

英 語

(問 題)

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注 意 事 項

1. 問題冊子は、試験開始の指示があるまで開かないこと。
2. 問題は2～11ページに記載されている。試験中に問題冊子の印刷不鮮明、ページの落丁・乱丁およびマーク解答用紙の汚れ等に気付いた場合は、手を挙げて監督員に知らせること。
3. 解答はすべてマーク解答用紙の所定欄にHBの黒鉛筆またはHBのシャープペンシルでマークすること。欄外の余白には何も記入しないこと。欄外に何かを記入した解答用紙は無効となる場合がある。
4. 試験が開始されたらただちに、マーク解答用紙の所定欄（1か所）に、氏名を正確に丁寧に記入すること。
5. マーク欄ははっきりマークすること。また、訂正する場合は、消し残しがないよう消しゴムで丁寧に消すこと（砂消しゴムは使用しないこと）。

マークする時	<input checked="" type="radio"/> 良い	<input type="radio"/> 悪い	<input type="radio"/> 悪い
マークを消す時	<input type="radio"/> 良い	<input checked="" type="radio"/> 悪い	<input type="radio"/> 悪い

6. いかなる場合でも、マーク解答用紙は必ず提出すること。
7. 試験終了後、問題冊子は持ち帰ること。

I. 次の Water's Worldwide Travels というタイトルの英文を読み、設問 1～10 に答えよ。

Water runs downhill from mountaintops to streams to rivers to oceans. But downhill isn't the only way that water moves. A new study measures how water travels from country to country for human consumption. This flow isn't the type we usually think about. These scientists looked at the water used to grow and make the products that get shipped from nation to nation as imports or exports. They call this a flow of "virtual water."

We typically think about water as the liquid that flows from a faucet. However, nearly all—92 percent—of the water used by people goes into growing crops, according to water researcher Arjen Hoekstra at the University of Twente in the Netherlands. He and his team recently studied the hidden travels of virtual water used in products made from things like crops and meats. These products are shipped around the world.

For example, consider a sugary soft drink. Hoekstra and his team estimated that to produce one half-liter of the beverage requires between 170 and 310 liters of water. Only a tiny amount of that—about 1 percent—is the water actually used in the soda. The vast majority of the water—about 95 percent—is used to grow and process the ingredients. Another 4 percent goes into the packaging and labeling, say the scientists. (The exact amount of water required depends on the sweetener being used.) In Hoekstra's calculation, when one country produces a half-liter of soda and sells it abroad, it exports as much virtual water as would fill a large refrigerator.

According to Hoekstra's new report, dry countries like Israel and Kuwait, both in the Middle East, get the majority of their virtual water from other countries, through imported products. More surprisingly, some wetter countries, like the Netherlands and the United Kingdom, also get the majority of their virtual water from other places. That means that most of the water used to grow or produce the products and food consumed in those countries came from other countries.

In the United States, most of the virtual water used comes from American sources; only about 20 percent of the virtual water comes from outside national boundaries. In China, even less of the water associated with its products—about 10 percent—came from foreign countries.

Tracing the water trade, Hoekstra and his team turned up other surprising relationships. For instance, often an ⁽²⁾arid region sends virtual water to a wetter region. Dry areas in northern China, for example, send virtual water to the southern part of that country, which is wetter. "There are exporting regions that do have a lot of ⁽³⁾water stress," he said.

1. 本文で説明されている virtual water の定義として最もふさわしいものを a～d から一つ選べ。

- a. water that flows from higher places to lower places
- b. water needed to make products and grow the ingredients in them
- c. water packaged in bottles and transported between countries by ship
- d. water that is included in various types of soft drinks

2. 第二段落の内容として最もふさわしいものを a～d から一つ選べ。

- a. 穀物や肉、またそれらを原料として使った輸出品に含まれる水分量は正確に計測できない。
- b. 私たちが水道水として使用している水は、人間が様々な形で使用する水の大部分を占める。
- c. 私たちが作物を育てるのに必要な水の量は、水道から供給される水の量よりはるかに多い。
- d. 年間どのぐらいの量の穀物や肉が輸出入されているかは、一般の人々によく理解されている。

