Unit 3. THE GREEN MOVEMENT

PART 3: READING

I. Choose the word or phrase among A, B, C or D that best fits the blank space in the following passage.

From the seeds themselves to the machinery, fertilizers and pesticides - The Green Revolution regimen depend heavily on technology. One alternative, however, depends much (1) ____ on technology - organic farming. Many organic farmers use machinery, but not chemical fertilizers or pesticides. (2) ____ chemical soil enrichers, they use animal manure and plant parts not used as food - natural, organic fertilizers that are clearly a renewable (3) ____. Organic farmers also use alternatives for pesticides, for example, they may rely on natural predators of certain insect pests. (4) ____ the need arises, they can buy the eggs and larvae of these natural predators and introduce them into their crop fields. They use other techniques to control pests as well, like planting certain crops together because one crop repels the other's pests. Organic farmers do not need a lot of land, in fact organic farming is perfectly (5) ____ to small farms and is relatively inexpensive. Finally, many organic farmers' average yields compare favorably with other farmers' yields.

1. A. more	B. less	C. better	D. worse
2. A. In spite of	B. On account of	C. In favor of	D. Instead of
3. A. resource	B. source	C. matter	D. substance
4. A. Then	B. If	C. Because	D. Thought
5. A. suitable	B. open	C. likely	D. suited

II. Choose the word or phrase among A, B, C or D that best fits the blank space in the following passage.

GREEN ENERGY

Fossil fuels are used to generate the majority of the world's energy, and they come in different forms. For example, coal may be burned in a power (1) ____ to generate electricity, but gasoline is burned in a car's engine to make it run. Neither of these two sources is considered green energy because they produce a lot of pollution when they are burned. In addition, they come from a source that is inevitably going to (2) ____.

Green energy can be defined as any energy source that is to some degree non-polluting. When it is called (3) ____, this means that a person can replace the same amount of energy that was consumed by that person (4) ____ that person's lifetime. Since it took millions and millions of years to create the fossil fuels that we now burn, we know that they cannot be replaced by us.

Wind power and solar power, (5) ____ harnessed properly, are two excellent sources of green energy. Once the necessary parts such as wind turbines to generate wind power and solar panels to create solar power have been produced, only the pollution from the production is left.

1. A. point	B. outlet	C. factory	D. plant
2. A. run out of	B. run out	C. burn out	D. cut out
3. A. durable	B. sustainable	C. harmful	D. effective
4. A. along	B. about	C. within	D. during

5. A. where B. when C. which D. what

III. Choose the word or phrase from the box that best fits the blank space in the following passage.

Experts in climatology and other scientists are becoming extremely concerned about the changes to our climate which are taking place. Admittedly, climate changes have occurred on our planet before. For example, there have been several ice ages or glacial periods. These climatic changes, however, were different from the modern ones in that they occurred gradually and, as far as we know, naturally. The changes currently being monitored are said to be the result not of natural causes, but of human activity. Furthermore, the rate of change is becoming **alarmingly** rapid.

The major problem is that the planet appears to be warming up. According to some experts, this warming process, known as global warming, is occurring at a rate unprecedented in the last 10,000 years. The implications for the planet are very serious. Rising global temperatures could give rise to such ecological disasters as extremely high increases in the incidence of flooding and of droughts. These could have a harmful effect on agriculture. It is thought that this unusual warming on the Earth has been caused by so-called greenhouse gases, such as carbon dioxide, being emitted into the atmosphere by car engines and modern industrial processes, for example. Such gases not only add to the pollution of the atmosphere, but also create a greenhouse effect, by which the heat of the sun is trapped. This leads to the warming up of the planet.

Politicians are also concerned about climate change and there are now regular summits on the subject, attended by representatives from around 180 of the world's industrialized countries. Of these summits, the most important took place in Kyoto in Japan in 1997. There it was agreed that the most industrialized countries would try to reduce the volume of greenhouse gas emissions and were given targets for this reduction of emissions.

It was also suggested that more forests should be planted to create so-called sinks to absorb greenhouse gases. At least part of the problem of rapid climate change has been caused by too **drastic** deforestation.

Sadly, the targets are not being met. Even more sadly, global warnings about climate changes are often still being regarded as scaremongering.

1. According to the passage, in what way did the climate changes in the ice ages differ from the modern ones?

A. They occurred naturally over a long period of time.

B. They were partly intended.

C. They were wholly the result of human activity.

D. They were fully monitored by humans.

2. The word "**alarmingly**" in paragraph 1 is closest in meaning to ____.

A. disapprovingly B. disappointingly C. surprisingly D. worryingly

3. According to the passage, agriculture could ____.

A. make the global warming more serious

B. be indirectly affected by the global temperature rises

C. give rise to many ecological disasters

D. be directly damaged by the rises in global temperature

4. Greenhouse gases cause the warming up of the Earth because they ____.

A. are emitted by car engines
B. trap heat from the sun
C. do not add to atmosphere pollution
D. are unusual gases

5. It can be inferred from the passage that the countries which are mainly responsible for global warming are ____.

A. countries with the warmest climate
B. developing countries
C. developed countries
D. the most industrialized countries

6. Which of the following is NOT true, according to the passage?

A. Carbon dioxide is one of the gases that may cause the so-called greenhouse effect
B. The so-called sinks created by forests can absorb greenhouse gases.
C. The problem of rapid climate change has been caused mainly by deforestation.
D. Politicians are among those who are concerned about climate change.

