2019年度　　〔試験時間　60分〕

J 6　英　語

この冊子は，英語の問題で1ページより16ページまであります。

〔注　　意〕

(1) 試験開始の指示があるまで，この冊子を開いてはいけません。

(2) 監督者から受験番号等記入の指示があったら，解答用紙に受験番号と氏名を記入してください。また，解答用マークシートに受験番号と氏名を記入し，さらに受験番号をマークしてください。

(3) 解答は，所定の解答用紙に記入したもの及び解答用マークシートにマークしたものだけが採点されます。

(4) 解答用マークシートについて

① 解答用マークシートは，絶対に折り曲げてはいけません。

② マークには黒鉛筆(ＨＢまたはＢ)を使用してください。
指定の黒鉛筆以外でマークした場合，採点できないことがあります。

③ 誤ってマークした場合は，消しゴムで丁寧に消し，消しくずを完全に取り除いたうえ，新たにマークしてください。

④ 解答欄のマークは，横1行について1箇所に限ります。
2箇所以上マークすると採点されません。
あいまいなマークは無効となるので，はっきりマークしてください。

⑤ 解答用マークシートに記載されている解答上の注意事項を，必ず読んでから解答してください。

(5) 試験開始の指示があったら，初めに問題冊子のページ数を確認してください。
ページの落丁・乱丁，印刷不鮮明等に気づいた場合は，手を挙げて監督者に知らせてください。

(6) 問題冊子は，試験終了後，持ち帰ってください。

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1 Read the following passage and answer each question. (61 points)

(This mark (*) indicates, see **Notes** after the text)

Rising sea levels are one of the clearest indications that the Earth's climate is changing. Scientists might still be engaged in finding out how fast, how much and where the effects will be most keenly (1) felt, but there is little doubt that it is already having an impact on our seas.

Low-lying areas of the world are being slowly covered with water, storms are becoming more frequent, and coastal towns and cities are experiencing bigger floods more often. The worst part is, anything that has happened so far is just the beginning. Climate change has much more in store for those who live (2) the sea and, perhaps later this century, for people living further inland too.

We know that sea levels will rise over the next century as the world continues to warm, and we also know that this means death, destruction and the end of livelihoods for millions of people.

The Earth has enough water to easily drown (3) most of its human population. Worse still, we have built most of our biggest and most important cities near oceans, rivers and seas. A major increase in sea level would change every one of our lives. The higher the seas rise, the less food we can grow, the fiercer storms will be and the (4) (1 become 2 human 3 population 4 smaller 5 the 6 will).

Water exists in three distinct forms on Earth: the familiar liquid that fills the seas and washes on to coastlines; the vapour in the air; and the vast sheets of ice covering continents and floating on oceans. In the short term, the balance of these three in any part of the world (5) upon local temperature and weather. In the long term, it depends on climate and the flow of energy around the planet.

The volume of water in the sea can go up for two reasons: water expands

as it gets warmer; or extra water enters the sea because ice sheets melt. Both these things have been happening for the past century, partly due to natural cycles, but also driven by man-made global warming, as we burn fossil fuels and release greenhouse gases into the atmosphere.

'Measurements from tide gauge stations around the world show that the (6) global sea level has risen by almost 20 cm since 1880,' says Stefan Rahmstorf, a climate scientist and oceanographer* at the Potsdam Institute for Climate Impact Research. 'Since 1993, global sea level has been measured accurately from satellites; since 1993 figures have shown levels rising at a rate of 3.2 cm per decade.'

One of the biggest ice sheets in the world sits near the Arctic Circle, on the land mass of Greenland. The land there was not always covered — around 60 million years ago, the Earth was far warmer than today, and Greenland was a grassy tundra populated by ancient mammals. (7) Today's ice sheet, which is three kilometrers (almost two miles) thick in some parts, was formed in the last ice age, around 20,000 years ago, and the reason it is still there is because average temperatures between then and now have not risen high enough to melt it. Any ice that has melted into the surrounding sea has been replaced by regular snowfall in that time.