3. 下線部 (1) の示すものを a～d から一つ選べ。

- a. 0.5 liter
- b. 170～310 liters
- c. 1 percent
- d. 5 percent

4. 炭酸飲料を作る時に、最も多く必要とされる種類の水を a ~ d から一つ選べ。
- a. the water needed to produce the drink's ingredients
 - b. the water needed to produce the drink's container
 - c. the water actually used in the drink
 - d. the water needed to store the drink in the refrigerator
5. 第四段落の内容と合致しないものを a ~ d から一つ選べ。
- a. There are countries that export virtual water to drier countries in the Middle East.
 - b. Two relatively wet European countries are importers of virtual water.
 - c. The research report written by Hoekstra and his team included some unexpected results.
 - d. Most European countries import products and food from other regions.
6. アメリカ合衆国の水事情に関する記述として最もふさわしいものを a ~ d から一つ選べ。
- a. Part of the virtual water used in the country is obtained from nearby countries.
 - b. About one fifth of the virtual water used in the country is imported from other countries.
 - c. One region of the country supplies a large percentage of its virtual water.
 - d. About eighty percent of the water produced in the country is eventually exported as virtual water.
7. 国外から輸入する virtual water の割合が最も低い国を a ~ d から一つ選べ。
- a. Kuwait
 - b. the Netherlands
 - c. China
 - d. the United States
8. 下線部 (2) の arid の意味として最もふさわしいものを a ~ d から一つ選べ。
- a. rainy
 - b. central
 - c. southern
 - d. dry
9. Hoekstra のチームの研究内容または成果に関する記述として、最もふさわしいものを a ~ d から一つ選べ。
- a. Their findings about the relationship between climate and virtual water flow were not new.
 - b. They discovered that regions that have more water do not always supply it to those that have less.
 - c. They found that many countries in Europe import virtual water from other regions of the world.
 - d. The primary focus of the research team was to study the flow of virtual water in China.
10. 下線部 (3) の water stress の意味として最もふさわしいものを a ~ d から一つ選べ。
- a. 水を間接的に他の地域に供給しているが、実は水が不足していること
 - b. 地域で取れる水の量が多すぎて、水を直接的に他の地域に供給していること
 - c. 水の直接的な輸出に力を入れすぎて、他品目の輸出が減ること
 - d. 近場で水が手に入りにくいため、水の間接的な輸入に頼ること

II. 次の ecosystem (生態系) と biodiversity (生物多様性) についての英文を読み、設問 1～9 に答えよ。

Nearly 20,000 species of animals and plants are considered high risks for extinction in the wild. That's according to the most authoritative compilation of living things at risk—the so-called Red List maintained by the International Union for Conservation of Nature. This should keep us awake at night.

By generalizing from the few groups that we know fairly well—amphibians, birds and mammals—a⁽¹⁾ study in the journal *Nature* last year concluded that if all species listed as threatened on the Red List were lost over the coming century, and that rate of extinction continued, we would be on track to lose three-quarters or more of all species within a few centuries. We know from the fossil record that such rapid loss of so many species has previously occurred only five times in the past 540 million years. The last mass extinction, around 65 million years ago, wiped out the dinosaurs.

The Red List provides just a tiny insight⁽²⁾ into the true number of species in trouble. (1) The vast majority of living things that share our planet remain undiscovered or have been so poorly studied that we have no idea whether their populations are healthy or approaching their demise.* Less than 4 percent of the roughly 1.7 million species known to exist have been evaluated.

And for every known species, there are most likely at least two others—possibly many more—that have not yet been discovered, classified and given a formal name by scientists. (2) So we have no idea how many undiscovered species are poised on the precipice or were already lost.

It is often forgotten how dependent we are on other species. Ecosystems of multiple species that interact with one another and their physical environments are essential for human societies. These systems provide food, fresh water and the raw materials for construction and fuel; they regulate climate and air quality; buffer* against natural hazards like floods and storms; maintain soil fertility; and pollinate* crops.

The genetic diversity of the planet's myriad* life forms provides the raw ingredients for new medicines and new commercial crops and livestock, including those that are better suited to conditions under a changed climate. (3)

This is why a proposed effort by the I.U.C.N. to compile a Red List of endangered ecosystems is so important. The list will comprise communities of species that occur at a particular place—say, Long Island's Pine Barrens or the Cape Flats Sand Fynbos in South Africa. This new Red List for ecosystems⁽³⁾ will be crucial not only for protecting particular species but also for safeguarding the enormous benefits we receive from whole ecosystems.

