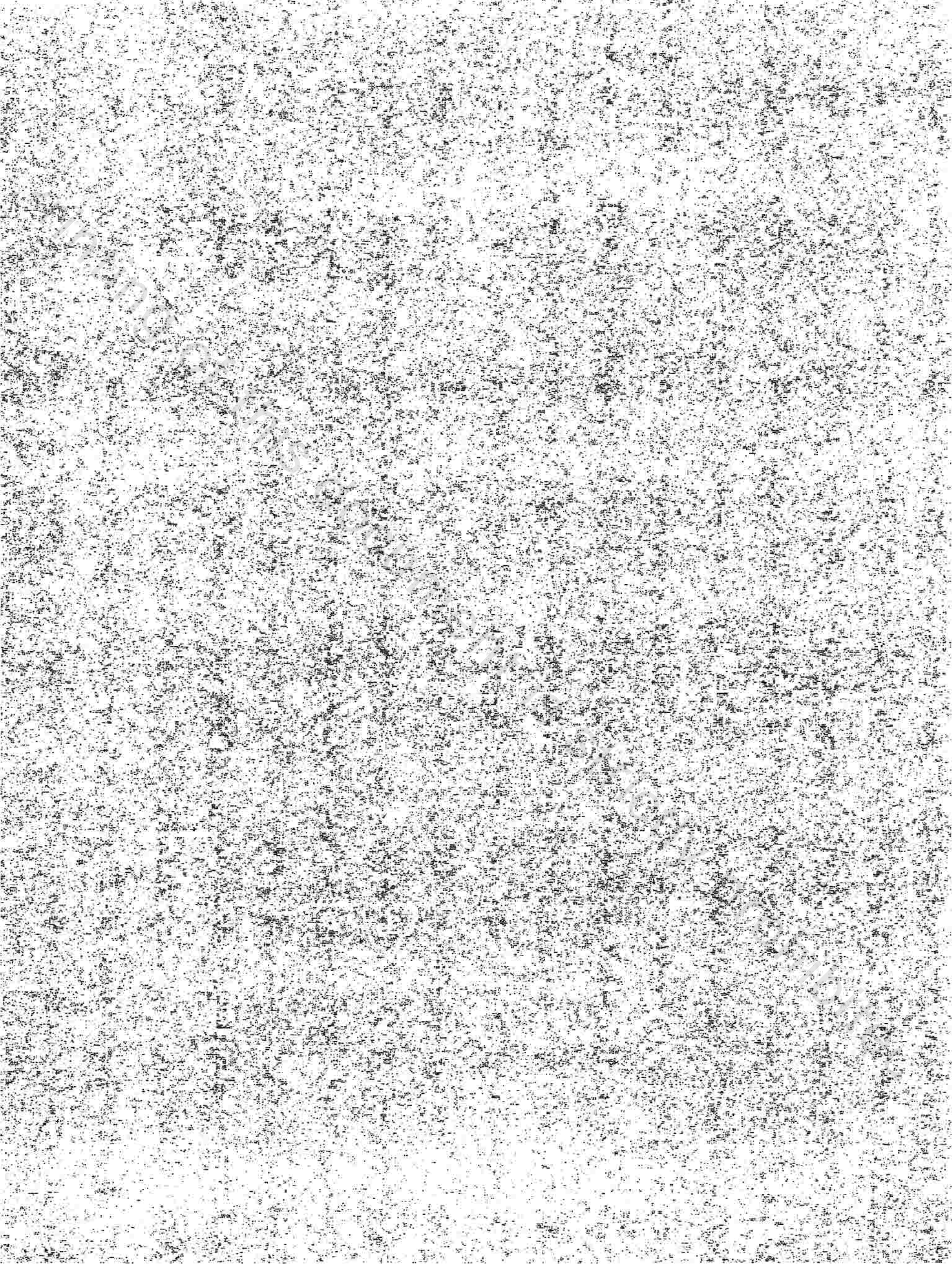


TOEFL iBT Test 4



READING

This section measures your ability to understand academic passages in English.

There are three passages in the section. Give yourself 20 minutes to read each passage and answer the questions about it. The entire section will take 60 minutes to complete.

You may look back at a passage when answering the questions. You can skip questions and go back to them later as long as there is time remaining.

Printing of this document is strictly prohibited



Directions: Read the passage. Then answer the questions. Give yourself 20 minutes to complete this practice set.

POPULATION AND CLIMATE

The human population on Earth has grown to the point that it is having an effect on Earth's atmosphere and ecosystems. Burning of fossil fuels, deforestation, urbanization, cultivation of rice and cattle, and the manufacture of chlorofluorocarbons (CFCs) for propellants and refrigerants are increasing the concentration of carbon dioxide, methane, nitrogen oxides, sulphur oxides, dust, and CFCs in the atmosphere. About 70 percent of the Sun's energy passes through the atmosphere and strikes Earth's surface. This radiation heats the surface of the land and ocean, and these surfaces then reradiate infrared radiation back into space. This allows Earth to avoid heating up too much. However, not all of the infrared radiation makes it into space; some is absorbed by gases in the atmosphere and is reradiated back to Earth's surface. A greenhouse gas is one that absorbs infrared radiation and then reradiates some of this radiation back to Earth. Carbon dioxide, CFCs, methane, and nitrogen oxides are greenhouse gases. The natural greenhouse effect of our atmosphere is well established. In fact, without greenhouse gases in the atmosphere, scientists calculate that Earth would be about 33°C cooler than it currently is.

