two different weights dropped from the same height at the same time would hit the ground together.</u>

次の英文を読んで、以下の設問に答えなさい。

In the late 1960s, the psychologist Walter Mischel began a simple experiment with four-yearold children. He invited the kids into a tiny room containing a desk and a. chair and asked them to pick a treat from a tray of marshmallows, cookies, and pretzel sticks. Mischel then made the four-year-olds an offer: They could either eat one treat right away or, if they were willing to wait while he stepped out for a few minutes, they could have two treats when he returned. Not surprisingly, nearly every kid chose to wait.

At the time, psychologists assumed that the ability to delay gratification in order to get that second marshmallow or cookie depended on willpower. Some people simply had more willpower than others, which allowed them to resist tempting sweets and save money for retirement. However, after watching hundreds of kids participate (A) the marshmallow experiment, Mischel concluded that this standard model was wrong. He came to realize that willpower was (i)<u>inherently</u> weak and that children who tried to postpone the treat — gritting their teeth in the face of temptation — soon [1]lost the battle, often within thirty seconds.

Instead, Mischel discovered something interesting when he studied the tiny percentage of kids who could successfully wait for the second treat. Without exception, these "high delayers" all relied on the same mental strategy: [2]<u>These kids found a way to keep themselves from thinking about the treat, directing their gaze away from the yummy marshmallow.</u> Some covered their eyes or played hide-and-seek underneath the desks. Others sang songs from Sesame Street, or repeatedly tied their shoelaces, or pretended to take a nap. Their desire wasn't defeated, it was merely forgotten.

Mischel refers to this skill as the "strategic (ii)<u>allocation</u> of attention," and he argues that it's the skill underlying self-control. Too often, we assume that willpower is about having strong moral fiber. But that's wrong. Willpower is really about properly directing the spotlight of attention, learning how to control that short list of thoughts in working memory. It's about realizing that if we're thinking about the marshmallow, we're going to eat it, which is why we need to look away.

What's interesting is that this cognitive skill isn't just useful for dieters. It seems to be a core part of success in the real world. For instance, when Mischel followed (B) the initial subjects thirteen years later — they were now high school seniors — he realized that their performance on the marshmallow task had been highly predictive on a vast range of metrics. Those kids who had

struggled to wait at the age of four were also more likely to have behavioral problems, both in school and at home. They struggled in stressful situations, often had trouble paying attention, and found it difficult to maintain friendships. Most impressive, perhaps, were the academic numbers: The kids who could wait fifteen minutes for a marshmallow had an SAT* score that was, on average, 210 points higher than that of the kids who could wait only thirty seconds.

[3]<u>These correlations</u> demonstrate the importance of learning to strategically allocate our attention. When we properly control the spotlight, we can resist negative thoughts and dangerous temptations. We can walk away from fights and improve our odds (C) addiction. Our decisions are driven by the facts and feelings bouncing around the brain — the allocation of attention allows us to direct this haphazard process, as we consciously select the thoughts we want to think about.

Furthermore, this mental skill is getting more valuable. [4]We live, after all, in the age of information, which makes the ability to focus on the important information incredibly important. (Herbert Simon said it best: "A wealth of information creates a poverty of attention.") The brain is a bounded machine, and the world is a confusing place, full of data and distractions. Intelligence is the ability to (iii)<u>parse</u> the data so that it makes just a little bit more sense. Like willpower, this ability requires the strategic allocation of attention.

One final thought: In recent decades, psychology and neuroscience have severely (iv)<u>eroded</u> classical notions of free will. The unconscious mind, it turns out, is most of the mind. And yet, we can (D) control the spotlight of attention, focusing on those ideas that will help us succeed. In the end, this may be the only thing we can control. We don't have to look at the marshmallow.