⁽⁴⁾ Another key step was the creation of a new Intergovernmental Platform on Biodiversity and Ecosystem Services. Created under the auspices of the United Nations, it will provide the scientific background for international policy negotiations affecting biodiversity.

Do we need to protect so many species? Or can we rely on ecosystems with a depleted number of parts? Recent results from a study⁽⁵⁾ of grassland ecosystems shed important new light on these questions. Seventeen grasslands with different numbers of species were created and then studied over many years. (4) The analysis, published in *Nature* last fall, showed that more than 80 percent of the plant species [ア] the effective functioning of the ecosystems, causing, for instance, a greater buildup of nutrients in soils.

*demise 消滅 *buffer 緩衝の働きをするもの *pollinate 授粉する *myriad 無数の

1. 下線部（1）の研究結果として最もふさわしいものを a～d から一つ選べ。
 - a. リストに記載されている絶滅危惧種は今世紀中にそのほとんどが絶滅する可能性がある。
 - b. 今回の大量絶滅は恐竜が絶滅した前回よりも大規模なものになる可能性がある。
 - c. リスト記載種が来世紀中に失われるならば、数世紀中に75%以上の種が絶滅する可能性がある。
 - d. 2万種以上の種が絶滅の危機に瀕しており、数十年のうちにそのほとんどが絶滅する可能性がある。
2. 筆者が下線部（2）と述べている理由として最もふさわしいものを a～d から一つ選べ。
 - a. 小動物の調査しか行われておらず、考察が充分に行われていないから。
 - b. 生息状況が安定しており、保護の必要な生物が少ない地域もあるから。
 - c. 未発見、もしくは生息実態が不明な種が多いから。
 - d. 長期にわたって多くの種が乱獲にあり、生息数が激減しているから。
3. 下線部（3）について、第七段落の中で述べられていないものを a～d から一つ選べ。
 - a. 人間が生態系全体から受ける恩恵そのものの保護につながる。
 - b. 特定の地域に生息する生物の生息状況を調査し保護する。
 - c. I.U.C.N.がみずから提唱し、危機に瀕した生態系について調査をおこなう予定である。
 - d. 温暖化に伴って生息状況がよくなる生物について調査する。
4. 下線部（4）の内容について、最もふさわしいものを a～d から一つ選べ。
 - a. 生物多様性に関する法律に基づいて保護活動を行う執行機関の創設
 - b. 生物多様性に関わる政策協議のための情報を提供する国際機関の創設
 - c. 生物多様性の保護活動をおこなう国連の諮問機関の創設
 - d. 生物多様性とその保護を研究対象とする高等教育機関の創設
5. 下線部（5）の研究の内容と合致するものを a～d から一つ選べ。
 - a. 生息する種の数が異なり各地に散らばる既存の牧草地で、生態系の状況を調査した。
 - b. 土壤に含まれる絶滅危惧種の数著しく減らした牧草地で、一年間環境調査を実施した。
 - c. 生息する種の数異なる牧草地を研究のために作り、生態系の状況を数年間観察した。
 - d. 土壤に含まれる絶滅危惧種の種類の多い牧草地で、多年度にわたり環境調査を実施した。
6. 空所 [ア] に入れるのに最もふさわしいものを a～d から一つ選べ。
 - a. contributed to
 - b. reflected
 - c. resulted in
 - d. reported
7. 以下の文を本文中に挿入する場所として最もふさわしいものを a～d から一つ選べ。
 Just recently, for instance, a new species of leopard frog was found in ponds and marshes in New York City.
 - a. (1)
 - b. (2)
 - c. (3)
 - d. (4)
8. 生物が人間社会に与える利益として、第五段落・第六段落の中で述べられていないものを a～f から一つ選べ。
 - a. 飲食物としての利用
 - b. 食品の発酵作用
 - c. 新薬の素材
 - d. 建築材料や燃料の素材
 - e. 大気の安定
 - f. 肥沃な土壌の維持
9. 本文の内容と合致するものを a～f から二つ選べ。
 - a. Increased hunting is one of the main causes of the extinction of many species.
 - b. There have been dramatic declines in the populations of many species in the past decade.
 - c. Severe climate change may accelerate extinction of endangered species.
 - d. Benefits provided by ecosystems and biodiversity are often underestimated.
 - e. We need to increase protection of species through international law.
 - f. A high proportion of the species in an ecosystem is needed to maintain its health.