The current concentration of carbon dioxide in the atmosphere is about 360 parts per million. Human activities are having a major influence on atmospheric carbon dioxide concentrations, which are rising so fast that current predictions are that atmospheric concentrations of carbon dioxide will double in the next 50 to 100 years. The Intergovernmental Panel on Climate Change (IPCC) report in 1992, which represents a consensus of most atmospheric scientists, predicts that a doubling of carbon dioxide concentration would raise global temperatures anywhere between 1.4°C and 4.5°C. The IPCC report issued in 2001 raised the temperature prediction almost twofold. The suggested rise in temperature is greater than the changes that occurred in the past between ice ages. The increase in temperatures would not be uniform, with the smallest changes at the equator and changes two or three times as great at the poles. The local effects of these global changes are difficult to predict, but it is generally agreed that they may include alterations in ocean currents, increased winter flooding in some areas of the Northern Hemisphere, a higher incidence of summer drought in some areas, and rising sea levels, which may flood low-lying countries.

Scientists are actively investigating the feedback mechanism within the physical, chemical, and biological components of Earth's climate system in order to make accurate predictions of the effects the rise in greenhouse gases will have on future global climates. Global circulation models are important tools in this process. These models incorporate current knowledge on atmospheric circulation patterns, ocean currents, the effect of landmasses, and the like to predict climate under changed conditions. There are several models, and all show agreement on a global scale. For example, all models show substantial changes in climate when carbon dioxide concentration is doubled. However, there are significant differences in the regional climates predicted by different models. Most models project greater temperature increases in

mid-latitude regions and in mid-continental regions relative to the global average. Additionally, changes in precipitation patterns are predicted, with decreases in mid-latitude regions and increased rainfall in some tropical areas. Finally, most models predict that there will be increased occurrences of extreme events, such as extended periods without rain (drought), extreme heat waves, greater seasonal variation in temperatures, and increases in the frequency and magnitude of severe storms. Plants and animals have strong responses to virtually every aspect of these projected global changes.

The challenge of predicting organismal responses to global climate change is difficult. Partly, this is due to the fact that there are more studies of short-term, individual organism responses than there are of long-term, systemwide studies. It is extremely difficult, both monetarily and physically, for scientists to conduct field studies at spatial and temporal scales that are large enough to include all the components of real-world systems, especially ecosystems with large, freely ranging organisms. One way paleobiologists try to get around this limitation is to attempt to reconstruct past climates by examining fossil life.

The relative roles that abiotic and biotic factors play in the distribution of organisms is especially important now, when the world is confronted with the consequences of a growing human population. Changes in climate, land use, and habitat destruction are currently causing dramatic decreases in biodiversity throughout the world. An understanding of climate-organism relationships is essential to efforts to preserve and manage Earth's biodiversity.

Directions: Now answer the questions.

The human population on Earth has grown to the point that it is having an effect on Earth's atmosphere and ecosystems. Burning of fossil fuels, deforestation, urbanization, cultivation of rice and cattle, and the manufacture of chlorofluorocarbons (CFCs) for propellants and refrigerants are increasing the concentration of carbon dioxide, methane, nitrogen oxides, sulphur oxides, dust, and CFCs in the atmosphere. About 70 percent of the Sun's energy passes through the atmosphere and strikes Earth's surface. This radiation heats the surface of the land and ocean, and these surfaces then reradiate infrared radiation back into space. This allows Earth to avoid heating up too much. However, not all of the infrared radiation makes it into space; some is absorbed by gases in the atmosphere and is reradiated back to Earth's surface. A greenhouse gas is one that absorbs infrared radiation and then reradiates some of this radiation back to Earth. Carbon dioxide, CFCs, methane, and nitrogen oxides are greenhouse gases. The natural greenhouse effect of our atmosphere is well established. In fact, without greenhouse gases in the atmosphere, scientists calculate that Earth would be about 33°C cooler than it currently is.

1. The phrase "makes it" in the passage is closest in meaning to
- (A) is reflected
 - (B) collects
 - (C) arrives
 - (D) blends

2. It can be inferred from paragraph 1 that one positive aspect of greenhouse gases is that they
- (A) absorb 70 percent of the Sun's energy
 - (B) can be rapidly replenished in the atmosphere
 - (C) remove pollutants from ecosystems
 - (D) help keep Earth warm

PARAGRAPH 2

The current concentration of carbon dioxide in the atmosphere is about 360 parts per million. Human activities are having a major influence on atmospheric carbon dioxide concentrations, which are rising so fast that current predictions are that atmospheric concentrations of carbon dioxide will double in the next 50 to 100 years. The Intergovernmental Panel on Climate Change (IPCC) report in 1992, which represents a consensus of most atmospheric scientists, predicts that a doubling of carbon dioxide concentration would raise global temperatures anywhere between 1.4°C and 4.5°C. The IPCC report issued in 2001 raised the temperature prediction almost twofold. The suggested rise in temperature is greater than the changes that occurred in the past between ice ages. The increase in temperatures would not be uniform, with the smallest changes at the equator and changes two or three times as great at the poles. The local effects of these global changes are difficult to predict, but it is generally agreed that they may include alterations in ocean currents, increased winter flooding in some areas of the Northern Hemisphere, a higher incidence of summer drought in some areas, and rising sea levels, which may flood low-lying countries.