7. The word "**drastic**" in paragraph 4 is closest in meaning to ____.

A. hard
B. severe
C. widespread
D. obvious

8. What is probably the writer's attitude toward global warning?

A. Optimistic
B. Pessimistic
C. Neutral
D. Positive

IV. Read the passage, and choose the correct answer A, B, C or D for each question.

DESERTIFICATION

Desertification is the degradation of once-productive land into unproductive or poorly productive land. Since the first great urban-agricultural centers in Mesopotamia nearly 6,000 years ago, human activity has had a destructive impact on soil quality, leading to gradual desertification in virtually every area of the world.

It is a common misconception that desertification is caused by droughts. Although drought does make land more vulnerable, well-managed land can survive droughts and recover, even in arid regions. Another mistaken belief is that the process occurs only along the edges of deserts. In fact, it may take place in any arid or semiarid region, especially where poor land management is practiced. Most vulnerable, however, are the transitional zones between deserts and **arable** land; wherever human activity leads to land abuse in these fragile marginal areas, soil destruction is inevitable.

Agriculture and overgrazing are the two major sources of desertification Large-scale farming requires extensive irrigation, which ultimately destroys lands by depleting its nutrients and leaching minerals into the topsoil. Grazing is especially destructive to land because, in addition to depleting cover vegetation, herds of grazing mammals also trample the fine organic particles of the topsoil, leading to soil compaction and erosion. It takes about 500 years for the earth to build up 3 centimeters of topsoil. However, cattle ranching and agriculture can deplete as much as 2 to 3 centimeters of topsoil every 25 years - 60 to 80 times faster than it can be replaced by nature.

Salination is a type of land **degradation** that involves an increase in the same content of the soil. This usually occurs as a result of improper irrigation practices. The greatest Mesopotamian empires-Sumer, Akkad and Babylon- were built on the surplus of the enormously productive soil of the ancient Tigris- Euphrates alluvial plain. After nearly a thousand years of intensive cultivation, land quality was in evident decline. In response, around 2800 BC the Sumerians began digging the huge Tigris Euphrates canal system to irrigate the exhausted soil. A temporary gain in crop yield was achieved in this way, but over-irrigation was to have serious and unforeseen consequences. From as early as 2400 BC we find Sumerian documents referring to salinization as a soil problem. It is believed that the fall of the Akkadian Empire around 2150 BC may have been due to a catastrophic failure in land productivity; the soil was literally turned into salt. Even today, four thousand years later, vast tracks of salinized land between the Tigris and Euphrates rivers still resemble rock-hard fields of snow.

Soil erosion is another form of desertification. It is a self-reinforcing process, once the cycle of degradation begins, conditions are set for continual deterioration. As the vegetative cover begins to disappear, soil becomes more vulnerable to raindrop impact. Water runs off instead of soaking in to provide moisture for plans. This further diminishes plan cover by leaching away nutrients from the soil. As soil quality declines and runoff is increased, floods become more frequent and more severe. Flooding washes away topsoil, the thin, rich, uppermost layer of the earth's soil, and leaves finer underlying particles more vulnerable to wind erosion. Topsoil contains the earth's greatest concentration of organic matter and microorganisms, and is where most of the earth's land-based biological activity occurs. Without this fragile coat of nutrient-laden material, plan life cannot exist. An extreme case of its erosion is found in the Sahel, a transitional zone between the Sahara Desert and the tropical African rain forests, home to some 56 million people. Overpopulation and overgrazing have opened the hyperarid land to wind erosion, which is stripping away the protective margin of the Sahel, and causing the desert to grow at an alarming rate. Between 1950 and 1975, the Sahara Desert spread 100 kilometers southward through the Sahel.

1. Which of the following statement is true about desertification?

A. It has a history as long as that of civilization

B. It was just as serious in the past as it is today.

C. It is a fairy recent problem.

D. Ancient societies managed the problem well.

2. The word "**arable**" in paragraph 2 is closet in meaning to ____.

A. cultivate B. dry C. settled D. populated

3. According to the passage, many people's understanding of desertification is incorrect because ____.

A. they do not think of it as a serious problem

B. they see it as being reversible

C. they do not see it as being caused by human activity

D. they think of it as a very slow process

4. According to the passage, agriculture further desertification through which the following activities ____.

A. The repetitive planting of the same crop
B. Irrigation
C. The stripping away of native vegetation
D. Over fertilization

5. The word "**degradation**" in paragraph 4 is closet in meaning in ____.

A. rejuvenation B. deterioration C. contribution D. consumption

6. Paragraph 4 of the passage serves mainly to do which of the following ____.

A Show the progress of desertification down through history

B. Propose a method for dealing with the desertification problem

C. Describe one progress that leads to desertification

D. Describe the main cause of desertification in one particular area