Ⅲ. 2012年春に出た次の雑誌記事の抜粋を読み、設問1～10に答えよ。

It may not be true that “the three most written-about subjects of all time are Jesus, the Civil War, and the *Titanic*,” as one historian has put it, but it’s not much of an exaggeration. Since the early morning of April 15, 1912, when the great liner went to the bottom of the Atlantic Ocean, taking with it five grand pianos, eight thousand dinner forks, an automobile, a fifty-line telephone switchboard, twenty-nine boilers, a jewelled copy of “The Rubáiyát of Omar Khayyam,” and more than fifteen hundred lives, ⁽¹⁾ the writing hasn’t stopped. First, there were the headlines, which even today can produce an awful thrill. “ALL SAVED FROM TITANIC AFTER COLLISION,” the New York *Evening Sun* crowed less than twenty-four hours after the sinking. A day later, ⁽²⁾ brute fact had replaced wishful conjecture: “TITANIC SINKS, 1500 DIE.” Then there were the early survivor narratives—a genre that has by now grown to include a book by the descendants of a Lebanese passenger whose trek to America had begun on a camel caravan. There were the poems. For a while, there was such a glut* that the *Times* was moved to print ⁽³⁾ a warning: “To write about the *Titanic* a poem worth printing requires that the author should have something more than paper, pencil, and a strong feeling that the disaster was a terrible one.” Since then, there have been histories, academic studies, polemics* by enthusiasts, and novels, numbering in the hundreds. There’s even a “Titanic for Dummies.”* This centennial* month alone will [ア] the publication of nearly three dozen titles.

The books are, so to speak, just the tip of the iceberg. Between 1912 and 1913 more than a hundred songs about the *Titanic* were published. A scant month after the sinking, a one-reel movie called “Saved from the *Titanic*” was released, featuring Dorothy Gibson, an actress who had been a passenger in first class. It established ⁽⁴⁾ a formula—a love story wrapped around the real-life catastrophe—that has resurfaced again and again, notably in a 1953 tearjerker starring Barbara Stanwyck and in James Cameron’s 1997 blockbuster, which, when it was released, was both the most expensive and the highest-grossing film of all time.

The ⁽⁵⁾ inexhaustible interest suggests that the *Titanic*’s story taps a vein* much deeper than the morbid* fascination that has attached to other disasters. Unlike other disasters, the *Titanic* seems to be about something. But what? For some, it’s a parable* about the scope, and limits, of technology: a 1997 Broadway musical admonished* us that “in every age mankind attempts to fabricate great works at once magnificent and impossible.” For others, it’s a morality tale about class, or a foreshadowing of the First World War—the marker of the end of a more innocent era. Academic historians dismiss this notion as mere nostalgia; for them, the disaster is less a historical dividing line than a screen on which early-twentieth-century society projected its anxieties about race, gender, class, and immigration.

All these interpretations are legitimate, even provocative; and yet none, somehow, seems wholly satisfying. If the *Titanic* has gripped our imagination so forcefully for the past century, it must be because of something bigger than any fact of social or political or cultural history. ⁽⁶⁾ To get to the bottom of why we can’t forget it, you have to turn away from the facts and consider the realm [イ] which the *Titanic* and its story properly belong: ⁽⁷⁾ myth.

*glut 供給過剰 *polemic 口撃・論争 *“Titanic for Dummies” 「誰にでも分かるタイタニック」
*centennial 百周年の *tap a vein 心の琴線に触れる *morbid 病的な
*parable たとえ話 *admonish 警告する