3. According to paragraph 2, what can be said about the effects of global changes?
- (A) The local plants and animals will be permanently damaged.
 - (B) It is hard to know exactly what form the local effects will take.
 - (C) Seawater levels will fall around the world.
 - (D) The effects will not occur in some regions of the world.
4. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect choices change the meaning in important ways or leave out essential information.
- (A) The rapid rise of carbon dioxide concentrations can be attributed largely to the actions of humans.
 - (B) Predictions about atmospheric concentrations of carbon dioxide indicate that the influence of human activities will double soon.
 - (C) In the next 50 to 100 years, human activities will no longer have an influence on atmospheric carbon dioxide concentrations.
 - (D) Human activities can influence current predictions about atmospheric conditions.
5. The word "consensus" in the passage is closest in meaning to
- (A) publication
 - (B) debate
 - (C) collection
 - (D) agreement

Scientists are actively investigating the feedback mechanism within the physical, chemical, and biological components of Earth's climate system in order to make accurate predictions of the effects the rise in greenhouse gases will have on future global climates. Global circulation models are important tools in this process. These models incorporate current knowledge on atmospheric circulation patterns, ocean currents, the effect of landmasses, and the like to predict climate under changed conditions. There are several models, and all show agreement on a global scale. For example, all models show substantial changes in climate when carbon dioxide concentration is doubled. However, there are significant differences in the regional climates predicted by different models. Most models project greater temperature increases in mid-latitude regions and in mid-continental regions relative to the global average. Additionally, changes in precipitation patterns are predicted, with decreases in mid-latitude regions and increased rainfall in some tropical areas. Finally, most models predict that there will be increased occurrences of extreme events, such as extended periods without rain (drought), extreme heat waves, greater seasonal variation in temperatures, and increases in the frequency and magnitude of severe storms. Plants and animals have strong responses to virtually every aspect of these projected global changes.

6. The phrase "this process" refers to
 - (A) the interaction between physical and biological components of Earth's climate system
 - (B) the increase of greenhouse gases in the atmosphere
 - (C) predicting future global climate
 - (D) global circulation models

7. According to paragraph 3, rainfall amounts are predicted to decrease in what parts of the world?
 - (A) In mid-latitude regions
 - (B) In tropical areas
 - (C) In mid-continental regions
 - (D) At the poles

8. The word "incorporate" in the passage is closest in meaning to
 - (A) describe
 - (B) include
 - (C) expand
 - (D) present

9. The word "virtually" in the passage is closest in meaning to
 - (A) nearly
 - (B) presumably
 - (C) usually
 - (D) visually

10. According to paragraph 3, climate models predict that all of the following events will occur with the increase in greenhouse gases EXCEPT
- (A) greater seasonal temperature changes
 - (B) prolonged heat waves
 - (C) increased diversity of plants and animals
 - (D) longer dry periods

PARAGRAPH 5

The relative roles that abiotic and biotic factors play in the distribution of organisms is especially important now, when the world is confronted with the consequences of a growing human population. Changes in climate, land use, and habitat destruction are currently causing dramatic decreases in biodiversity throughout the world. An understanding of climate-organism relationships is essential to efforts to preserve and manage Earth's biodiversity.

11. The author's main purpose in paragraph 5 is to
- (A) explain the process of studying organism responses to climate change
 - (B) stress the importance of learning how climate affects plants and animals
 - (C) illustrate an important point about factors affecting biodiversity
 - (D) examine current research practices on the distribution of organisms on Earth

PARAGRAPHS 1 2 3 4 & 5

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between ice ages. The increase in temperatures would not be uniform, with the smallest changes at the equator and changes two or three times as great at the poles. The local effects of these global changes are difficult to predict, but it is generally agreed that they may include alterations in ocean currents, increased winter flooding in some areas of the Northern Hemisphere, a higher incidence of summer drought in some areas, and rising sea levels, which may flood low-lying countries.

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The relative roles that abiotic and biotic factors play in the distribution of organisms is especially important now, when the world is confronted with the consequences of a growing human population. Changes in climate, land use, and habitat destruction are currently causing dramatic decreases in biodiversity throughout the world. An understanding of climate-organism relationships is essential to efforts to preserve and manage Earth's biodiversity.