But Greenland's equilibrium* might now be in great danger. Under the worst climate scenarios predicted for this century, the average temperature around Greenland might increase by 8℃ by 2100. If all the ice there melted into the sea, global sea levels could rise by around seven metres.

Even if the average temperature in Greenland increased by only 3℃, its ice sheet would largely disappear, though it would take a long time — around 1,000 years — for (8) it to melt completely. In 2004, Jonathan Gregory of the University of Reading showed that by 2100, concentrations of greenhouse gases would probably have reached levels sufficient (9) the temperature past this warming limit.

At the other end of the world is an even bigger continent of ice — Antarctica. Overall it is more stable than Greenland, but if just a small part of the west Antarctic ice sheet were to melt (which is not an unreasonable (10) possibility, given its various major collapses during the past decade), the world's sea levels would increase by up to five metres.

Of course, if temperatures keep going up, even more ice will fall into the sea and the water will continue to rise. If all the ice in the world melted, from mountain ranges, Greenland and Antarctica, the result would be catastrophic. 'The land-based ice sheets of Greenland and Antarctica hold enough water to raise the global sea level by more than 200 feet,' says Robin Bell, an expert on Antarctica at Columbia University's Lamont-Doherty Earth Observatory. A sea-level rise of this order would decimate* the world's big cities and much of their populations along with it.

(Notes) **oceanographer** : a scientist who deals with the physical and biological properties and phenomena of the sea

equilibrium : a state in which opposing forces or influences are balanced

decimate : destroy

(1) Choose the most appropriate word which has the closest meaning to the underlined word (1) and mark the number on your **Answer Sheet A.**

1 sensibly　　2 softly

3 strangely　　4 strongly

(2) Choose the most appropriate word for the blank (2) and mark the number on your **Answer Sheet A.**

1 by　　2 for

3 from　　4 in

(3) Choose the word which has the same pronunciation with the underlined part (3) and mark the number on your **Answer Sheet A.**

1 bowl　　2 dawn

3 couch　　4 soup

(4) Arrange the words within the brackets (4) to make a correct sentence and mark each number in proper order on your **Answer Sheet A.**

(5) Choose the most appropriate word for the blank (5) and mark the number on your **Answer Sheet A.**

1 carries　　2 holds

3 keeps　　4 relies

(6) Choose the word which has the same pronunciation with the underlined part (6) and mark the number on your **Answer Sheet A.**

1 height　　2 pound

3 taught　　4 vague

(7) Choose the most appropriate answer which has the closest meaning to the underlined part (7) and mark the number on your **Answer Sheet A.**

1 Average temperatures before the last ice age were not high enough to melt the ice sheet.

2 Average temperatures 20,000 years ago were higher than they are today leading to the formation of a three-kilometre thick ice sheet.

3 Today's ice sheet is still there because temperatures have failed to increase sufficiently over the past 20,000 years.

4 Today's ice sheet is three kilometres thicker than it was 20,000 years ago because average temperatures between then and now have not risen enough to melt it.

(8) What does the underlined word (8) refer to? Choose the most appropriate answer and mark the number on your **Answer Sheet A.**

1 the average temperature
2 Greenland
3 the ice sheet
4 a long time

(9) Choose the most appropriate answer for the blank (9) and mark the number on your **Answer Sheet A.**

1 from raising
2 raised
3 raising
4 to raise

(10) Choose the most appropriate word which has the closest meaning to the underlined word (10) and mark the number on your **Answer Sheet A.**

1 irrational
2 irregular
3 irresponsible
4 irritable

(11) Choose the primary accent for each word and mark the number on your **Answer Sheet A.**

1 bal-ance
1 2

2 in-sti-tute
1 2 3

3 ac-cu-rate-ly
1 2 3 4

4 sat-el-lite
1 2 3

5 sce-nar-i-o
1 2 3 4

6 con-cen-tra-tion
1 2 3 4

7 cat-a-stroph-ic
1 2 3 4

8 ob-serv-a-to-ry
1 2 3 4 5

(12) For each of the following sentences, on your **Answer Sheet A**, mark **T** (True) for the statements that agree with the text and mark **F** (False) for the statements that do not agree.