1. 下線部 (1) の内容として最もふさわしいものを a ~ d から一つ選べ。
 - a. There has been continuous publication of books about the Titanic disaster.
 - b. There has been occasional publication of books about the Titanic disaster.
 - c. There was once a great deal of publication of books about the Titanic disaster.
 - d. There is at present a great deal of publication of books about the Titanic disaster.
2. 下線部 (2) の内容として最もふさわしいものを a ~ d から一つ選べ。
 - a. Wishes had come true.
 - b. Hopes had faded away.
 - c. Facts had been hidden.
 - d. Facts had been overlooked.
3. 下線部 (3) はどのような内容であると推測できるか、最もふさわしいものを a ~ d から一つ選べ。
 - a. 投稿する詩は時事性に富んだものでなければならない。
 - b. 投稿する詩は犠牲者をしのぶものでなければならない。
 - c. 投稿する詩は事故の悲劇性を強調するものでなければならない。
 - d. 投稿する詩は文学的価値のあるものでなければならない。
4. 下線部 (4) の内容として最もふさわしいものを a ~ d から一つ選べ。
 - a. 歴史的な大災害に恋愛ドラマをからめた映画
 - b. ジェームズ・キャメロン監督が作る映画
 - c. 実際タイタニックに乗っていた人が演じる映画
 - d. 巨額の費用を投じて制作する映画
5. 下線部 (5) の意味に最も近いものを a ~ d から一つ選べ。
 - a. careful attention
 - b. excited feeling
 - c. limited curiosity
 - d. endless fascination
6. 下線部 (6) の言い換えとして最もふさわしいものを a ~ d から一つ選べ。
 - a. to be grounded on
 - b. to find the real reason for
 - c. to tell you the truth of
 - d. to reach an agreement about
7. 下線部 (7) の意味に最も近いものを a ~ d から一つ選べ。
 - a. a story that is widely believed, but is in the end false
 - b. a story of ancient gods and goddesses
 - c. a story felt to have deep meaning that is often retold
 - d. a story of an individual of legendary accomplishments
8. 空所 [ア] に入れるのに最もふさわしいものを a ~ d から一つ選べ。
 - a. hear
 - b. show
 - c. see
 - d. make
9. 第三段落で述べられていないものを a ~ d から一つ選べ。
 - a. この悲劇は科学技術の及ぶ範囲とその限界を伝える実例であると言えるだろう。
 - b. 第一次世界大戦前のある意味で幸せな時代が、この大惨事をきっかけにして終わった。
 - c. タイタニック以上に人々の関心と呼ぶ大惨事は、実のところ結構多い。
 - d. この悲劇には、人種差別や階級差別などに関する20世紀初頭の不安感が反映されている。
10. 空所 [イ] に入れるのに最もふさわしいものを a ~ d から一つ選べ。
 - a. at
 - b. for
 - c. from
 - d. to

IV. 人間が動物にサイン（手振り言語）を教える試みに関する次の文章を読んで設問1～10に答えよ。

The animals learn most of their signs through explicit teaching. The total vocabulary after a few years of training often runs to several hundred signs. The signs include common objects and actions, the names of people and apes in the environment, a few properties like “hurt” and “dirty” (the latter often spontaneously used as a general-purpose insult), pronouns such as “me” and “you,” the question words “what” and “where,” and a few utility words like “yes” and “please.”

It is pretty clear that the apes assign more or less the same meanings to these signs as people do. They use the signs copiously, and on most occasions their uses are interpretable. They use signs to indicate objects that are absent and that they want, so the signs are not just elicited by the here-and-now environment. When they make what appear to be errors, often there is an obvious reason for it. For example, the gorilla Koko was taught the sign “straw” to mean a drinking straw. But she spontaneously used it as a label for plastic tubing, clear plastic hose, cigarettes, a pen, and a car radio antenna—all long thin objects for which she had no previous sign. So, like a child who at first calls all animals “doggie,” Koko had interpreted the sign to refer to a larger class of objects than [ア].

The apes often produce strings of signs that make novel sense. Two favorite anecdotes in the literature are Washoe’s use of the signs “water bird” [イ] encountering a swan and Koko’s “cookie rock” in response to a stale roll. Altogether common in the literature [ウ] utterances like “gimme drink” and “tickle me.”

More generally, the apes’ reliable use of signs suggests that (i) they have concepts (or thoughts) that are structured sufficiently similarly to ours to be recognizable; and (ii) they are capable of attaching concepts to external symbols, in this case signs. The latter ability is a profound accomplishment, requiring considerable cognitive sophistication.

Let’s next ask: do the apes have a mental grammar that allows them to combine signs in regimented* fashion? The evidence seems to indicate that they don’t. On one hand, there appear to be some rudiments* of a basic word order. For example, the chimp Lucy clearly knew the difference between “Roger tickle Lucy” and “Lucy tickle Roger”—as shown by her response. This might be evidence for a preference for putting the actor of a sentence before the person acted upon.