12. Look at the terms "greenhouse gas," "atmospheric circulation patterns," "global scale," and "biotic factors." Which of these terms is defined in the passage?
- (A) Greenhouse gas
 - (B) Atmospheric circulation patterns
 - (C) Global scale
 - (D) Biotic factors

The challenge of predicting organismal responses to global climate change is difficult. ■ Partly, this is due to the fact that there are more studies of short-term, individual organism responses than there are of long-term, systemwide studies. ■ It is extremely difficult, both monetarily and physically, for scientists to conduct field studies at spatial and temporal scales that are large enough to include all the components of real-world systems, especially ecosystems with large, freely ranging organisms. ■ One way paleobiologists try to get around this limitation is to attempt to reconstruct past climates by examining fossil life. ■

13. Look at the four squares [■] that indicate where the following sentence can be added to the passage.

Much of this work depends on the assumption that life forms adapted to a particular climate in the present were adapted to the same type of climate in the past.

Where would the sentence best fit?

- (A) The challenge of predicting organismal responses to global climate change is difficult. **Much of this work depends on the assumption that life forms adapted to a particular climate in the present were adapted to the same type of climate in the past.** Partly, this is due to the fact that there are more studies of short-term, individual organism responses than there are of long-term, systemwide studies. ■ It is extremely difficult, both monetarily and physically, for scientists to conduct field studies at spatial and temporal scales that are large enough to include all the components of real-world systems, especially ecosystems with large, freely ranging organisms. ■ One way paleobiologists try to get around this limitation is to attempt to reconstruct past climates by examining fossil life. ■
- (B) The challenge of predicting organismal responses to global climate change is difficult. ■ Partly, this is due to the fact that there are more studies of short-term, individual organism responses than there are of long-term, systemwide studies. **Much of this work depends on the assumption that life forms adapted to a particular climate in the present were adapted to the same type of climate in the past.** It is extremely difficult, both monetarily and physically, for scientists to conduct field studies at spatial and temporal scales that are large enough to include all the components of real-world systems, especially ecosystems with large, freely ranging organisms. ■ One way paleobiologists try to get around this limitation is to attempt to reconstruct past climates by examining fossil life. ■
- (C) The challenge of predicting organismal responses to global climate change is difficult. ■ Partly, this is due to the fact that there are more studies of short-term, individual organism responses than there are of long-term, systemwide studies. ■ It is extremely difficult, both monetarily and physically, for scientists to conduct field studies at spatial and temporal scales that are large enough to include all the components of real-world

systems, especially ecosystems with large, freely ranging organisms. **Much of this work depends on the assumption that life forms adapted to a particular climate in the present were adapted to the same type of climate in the past.** One way paleobiologists try to get around this limitation is to attempt to reconstruct past climates by examining fossil life. ■

- Ⓓ The challenge of predicting organismal responses to global climate change is difficult. ■ Partly, this is due to the fact that there are more studies of short-term, individual organism responses than there are of long-term, systemwide studies. ■ It is extremely difficult, both monetarily and physically, for scientists to conduct field studies at spatial and temporal scales that are large enough to include all the components of real-world systems, especially ecosystems with large, freely ranging organisms. ■ One way paleobiologists try to get around this limitation is to attempt to reconstruct past climates by examining fossil life. **Much of this work depends on the assumption that life forms adapted to a particular climate in the present were adapted to the same type of climate in the past.**

14. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

Write your answer choices in the spaces where they belong. You can either write the letter of your answer choice or you can copy the sentence.

Human population on Earth is affecting both the atmosphere and the ecosystems.

-
-
-

Answer Choices

- Ⓐ The survival of organisms on Earth is directly related to the amount of fossil fuels that are consumed.
- Ⓑ Atmospheric carbon dioxide concentrations are rising quickly.
- Ⓒ Scientists are working on ways to make precise forecasts of how the increase of greenhouse gases will affect Earth.
- Ⓓ Scientists predict that temperature changes would be greater at the poles than at the equator.
- Ⓔ Global circulation models can be used to measure the concentrations of chlorofluorocarbons in the atmosphere.
- Ⓕ The ability to make accurate predictions about global climate presents several difficulties.

Directions: Read the passage. Then answer the questions. Give yourself 20 minutes to complete this practice set.

EUROPE IN THE TWELFTH CENTURY

Europe in the eleventh century underwent enormous social, technological, and economic changes, but this did not create a new Europe—it created two new ones. The north was developed as a rigidly hierarchical society in which status was determined, or was at least indicated, by the extent to which one owned, controlled, or labored on land; whereas the Mediterranean south developed a more fluid, and therefore more chaotic, world in which industry and commerce predominated and social status both reflected and resulted from the role that one played in the public life of the community. In other words, individual identity and social community in the north were established on a personal basis, whereas in the south they were established on a civic basis. By the start of the twelfth century, northern and southern Europe were very different places indeed, and the Europeans themselves noticed it and commented on it.