1 While many questions concerning the exact impact of climate change remain uncertain, scientists are positive that sea levels will only be slightly effected.

2 In the future, as temperatures continue to rise, large numbers of people will suffer disastrous consequences due to rising sea levels.

3 As sea levels continue to rise, it is unlikely that people living near the water will have to change their lives.

4 Water on our planet is comprised of seawater, the vapour in the air, and the vast ice sheets that cover a floating mass of ice.

5 The reason for the rise of seawater is solely due to natural cycles of global warming and natural emissions of greenhouse gases.

6 Since 1993 satellite measurements indicate that sea levels are rising by a ratio of over 3 cm every ten years.

7 Ordinary snowfall has been insufficient in replacing the ice that has melted into the surrounding sea.

8 In the worst climate forecast for this century, the ice in Greenland would completely melt resulting in global sea levels to possibly rise by approximately seven metres.

9 If all the Antarctic ice sheet were to melt entirely, sea levels all over the world would rise by as much as five metres.

10 The ice sheets that cover Greenland and Antarctica contain enough water to cause sea levels in the world to go up by over two hundred feet.

（下書き用紙）

2 Choose the most appropriate answer for each blank to complete the sentence and mark the number on your **Answer Sheet A.** (14 points)

(1) ( ) a healthy diet and lifestyle can lead to a longer lifespan.

1 Accepting that it is 2 That it is accepted

3 It is accepted that 4 That is accepted

(2) ( ) by the author Stephen King are often on the best seller list.

1 The novel 2 Novels

3 A novel 4 Some novel

(3) I met three of the new professors yesterday, one of ( ) is teaching geography.

1 what 2 who

3 whom 4 whose

(4) The latest data on climate change and global warming is very ( ).

1 interested 2 interesting

3 interest 4 of interest

(5) The cost of a flight from Narita to Vancouver International airport can run ( ) 18,000 dollars for a first class ticket.

1 so high as 2 as high to

3 as high as 4 as high than

(6) In the winter Russia is an extremely cold country, and ( ).

1 so does Finland 2 so has Finland

3 so is Finland 4 so Finland

(7) Nine out of every ten people in the world ( ) in the country in which they were born.

1 living
2 they are living
3 lives
4 live

3 The following is a conversation between A and B. Choose the most appropriate word for each blank (**a-e**) from below, and mark the number on your **Answer Sheet A**; however, you must not use the same word more than once. (15 points)

A: Good afternoon, Sir. Welcome to Pikari Hotel!

B: Good afternoon. My name is Justin Harper. I (**a**) a single room for three nights via the Japan Travel Booking Service. This is my reference number.

A: Thank you very much. Can I see your passport, Mr. Harper?

B: Certainly. Here you go.

A: Do you have a credit card?

B: Here's my credit card.

A: Is this the same card as you (**b**) for the deposit on booking?

B: Of course, it is.

A: Alright. Your payment has been (**c**). You're in Room 411. It is a very spacious room and it has a beautiful view of the snowy mountains in Hokkaido. Is that suitable for you?

B: Yes, it sounds like everything I (**d**). By the way, is it permitted to smoke in the room?

A: No, it isn't. Smoking is strictly (**e**) in this hotel. Here's your key. If you need anything, just dial 0 on your room phone.

1 accepted	2 expected	3 prohibited
4 reserved	5 used	

（下書き用紙）

4 In the box on your **Answer Sheet B**, write the word that applies to both of the blanks. You MUST spell the entire word. The first letter of the word has been provided within the brackets. (10 points)

(1) 2, 4, 6 and 8 are (e) numbers.
The result of the experiment was (e) better than I expected.

(2) The speed of light is very (f).
Some people claim that (f) food causes diabetes.

(3) When you enter Tokyo University of Science, what research field do you want to (m) in?
Recently, the government of Japan has identified the decreasing birthrate as being a (m) problem facing Japanese society.

(4) Yesterday, I (s) girls dancing in the Autumn Festival.
A shark has teeth like a (s).

(5) Get in (t) with me if you have some questions about my lecture.
Don't (t) the wall. It's just been painted.