*(注) SAT 大学進学適性試験

設問(1) 本文中の空所(A)~(D)を埋めるのに最も適当な語または語句を選んで、記号で 答えなさい。

(А)	(イ) in	(□) of	(ハ) over	(ニ) to
(В)	(イ) away from	(ロ) on from	(n) through with	(ニ) up with
(С)	(イ) against	(□) for	(ハ) of	(ニ) to
(D)	(イ) also	(□) never	(ハ) still	(ニ) thus

設問(2) 本文中の下線部の語(i)~(iv)に最も近い意味の語または語句を選んで、記号で答 えなさい。 (i)inherently (イ) extremely (口) fundamentally (ハ) occasionally (=) simultaneously (ii)allocation (1)assignment (ロ)definition (\land) enlightenment (\neg) protection (iii)parse (イ)analyze (□)contradict (ハ)protect (ニ)prove (iv)eroded (イ)built up (□)put away (ハ)set up (=)worn away

設問(3) 本文中の下線部[1]の lost the battle の意味するところを具体的に日本語で説明しなさい。

設問(4) 本文中の下線部[2]の英文の意味を日本語で表しなさい。

設問(5) 本文中の下線部[3]の These correlations の例として適切なものを(イ)~(ニ)から 一つ選んで、記号で答えなさい。

(1) The harder students try to concentrate on their targets all the time, the higher chance they have of academic success in their school life.

 (\square) Students who achieved high scores on the SAT were those who had earlier ended up eating a marshmallow within fifteen minutes.

() If children are allowed to have as many marshmallows as they can eat, they are likely to find it difficult to maintain friendship with other kids.

(=) Children who were able to divert their attention to something other than what they wanted performed better academically in their later years.

設問(6) 本文の内容に最もよく合っているものを(イ)~(ニ)から一つ選んで、記号で答えなさい。

(1) A series of psychological experiments by Walter Mischel found that human willpower is essentially strong enough to resist various temptations in daily life.

 (\Box) Scientists used to believe that strong determination plays a vital role in sacrificing one's immediate desire for future benefits.

(\land) Desire to put yourself in the spotlight is important for achieving success in your career. (\doteq) Walter Mischel's discovery was that self-control has little to do with your ability to manage your attention properly.

設問(7) 本文中の下線部[4]の英文の意味を日本語で表しなさい。

次の英文を読んで設問に答えなさい。

In February 2013, a large asteroid ripped through the atmosphere over the Chelyabinsk area of Russia, trailing long lines of smoke as it made its shallow entry, radiating so much light and heat that onlookers (A) reddened faces and peeling skin. When the meteor exploded, 15 miles up, there was a terrible, prolonged bang—a noise that (B), in a sense, ever since. We now know that the explosion over Chelyabinsk (C) with a force equal to 500 kilotons of TNT*, or (\mathcal{T}) Nagasaki bombs. Had the meteor come down a little steeper (1), directing the might of its detonation* at, rather than over, Chelyabinsk, it (D) thousands on the ground. Although nobody died at Chelyabinsk, it was an event of such calamitous* potential that the asteroid (E) by certain astronomers as a "city-killer." Many are now wondering if we're not being a little complacent*.

In November 2013, a trio of studies (F) in the journals *Nature* and *Science* suggested that impacts of Chelyabinsk's magnitude were ($\dot{7}$) more likely to happen than previously supposed. In December, the UN called for the creation of an international asteroid warning network. In the New Year, it took only hours for the first major rock of 2014 to arrive: a car-sized lump that burst (\pm) over the Atlantic on January 1.

But at a press conference earlier this year, former NASA astronaut Dr Edward Lu announced that there are around one million asteroids in the Earth's vicinity* "with the (\mathcal{T}) destroy a major metropolitan area." He showed an animated graphic to demonstrate how (H). The graphic showed the Earth in orbit among the dangerous asteroids we knew about and were tracking—around 10,000 of them. (I) like this, our planet looked like a pedestrian walking along a busy street, not overly troubled. Then Lu changed the graphic to show "what it really looks like out there" with the Earth (J) through a million-strong field of city-killing asteroids. I saw

the same pedestrian now trying to run through a train station in the middle of rush hour, avoiding collisions purely (\neg) . "Blind luck," as Lu put it.