Political dominance belonged to the north. Germany, France, and England had large populations and large armies that made them, in the political and military senses, the masters of western Europe. Organized by the practices known collectively as feudalism¹, these kingdoms emerged as powerful states with sophisticated machineries of government. Their kings and queens were the leading figures of the age; their castles and cathedrals stood majestically on the landscape as symbols of their might; their armies both energized and defined the age. Moreover, feudal society showed a remarkable ability to adapt to new needs by encouraging the parallel development of domestic urban life and commercial networks; in some regions of the north, in fact, feudal society may even have developed in response to the start of the trends toward bigger cities. But southern Europe took the lead in economic and cultural life. Though the leading Mediterranean states were small in size, they were considerably wealthier than their northern counterparts. The Italian city of Palermo in the twelfth century, for example, alone generated four times the commercial tax revenue of the entire kingdom of England. Southern communities also possessed urbane, multilingual cultures that made them the intellectual and artistic leaders of the age. Levels of general literacy in the south far surpassed those of the north, and the people of the south put that learning to use on a large scale. Science, mathematics, poetry, law, historical writing, religious speculation, translation, and classical studies all began to flourish; throughout most of the twelfth century, most of the continent's best brains flocked to southern Europe.

So too did a lot of the north's soldiers. One of the central themes of the political history of the twelfth century was the continual effort by the northern kingdoms to extend their control southward in the hope of tapping into the Mediterranean bonanza. The German emperors starting with Otto I (936–973), for example, struggled ceaselessly to establish their control over the cities of northern Italy, since those cities generated more revenue than all of rural Germany combined. The kings of France used every means at their disposal to push the lower border of their kingdom to the

Mediterranean shoreline. And the Normans who conquered and ruled England established outposts of Norman power in Sicily and the adjacent lands of southern Italy; the English kings also hoped or claimed at various times to be, either through money or marriage diplomacy, the rulers of several Mediterranean states. But as the northern world pressed southward, so too did some of the cultural norms and social mechanisms of the south expand northward. Over the course of the twelfth century, the feudal kingdoms witnessed a proliferation of cities modeled in large degree on those of the south. Contact with the merchants and financiers of the Mediterranean led to the development of northern industry and international trade (which helped to pay for many of the castles and cathedrals mentioned earlier). And education spread as well, culminating in the foundation of what is arguably medieval Europe's greatest invention: the university. The relationship of north and south was symbiotic, in other words, and the contrast between them was more one of differences in degree than of polar opposition.

1. **feudalism:** a political and economic system based on the relationship of a lord to people of lower status, who owed service and/or goods to the lord in exchange for the use of land.

Directions: Now answer the questions.

PARAGRAPH 1

Europe in the eleventh century underwent enormous social, technological, and economic changes, but this did not create a new Europe—it created two new ones. The north was developed as a rigidly hierarchical society in which status was determined, or was at least indicated, by the extent to which one owned, controlled, or labored on land; whereas the Mediterranean south developed a more fluid, and therefore more chaotic, world in which industry and commerce predominated and social status both reflected and resulted from the role that one played in the public life of the community. In other words, individual identity and social community in the north were established on a personal basis, whereas in the south they were established on a civic basis. By the start of the twelfth century, northern and southern Europe were very different places indeed, and the Europeans themselves noticed it and commented on it.

15. The word “rigidly” in the passage is closest in meaning to
- (A) extremely
 - (B) normally
 - (C) obviously
 - (D) strictly
16. According to paragraph 1, which of the following was a deciding factor in a person's place in society in northern Europe at the end of the eleventh century?
- (A) Ownership of a commercial enterprise
 - (B) Participation in social and technological changes
 - (C) Role in public life in the community
 - (D) Relationship to land through ownership or labor

17. According to paragraph 1, which of the following best characterizes the societies in European lands close to the Mediterranean Sea at the beginning of the twelfth century?
- (A) They were civic societies dominated by industry and commerce.
 - (B) They were based on individual social status.
 - (C) They had a fixed and hierarchical form of government.
 - (D) They were established on the idea of individual responsibility.

PARAGRAPH 2

Political dominance belonged to the north. Germany, France, and England had large populations and large armies that made them, in the political and military senses, the masters of western Europe. Organized by the practices known collectively as feudalism¹, these kingdoms emerged as powerful states with sophisticated machineries of government. Their kings and queens were the leading figures of the age; their castles and cathedrals stood majestically on the landscape as symbols of their might; their armies both energized and defined the age. Moreover, feudal society showed a remarkable ability to adapt to new needs by encouraging the parallel development of domestic urban life and commercial networks; in some regions of the north, in fact, feudal society may even have developed in response to the start of the trends toward bigger cities. But southern Europe took the lead in economic and cultural life. Though the leading Mediterranean states were small in size, they were considerably wealthier than their northern counterparts. The Italian city of Palermo in the twelfth century, for example, alone generated four times the commercial tax revenue of the entire kingdom of England. Southern communities also possessed urbane, multilingual cultures that made them the intellectual and artistic leaders of the age. Levels of general literacy in the south far surpassed those of the north, and the people of the south put that learning to use on a large scale. Science, mathematics, poetry, law, historical writing, religious speculation, translation, and classical studies all began to flourish; throughout most of the twelfth century, most of the continent's best brains flocked to southern Europe.

18. The word "counterparts" in the passage is closest in meaning to
- (A) associates
 - (B) equivalents
 - (C) opponents
 - (D) admirers
19. Why does the author mention the "Italian city of Palermo" in the passage?
- (A) It had a population that spoke several different languages.
 - (B) Its artists and intellectuals were famous both in the north and south.
 - (C) Its commerce made it richer than a large northern country.
 - (D) It was a relatively small and unimportant Mediterranean state.