But on the other hand, the utterances of the chimps characteristically are full of multiple redundant repetitions. Things like “you me you out me” (Washoe), “please milk please me like drink apple bottle” (Koko), and “give orange me give eat orange me eat orange give me eat orange give me you” (Nim) are not exactly {speak, expect, what, child, you, a, learning, to, from}. Utterances like these are usually cited in the literature in greatly reduced form, so that what the chimp says looks more coherent* than it actually is.

*regimented 規則にのっとった *rudiments 萌芽 *coherent 一貫した

1. 第一段落の動物（サル）に関する記述として最もふさわしいものを a～d から一つ選べ。
 - a. 明示的な訓練をしなくてもサインを学ぶことが出来る。
 - b. 動作や事物の特徴を表すサインを学ぶことは出来ない。
 - c. 数年間の訓練によって数百の語彙を学習することがよくある。
 - d. サインを使って数の概念を表現することが出来る。

2. 第二段落の内容に合致しないものを a～d から一つ選べ。
 - a. サルはサインに対して人間が与えるのとおおむね同じ意味を与える。
 - b. サルがサインを使って表すことが出来るものは目の前にある事物のみに限られる。
 - c. サルは類似した特性を持った事物に対して同一のサインを使うことがある。
 - d. サルのサインの誤用は人間の子どもの言葉の誤用と類似している。
3. 空所 [ア] に入れるのに最もふさわしいものを a～d から一つ選べ。
 - a. intended b. involved c. inherited d. inhibited
4. 空所 [イ] に入れるのに不適切なものを a～d から一つ選べ。
 - a. after b. when c. before d. upon
5. 空所 [ウ] に入れるのに最もふさわしいものを a～d から一つ選べ。
 - a. include b. are c. record d. have
6. 第四段落のサルに関する記述として最もふさわしいものを a～d から一つ選べ。
 - a. 人間に近い概念構造を持ち、概念をサインで表すことが出来る。
 - b. サインを扱う能力が非常に高く、人間の子どもの言語能力に匹敵する。
 - c. 仲間同士で共通のサインを作り出し、互いに意思疎通することが出来る。
 - d. 人間には認識できないほど複雑な概念構造を持っている。
7. 第五段落のサルに関する記述と合致しないものを a～d から一つ選べ。
 - a. サインを規則的に組み合わせるための心的文法が備わっているようである。
 - b. 語順の違いが意味の違いを生み出すことを知っているようである。
 - c. 三語からなる文の意味を理解することが出来るようである。
 - d. 行為をする者を表す語を、行為を受ける者を表す語の前に置くことを好むようである。
8. 下線部 (1) を正しい語順に並べ替えたとき、三番目と七番目に来る単語の組み合わせとして最もふさわしいものを a～d から一つ選べ。
 - a. child—speak b. from—to c. what—you d. expect—learning
9. 第六段落の内容に合致するものとして最もふさわしいものを a～d から一つ選べ。
 - a. サルの発話は重複や繰り返しが多く、観察者にとって理解困難なことが多い。
 - b. 文献に記載されたサルの発話データでは、重複や繰り返しの特徴が大幅に削られている。
 - c. サルの発話能力は一匹一匹の差が大きいため、一般化するのが難しい。
 - d. サルの発話は一貫性が認められるため、サルは認知能力が高いと考えられている。
10. 本論の要約として最もふさわしいものを a～d から一つ選べ。
 - a. サルのサインは人間の言語と多くの類似点を持っているので、サルの認知能力について研究することは、人間の言語能力の謎を解明することにも寄与する。
 - b. 過去に行われた訓練では、サルにサインを規則的に組み合わせるための心的文法を教え込むことに一度も成功していないのだから、訓練の方法を改めるべきである。
 - c. 種の壁を越えてサルにサインを教えることが出来るという科学者の信念こそ、自然科学の研究を推進する上で最も大切な原動力であり、新しい発見にもつながる。
 - d. サルのサインと人間の言語には多くの類似点が見られるが、サルにはサインを規則的に組み合わせるための心的文法がないのだから、両者は区別される。

V. Two American high school students are talking about global warming and climate change. Read their conversation and answer the questions that follow.