NOTES

1.0120	
calamitous	creating great damage
complacent	not worried about a situation, even though the situation may be dangerous
detonation	a large explosion
hunk	a large piece of something
TNT	a powerful explosive substance (trinitrotoluene)
vicinity	the area near a particular place
whisk	move quickly
Adapted from (Oxford Advanced Learner's Dictionary (8th ed.) Oxford Dictionary of English (2nd ed. rev

Adapted from Oxford Advanced Learner's Dictionary (8th ed.), Oxford Dictionary of English (2nd ed. rev.), Longman Dictionary of Contemporary English (5th ed.), etc.

設問

設問					
問1	本文中の(A)~(J)に入れるのに最もふさわしい語句を選びなさい。				
(A)	1 are left with	2 had left with	3 have left with	4 were left with	
(B)	1 had rung on	2 has rung on	3 rang on	4 rings on	
(C)	1 had occurred	2 has occurred	3 occurred	4 occurs	
(D)	1 had killed	2 has killed	3 would have killed	4 would kill	
(E)	1 classified	2 classifies	3 has classified	4 was classified	
(F)	1 published	2 publishing	3 was published	4 were published	
(G)	1 has been tracking	2 is tracking	3 tracks	4 was tracking	
(H)	1 much unprepared we are 3 unprepared we are		2 much we are unprepared		
			4 we are unprepared		
(I)	1 Saw	2 See	3 Seeing	4 Seen	
(J)	1 having shot	2 shooting	3 shoots	4 shot	
問2	オナ中の(ア)~(フ)	に入れてのに是も	ふさわしい語句を選び	to to to	
門 ム (ア)	1 a couple dozens	2 a couple of dozen		4 dozen of	
(1)	1 February	2 in that February	3 on that February	4 that February	
(ウ)	 between three and ten times from three and ten times 		2 between three to ten times		
			4 three and ten times		
(エ)	1 above	2 apart	3 in	4 out	
(才)	1 big enough	2 enough big	3 enough small	4 small enough	
(力)	1 as size as	2 size as	3 size of	4 the size of	
(+)	1 concerned about		2 concerned with		
	3 content about		4 content with		
(ク)	1 as we know	2 example	3 it is said	4 say	

(ケ)	1 possibility of	2 possibility to	3 potential of	4 potential to
(コ)	1 at random	2 at will	3 by chance	4 by mistake

(慶應大・医 2015)

以下の文章は、"Can Solar Energy Save the World?"というテーマのディベートに関するものである。司会者の Geoff Carr が対立する二者—Richard Swanson と Benny Peiser—の意見を踏まえて行った発言である。英文を読んで、設問に答えなさい。

Sunlight is free. Turning it into electricity produces no greenhouse gases, and the process is getting cheaper every year. These facts suggest solar power ought soon to be a big part of the world's energy mix. However, it is unavailable at night and is most efficiently generated in deserts —places where few potential consumers live and which are often (at least in the case of those near Europe) in countries with dubious governments. Can these problems be (\mathcal{P})? (1)Or is solar power forever destined to be something for which fossil-fuel-based economies half-heartedly provide financial support just to make themselves seem more environmentally friendly than they really are?

As Richard Swanson observes, this debate depends on whether the world needs saving and, if so, from what? There are two conventional answers to the second question. One is that it needs saving from the effects of climate change (1) by man-made global warming. The other is that it needs saving from dependence on fossil fuels, which are, by definition, a finite* resource.

Both of these answers are challengeable. Few informed people doubt that humanity's emissions of greenhouse gases, particularly carbon dioxide, are altering the climate. (A) there is doubt over both how big that effect will be and whether the response should be to try to stop the change or to adapt to it. Trying to stop it would certainly require a vigorous approach to alternative energy, (B) solar power would play an important—and probably eventually dominant—role. Trying to adapt would mean business as usual, with access to the cheapest energy sources (i.e., fossil fuels, at the moment) to help bring about the economic ($\dot{7}$) that would help pay for adaptation to an altered climate.

Similarly, as the rise of fracking* has shown, previously inaccessible sources of fossil fuels can be made accessible by technological (\pm). And (C) more untapped resources are known to exist even now, such as methane trapped at the bottom of the sea in icy structures called clathrates. With such abundance, why invest in solar power?