20. The word "urbane" in the passage is closest in meaning to
- (A) cultivated
 - (B) famous
 - (C) popular
 - (D) exceptional
21. According to paragraph 2, European intellectuals moved to southern Europe during the twelfth century because southern cities
- (A) needed learned people for commerce
 - (B) paid educated people better than northern cities did
 - (C) were flourishing centers of science, literature, and other studies
 - (D) needed teachers to improve the levels of general learning
22. Which of the following best describes the organization of paragraph 2?
- (A) A statement of fact followed by examples
 - (B) A description followed by a contrasting description
 - (C) A series of detailed comparisons
 - (D) A logical argument

PARAGRAPH 3

So too did a lot of the north's soldiers. One of the central themes of the political history of the twelfth century was the continual effort by the northern kingdoms to extend their control southward in the hope of tapping into the Mediterranean bonanza. The German emperors starting with Otto I (936–973), for example, struggled ceaselessly to establish their control over the cities of northern Italy, since those cities generated more revenue than all of rural Germany combined. The kings of France used every means at their disposal to push the lower border of their kingdom to the Mediterranean shoreline. And the Normans who conquered and ruled England established outposts of Norman power in Sicily and the adjacent lands of southern Italy; the English kings also hoped or claimed at various times to be, either through money or marriage diplomacy, the rulers of several Mediterranean states. But as the northern world pressed southward, so too did some of the cultural norms and social mechanisms of the south expand northward. Over the course of the twelfth century, the feudal kingdoms witnessed a proliferation of cities modeled in large degree on those of the south. Contact with the merchants and financiers of the Mediterranean led to the development of northern industry and international trade (which helped to pay for many of the castles and cathedrals mentioned earlier). And education spread as well, culminating in the foundation of what is arguably medieval Europe's greatest invention: the university. The relationship of north and south was symbiotic, in other words, and the contrast between them was more one of differences in degree than of polar opposition.

23. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 3? Incorrect choices change the meaning in important ways or leave out essential information.
- Ⓐ In political history, northern kingdoms tried to extend their control during the twelfth century, but the south tapped into the rich treasures it had around the Mediterranean.
 - Ⓑ Political history demonstrates that during the twelfth century, while southern states enjoyed the Mediterranean bonanza, northern countries increased the power of their kings.
 - Ⓒ The political history of twelfth-century Europe shows particularly that northern countries continually tried to expand their rule into the south to profit from the riches there.
 - Ⓓ Political history shows that northern kingdoms were so influenced by the example of Mediterranean wealth that they advanced into other areas.
24. The word “proliferation” in the passage is closest in meaning to
- Ⓐ beginning
 - Ⓑ increase
 - Ⓒ occupation
 - Ⓓ construction
25. According to paragraph 3, northern Europe was influenced by the Mediterranean states in all of the following ways EXCEPT
- Ⓐ the design of castles and cathedrals
 - Ⓑ the spread of education
 - Ⓒ the construction of cities
 - Ⓓ the development of industry and trade

PARAGRAPH 1

Europe in the eleventh century underwent enormous social, technological, and economic changes, but this did not create a new Europe—it created two new ones. ■ The north was developed as a rigidly hierarchical society in which status was determined, or was at least indicated, by the extent to which one owned, controlled, or labored on land; whereas the Mediterranean south developed a more fluid, and therefore more chaotic, world in which industry and commerce predominated and social status both reflected and resulted from the role that one played in the public life of the community. ■ In other words, individual identity and social community in the north were established on a personal basis, whereas in the south they were established on a civic basis. ■ By the start of the twelfth century, northern and southern Europe were very different places indeed, and the Europeans themselves noticed it and commented on it. ■

26. Look at the four squares [■] that indicate where the following sentence can be added to the passage.

There was northern Europe on the one hand and southern Europe on the other.

Where would the sentence best fit?

- (A) Europe in the eleventh century underwent enormous social, technological, and economic changes, but this did not create a new Europe—it created two new ones. **There was northern Europe on the one hand and southern Europe on the other.** The north was developed as a rigidly hierarchical society in which status was determined, or was at least indicated, by the extent to which one owned, controlled, or labored on land; whereas the Mediterranean south developed a more fluid, and therefore more chaotic, world in which industry and commerce predominated and social status both reflected and resulted from the role that one played in the public life of the community. ■ In other words, individual identity and social community in the north were established on a personal basis, whereas in the south they were established on a civic basis. ■ By the start of the twelfth century, northern and southern Europe were very different places indeed, and the Europeans themselves noticed it and commented on it. ■
- (B) Europe in the eleventh century underwent enormous social, technological, and economic changes, but this did not create a new Europe—it created two new ones. ■ The north was developed as a rigidly hierarchical society in which status was determined, or was at least indicated, by the extent to which one owned, controlled, or labored on land; whereas the Mediterranean south developed a more fluid, and therefore more chaotic, world in which industry and commerce predominated and social status both reflected and resulted from the role that one played in the public life of the community. **There was northern Europe on the one hand and southern Europe on the other.** In other words, individual identity and social community in the north were established on a personal basis, whereas in the south they were established on a civic basis. ■ By the start of the twelfth century, northern and southern Europe were very different places indeed, and the Europeans themselves noticed it and commented on it. ■
- (C) Europe in the eleventh century underwent enormous social, technological, and economic changes, but this did not create a new Europe—it created two new ones. ■ The north was developed as a rigidly hierarchical society in which status was determined, or was at least indicated, by the extent to which one owned, controlled, or labored on land; whereas the Mediterranean south developed a more fluid, and therefore more chaotic, world in which industry and commerce predominated and social status both reflected and resulted from the role that one played in the public life of the community. ■ In other words, individual identity and social community in the north were established on a personal basis, whereas in the south they were established

