

**Reading Part (12 pts.)**

Read the following article, in which the writer speaks of natural disasters caused by global warming— a complex situation in Earth' s climate which some attribute to human factors. When you are through with the reading, answer the questions that follow.

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1. Killer floods in south Asia; crippling drought in east Africa; hot, dry periods that kept southern Europe and the western US in a molten grasp; a North Pole strangely free of ice; tropical storms that struck Asia's eastern borders; and unusual storms, like the one that swamped the French port of Marseilles in a few hours...
2. Are these phenomena of the past years part of normal weather patterns, the kind of incidents that before the communications revolution would have gone unreported? Or are they abnormal, the first alarming sign that global warming is starting to affect the planet's climate— a sign of vicious, often sudden, weather extremes to come?
3. Global warming which is caused by carbon gases discharged by the burning of oil, coal, and natural gases, is one of those weather patterns. The carbon and natural gases act as an invisible blanket around the earth, preventing solar heat from being reflected back into space. International negotiations which are done were to limit gas emissions, but even if they succeed, this will only slow the acceleration in temperature, not reverse it or even stop it.
4. Ever since atmospheric warming was identified as a great danger a decade or so ago, climatologists have been unwilling to blame it for a single catastrophic event or even a series of them. They caution that theirs is a pioneer science still trying to find its own tools- in particular, data about past patterns that could be a vital pointer to the present or the future. And the world' s weather is such a complex thing, they say, that it is difficult to predict much more than the most obvious climate changes: a gradual rise in mean atmospheric temperatures, and sea levels that will rise through thermal expansion and a partial melting of polar ice.
5. "A lot of extreme events you can certainly, to a large extent, associate with natural fluctuations," said John Mitchell, in charge of climate prediction at the Haley Center, the climatology branch of Britain's Meteorological Office. "It's hard enough to demonstrate convincingly that mean climate has changed because of global warming. When you are looking at extreme events, it' s even more difficult."
6. However, opinions are beginning to change among some scientists as new data becomes available, along with more sophisticated software to analyze it. Some experts now say that present cases of extreme weather can be linked, at least partially, to global warming. And others are beginning to predict with confidence the kind of events that could strike and where, after global warming— a machine that takes a long time to stoke up— really kicks in.
7. In research commissioned for the Worldwide Fund for Nature and published last week, Pier Velinga and Willem Van Verseveld of the Institute of Environmental Studies at Amsterdam's Free University argue that "the extreme weather events must have been influenced by the higher average temperatures."
8. "This implies that at least part of the damage caused by weather extremes is due to human- induced climate change," they added, predicting that countries south of the Equator will suffer much of the extreme weather.

**A. What does each of the underlined pronouns in the article refer to? (1 pt.)**

1. theirs (par.4)
2. it (par.6)

**B. Answer each of the following questions about the article. (3.75 pts.)**

1. Indicate the number of the paragraph that matches with each of the following headings:
  - a) Natural Occurrences
  - b) Effects of Global Warming
2. What do scientists believe the main cause of global warming is?
3. What attitude does the writer have towards the temperature of the earth in the coming future? Explain.
4. How can the technological development be of great use to the climatologists?
5. What message do you think the article conveys?

**C. The following statements are false because they misinterpret what the article says or implies. Rewrite them correctly. (1.5 pts.)**

1. Global warming will definitely lead to total melting of ice in the poles.
2. Scientists are certain that all today's cases of extreme weather are caused by global warming.

**D. Complete the following statements so that the resulting sentences harmonize in meaning with the situation developed in the article. (1.5 pts.)**

1. The climate changes are not very predictable, for .....
2. The less care we take of our environment, .....

**E. Fill in the blanks below with the words that best complete the sentences. The paragraph number is indicated between brackets. (2 pts.)**

1. The flood has totally ..... the city and drowned all the people living there. (paragraph 1)
2. Climatologists think that it is ..... for most people to be uninterested in weather changes. (paragraph 2)
3. Using sophisticated computer programs, climatologists could discover things that were ..... to the naked eye. (paragraph 3)
4. The samples could give scientists ..... information about long- term changes in the earth's atmosphere. (paragraph 4)

**F. Rewrite the following sentences, starting each as indicated, without changing the meaning. (1.5 pts.)**

1. Global warming is caused by carbon gases discharged by the burning of oil, coal, and natural gases  
Carbon gases .....
2. “It’s hard enough to demonstrate convincingly that mean climate has changed because of global warming”  
John Mitchell said that .....
3. The atmosphere is getting richer in carbon gases, so the average temperatures are likely to increase.  
If .....

**G. Find the ONE grammatical error in each sentence below and correct it. (0.75 pt.)**

1. Hardly scientists can attribute global warming to human actions only.
2. Climatologists believe that the question of global warming will be solved by the end of 2020.
3. Nobody can tell why did the international negotiations about gas emissions come to an end.

**Writing Part (8 pts.)**

**Human activities have caused many serious environmental problems.**

In a well- organized essay, discuss the causes of an environmental problem of your choice, other than the one presented in the article, and then suggest practical solutions to settle that problem down.

First, outline your ideas. Then develop those ideas into an essay, provided with a suitable title.

- Score: 2 pts. for the outline
- 3 pts. for content
- 3 pts. for organization, grammar, mechanics, ...

Best Wishes

A.

1. theirs (paragraph 4): science of climatology
2. it (paragraph 6): data

**Score: 0.5 pt. for each correct item**

B.

1. a: Paragraph 1                      b: Paragraph 6 **OR** 7

**Score: 0.25 pt. for identifying each paragraph number**

2. Scientists believe that global warming is caused by carbon gases discharged by the burning of oil, coal, and natural gases (human activities).

**Score: 0.5 pt. for identifying the cause**  
**0.25 pt. for the sentence structure**

3. The writer feels pessimistic and hopeless; he believes that what people will be able to do is only slowing the acceleration in temperature, not stopping or reversing it .

**Score: 0.5 pt. for identifying the attitude (Accept other reasonable responses.)**  
**0.25 for proper explanation**  
**0.25 pt. for the sentence structure**

4. Technological development has made climatologists able to analyze the available data and predict where and when a natural disaster will strike.

**Score: 0.5 pt. for content**  
**0.25 pt. for the sentence structure**

5. The message is that man has to be fully aware of the fact that his activities are exposing the planet Earth to great danger.

**Score: 0.5 pt. for identifying the message**  
**0.25 pt. for the sentence structure**

C.

1. Global warming will cause a partial melting of the polar ice.
2. Scientists believe that cases of extreme weather can be linked, at least partially, to global warming.

**Score: 0.75 pt. for correcting each statement**

D.

1. ...for the world's weather is still such a very complicated issue.
2. ... the more weather extremes people are likely to encounter.

**Score: 0.75 pt. for completing each statement**

E.

1. swamped
2. abnormal
3. invisible
4. vital

**Score: 0.5 pt. for each correct item; there must be no mistakes of any kind (spelling, part of speech...) in the student's answer.**

F.

1. Carbon gases discharged by the burning of oil, coal, and natural gases cause global warming.
2. John Mitchell said that it was hard enough to demonstrate convincingly that mean climate had changed because of global warming.
3. If the atmosphere were not getting richer in carbon gases, the average temperatures would not increase.

**Score: 0.5 pt. for rewriting each sentence properly; there must no mistakes at all in the student's answer.**

G.

1. scientists can attribute: can scientists attribute
2. will be solved: will have been solved
3. why did the international negotiations come: why the international negotiations did come/ came

**Score: 0.25 pt. for correcting each error**