Demand for energy is growing fast—doubling every 40 years. This means that unless something changes drastically, (2)人間はこれまでに使ったのと同じくらいの量のエネルギ <u>ーを次の40年間にわたって使うだろう</u>。Some of those who see this (オ) in disaster for Homo sapiens suggest anticipating the problem by perfecting solar technologies now—even though they are not sustainable without financial support—so that they can be deployed rapidly when needed.

Intriguingly, both Richard Swanson and Benny Peiser have considered the case of Germany, but they have managed to draw opposite conclusions in doing so. Mr. Swanson notes that renewables* supply a quarter of Germany's electricity needs, that solar alone supplies 5% (and on sunny summer days up to 40%), and that a third of the world's solar cells are installed there. Clearly, in his view, those cells are a force for good. Mr. Peiser, (D), points out that Germany has the second most expensive electricity in Europe, that its subsidization of green energy comes to €20 billion (\$28 billion) a year, and that during the winter it has to import power from its neighbours. In his view, the country is at serious risk of suffering blackouts.

One reason for the imports is obviously that Germany is not a particularly sunny place, especially in winter. But countries farther south (E). With a suitable intercontinental power grid, it would be possible for northern European countries to switch to solar energy by importing it, (F) by generating it themselves. For Europe, that would create other problems, since many of the sunniest nearby countries have unfriendly governments of questionable stability. But places such as America, which have sunny deserts within their territories, might find moving solar energy around in this way more achievable.

This leads to another possibility, which is that the world does not actually need solar power to save it but will get it anyway—simply because it will prove better than the alternatives. This argument depends on the fact that sunlight is free. The running costs of at least the simplest sort of solar power station are thus minimal. (3)Get the capital costs of such technology low enough and solve the problem of overnight storage, and market economics will do the rest.

The question of the future of solar energy is thus rich with possibilities and constitutes a fascinating subject for debate.

NOTES

finitehaving an end or limitfrackingthe process of extracting oil or gas from rocksrenewablessources of energy that do not run outAdapted from Oxford Advanced Learner's Dictionary (8th ed.), Oxford Dictionary of English (2nd ed. rev.),Longman Dictionary of Contemporary English (5th ed.), etc.

設問

問1 本文中の(ア)~(オ)に入れるのにふさわしい単語になるように解答欄の綴りを 完成させなさい。それぞれの単語についての説明を以下に示すので手がかりにしな さい。

- (\mathcal{P}) dealt with successfully, solved
- (1) brought about
- ([†]) an increase in the size, amount or degree of something
- (I)advance
- (オ)resulting
- (ア)0
- (1)c
- (ウ)g
- (エ)p
- (才)e
- 問2 下線部分(1)を日本語に訳しなさい。

問3 本文中の(A)~(F)に入れるのにふさわしい語句を選びなさい。

(A)	1 And	2 But	3 For	4 So
(B)	1 at which	2 in which	3 that	4 which
(C)	1 already	2 any	3 much	4 yet
(D)	1 by contrast	2 on the contrary	3 similarly	4 likewise
(E)	1 are	2 aren't	3 do	4 don't
(F)	1 better than	2 other than	3 rather than	4 worse than

問4 下線部分(2)の日本語を英語に訳しなさい。

問5 下線部分(3)を日本語に訳しなさい。

- 閉6 Which of the following is <u>not</u> cited in the passage as a problem associated with solar energy?
- (A) Europe would have to rely on countries with unstable governments for imports of solar energy.
- (B) It is hard to justify the investment that would have to be made to switch to solar power when new sources of fossil fuels are becoming more readily available.
- (C) Countries that do not have sunny climates cannot generate enough solar energy to meet their needs.
- (D) Solar energy alone will not be able to satisfy all of humanity's energy needs.
- 問7 Which of the following statements is <u>not</u> supported in the passage?
- (A) Switching to solar power would cost more than sticking with fossil fuels, yet it is becoming less and less expensive to produce electricity from sunlight.
- (B) Some people think it would be better to adapt to climate change than to try to reverse it.
- (C) Germany is the biggest user of alternative energy in Europe.
- (D) America would be more likely to have a stable supply of solar energy than Europe.