on a civic basis. **There was northern Europe on the one hand and southern Europe on the other.** By the start of the twelfth century, northern and southern Europe were very different places indeed, and the Europeans themselves noticed it and commented on it. ■

- Ⓓ Europe in the eleventh century underwent enormous social, technological, and economic changes, but this did not create a new Europe—it created two new ones. ■ The north was developed as a rigidly hierarchical society in which status was determined, or was at least indicated, by the extent to which one owned, controlled, or labored on land; whereas the Mediterranean south developed a more fluid, and therefore more chaotic, world in which industry and commerce predominated and social status both reflected and resulted from the role that one played in the public life of the community. ■ In other words, individual identity and social community in the north were established on a personal basis, whereas in the south they were established on a civic basis. ■ By the start of the twelfth century, northern and southern Europe were very different places indeed, and the Europeans themselves noticed it and commented on it. **There was northern Europe on the one hand and southern Europe on the other.**

27. **Directions:** Select from the seven phrases below the two phrases that correctly characterize northern Europe during the twelfth century and the three phrases that correctly characterize southern Europe. Two of the phrases will NOT be used.

Write your answer choices in the spaces where they belong. You can either write the letter of your answer choice or you can copy the sentence.

Northern Europe

-
-

Southern Europe

-
-
-

Answer Choices

- A Democratic social structure
- B Sophisticated culture
- C Small wealthy states
- D Famous kings and queens
- E Extensive communication systems
- F Highly literate population
- G Large military forces

Directions: Read the passage. Then answer the questions. Give yourself 20 minutes to complete this practice set.

WHAT IS A COMMUNITY?

The Black Hills forest, the prairie riparian forest, and other forests of the western United States can be separated by the distinctly different combinations of species they comprise. It is easy to distinguish between prairie riparian forest and Black Hills forest—one is a broad-leaved forest of ash and cottonwood trees, the other is a coniferous forest of ponderosa pine and white spruce trees. One has kingbirds; the other, juncos (birds with white outer tail feathers). The fact that ecological communities are, indeed, recognizable clusters of species led some early ecologists, particularly those living in the beginning of the twentieth century, to claim that communities are highly integrated, precisely balanced assemblages. This claim harkens back to even earlier arguments about the existence of a balance of nature, where every species is there for a specific purpose, like a vital part in a complex machine. Such a belief would suggest that to remove any species, whether it be plant, bird, or insect, would somehow disrupt the balance, and the habitat would begin to deteriorate. Likewise, to add a species may be equally disruptive.

One of these pioneer ecologists was Frederick Clements, who studied ecology extensively throughout the Midwest and other areas in North America. He held that within any given region of climate, ecological communities tended to slowly converge toward a single endpoint, which he called the "climatic climax." This "climax" community was, in Clements's mind, the most well-balanced, integrated grouping of species that could occur within that particular region. Clements even thought that the process of ecological succession—the replacement of some species by others over time—was somewhat akin to the development of an organism, from embryo to adult. Clements thought that succession represented discrete stages in the development of the community (rather like infancy, childhood, and adolescence), terminating in the climatic "adult" stage, when the community became self-reproducing and succession ceased. Clements's view of the ecological community reflected the notion of a precise balance of nature.

Clements was challenged by another pioneer ecologist, Henry Gleason, who took the opposite view. Gleason viewed the community as largely a group of species with similar tolerances to the stresses imposed by climate and other factors typical of the region. Gleason saw the element of chance as important in influencing where species occurred. His concept of the community suggests that nature is not highly integrated. Gleason thought succession could take numerous directions, depending upon local circumstances.

Who was right? Many ecologists have made precise measurements, designed to test the assumptions of both the Clements and Gleason models. For instance, along mountain slopes, does one life zone, or habitat type, grade sharply or gradually into another? If the divisions are sharp, perhaps the reason is that the community is so well integrated, so holistic, so like Clements viewed it, that whole clusters of species must remain together. If the divisions are gradual, perhaps, as Gleason suggested,

each species is responding individually to its environment, and clusters of species are not so integrated that they must always occur together.

It now appears that Gleason was far closer to the truth than Clements. The ecological community is largely an accidental assemblage of species with similar responses to a particular climate. Green ash trees are found in association with plains cottonwood trees because both can survive well on floodplains and the competition between them is not so strong that only one can persevere. One ecological community often flows into another so gradually that it is next to impossible to say where one leaves off and the other begins. Communities are individualistic.