- Andy: Do you remember learning about lemmings* in fifth-grade biology? How they rush in herds to their destruction, plunging over cliffs into the ocean?
- Bill: Actually, I think the teacher said that they don't deliberately do that, although sometimes a lot of them drown in the course of their seasonal migration. But why do you ask?
- Andy: I was just reading about the response of the oil companies to the ongoing melting of the Arctic Ocean. Basically, it was "Great! Now we can drill there."
- Bill: Well, I suppose that's a natural reaction for an oil company.
- Andy: Yes, but do you realize that even [A] any new drilling, energy companies already have in reserve more than five times as much oil, gas, and coal than it's safe to burn if we want to keep the global temperature increase since the beginning of industrialization within two degrees Centigrade? And if you told them they couldn't burn it all, their stock prices would collapse?
- Bill: Wow, when you put it that way, it makes it sound like there's a fundamental conflict between the interests of energy companies and the interests of everyone else. By the way, how much have we already raised the temperature?
- Andy: Scientists say about 0.8 degrees. But that's misleading, because there's a time lapse between carbon emissions and temperature rise, and they estimate that even if the carbon dioxide in the atmosphere stopped increasing today, the temperature would probably still rise another 0.8 degrees.
- Bill: You're kidding. That means that, in terms of emissions, we're already [B] of the way to the two degree limit.
- Andy: [C], many scientists are now saying that, given the loss of Arctic ice that we've already seen, the recent increase in the acidity of the oceans, and the droughts, fires, and storms that many parts of the earth have been experiencing, two degrees of warming is in fact not a safe target, but a recipe for disaster.
- Bill: I don't see a lot of movement in the direction of changing our present patterns of energy consumption, though. How much is the temperature going to rise if everything goes on just as it has been?
- Andy: "Just as it has been" means a three-percent increase in global carbon emissions every year. At that rate, some people say that the temperature increase could reach six degrees.
- Bill: Unbelievable. What would life on earth look [D] temperatures [E]?
- Andy: I don't know, but by the time we're eighty or so, we may find out.

*lemming レミング (北米、ヨーロッパに住むネズミ科の小動物)

For each question, choose the best completion of the given sentence from options a ~ d.

1. Judging from his statements throughout the conversation, Andy's reaction to the response of underline (1) is probably that
- a. he finds it ironic that what should have been an occasion for reflection is being used as an excuse for further drilling.
 - b. he's relieved because drilling in the Arctic Ocean will guarantee the supply of oil.
 - c. he's happy because drilling in the Arctic Ocean will increase the profits of the oil companies.
 - d. he reluctantly accepts the fact that drilling in the Arctic Ocean will increase the profits of the oil companies.

2. The best choice to fill blank [A] is
a . with b . within c . without d . along with
3. The best choice to fill blank [B] is
a . 75 percent b . 80 percent c . 85 percent d . 90 percent
4. The best choice to fill blank [C] is
a . Nevertheless b . As a result c . Even so d . On top of that
5. The best choice to fill blanks [D] and [E] is
a . like at—like that b . at like—like that
c . at like—that like d . like at—that like
6. The reason that Andy refers to lemmings is that
a . he's worried that lemmings may become extinct as a result of global warming.
b . he has fond memories of fifth-grade biology and the story he heard there about lemmings.
c . he's fascinated by the idea that lemmings rush in herds to their destruction.
d . he thinks that with regard to climate change, human beings are acting like lemmings.
7. According to the conversation, we know for a fact that
a . global carbon emissions will raise the earth's temperature by two degrees.
b . global carbon emissions will raise the earth's temperature by six degrees.
c . global carbon emissions are rising three percent each year.
d . global carbon emissions are rising six percent each year.
8. Andy implies that
a . energy companies are more concerned about their stock prices than about the future of the planet.
b . energy companies are more concerned about being able to use their reserves than about their stock prices.
c . if energy companies burn all of their reserves, global temperature may rise ten degrees.
d . if we stop emitting carbon dioxide, global temperature will stabilize at present levels.
9. The conversation suggests that Bill
a . thinks that a two degree temperature rise is a safe target.
b . thinks human beings will probably change their present patterns of energy consumption.
c . remembers in more detail than Andy what their fifth-grade biology teacher said.
d . doubts that there is a conflict of interest between energy companies and everyone else.
10. The only consequence of global warming that is not referred to in the conversation is
a . melting of the Arctic Ocean. b . flooding of coastal areas.
c . increase in ocean acidity. d . drought.

[以 下 余 白]