This is not to say that precise harmonies are not present within communities. Most flowering plants could not exist were it not for their pollinators—and vice versa. Predators, disease organisms, and competitors all influence the abundance and distribution of everything from oak trees to field mice. But if we see a precise balance of nature, it is largely an artifact of our perception, due to the illusion that nature, especially a complex system like a forest, seems so unchanging from one day to the next.

Directions: Now answer the questions.

PARAGRAPH
1

The Black Hills forest, the prairie riparian forest, and other forests of the western United States can be separated by the distinctly different combinations of species they comprise. It is easy to distinguish between prairie riparian forest and Black Hills forest—one is a broad-leaved forest of ash and cottonwood trees, the other is a coniferous forest of ponderosa pine and white spruce trees. One has kingbirds; the other, juncos (birds with white outer tail feathers). The fact that ecological communities are, indeed, recognizable clusters of species led some early ecologists, particularly those living in the beginning of the twentieth century, to claim that communities are highly integrated, precisely balanced assemblages. This claim harkens back to even earlier arguments about the existence of a balance of nature, where every species is there for a specific purpose, like a vital part in a complex machine. Such a belief would suggest that to remove any species, whether it be plant, bird, or insect, would somehow disrupt the balance, and the habitat would begin to deteriorate. Likewise, to add a species may be equally disruptive.

28. In paragraph 1, why does the author distinguish between prairie riparian forest and Black Hills forest?
- (A) To highlight the difference between the views of various ecologists about the nature of ecological communities
 - (B) To illustrate why some ecologists tended to view ecological communities as highly integrated
 - (C) To demonstrate that one forest has a greater variety of species than the other
 - (D) To show how these two forests differ from others in the United States

29. According to paragraph 1, what was a common claim about ecological communities before the early twentieth century?
- (A) Every species in a community has a specific role in that community.
 - (B) It is important to protect communities by removing certain species.
 - (C) A precise balance is difficult to maintain in an ecological community.
 - (D) It is necessary for new species to be added quickly as ecological communities develop.
30. The word "clusters" in the passage is closest in meaning to
- (A) models
 - (B) categories
 - (C) examples
 - (D) groups
31. According to paragraph 1, the belief in a balance of nature suggests that removing a species from an ecological community would have which of the following effects?
- (A) It would reduce competition between the remaining species of the community.
 - (B) It would produce a different, but equally balanced, community.
 - (C) It would lead to a decline in the community.
 - (D) It would cause more harm than adding a species to the community.

PARAGRAPH 2

One of these pioneer ecologists was Frederick Clements, who studied ecology extensively throughout the Midwest and other areas in North America. He held that within any given region of climate, ecological communities tended to slowly converge toward a single endpoint, which he called the "climatic climax." This "climax" community was, in Clements's mind, the most well-balanced, integrated grouping of species that could occur within that particular region. Clements even thought that the process of ecological succession—the replacement of some species by others over time—was somewhat akin to the development of an organism, from embryo to adult. Clements thought that succession represented discrete stages in the development of the community (rather like infancy, childhood, and adolescence), terminating in the climatic "adult" stage, when the community became self-reproducing and succession ceased. Clements's view of the ecological community reflected the notion of a precise balance of nature.

32. The word "ceased" in the passage is closest in meaning to
- (A) succeeded
 - (B) balanced
 - (C) ended
 - (D) advanced

33. Which of the following best represents the view of ecological communities associated with Frederick Clements in paragraph 2?
- Ⓐ Only when all species in a community are at the reproductive stage of development is an ecological community precisely balanced.
 - Ⓑ When an ecological community achieves "climatic climax," it begins to decline.
 - Ⓒ All climates have similar climax communities.
 - Ⓓ Ecological communities eventually reach the maximum level of balance that is possible for their region.
34. According to paragraph 2, Clements compared the process of ecological succession to
- Ⓐ the replacement of animal habitats over time
 - Ⓑ the development of an organism
 - Ⓒ self-reproduction
 - Ⓓ changes in climate

PARAGRAPH 3

Clements was challenged by another pioneer ecologist, Henry Gleason, who took the opposite view. Gleason viewed the community as largely a group of species with similar tolerances to the stresses imposed by climate and other factors typical of the region. Gleason saw the element of chance as important in influencing where species occurred. His concept of the community suggests that nature is not highly integrated. Gleason thought succession could take numerous directions, depending upon local circumstances.

35. According to Gleason in paragraph 3, the occurrence of a species in a particular community is influenced by
- Ⓐ unpredictable events
 - Ⓑ how individualistic the species is
 - Ⓒ the number of other species present
 - Ⓓ the tolerance of other species to stresses

Who was right? Many ecologists have made precise measurements, designed to test the assumptions of both the Clements and Gleason models. For instance, along mountain slopes, does one life zone, or habitat type, grade sharply or gradually into another? If the divisions are sharp, perhaps the reason is that the community is so well integrated, so holistic, so like Clements viewed it, that whole clusters of species must remain together. If the divisions are gradual, perhaps, as Gleason suggested, each species is responding individually to its environment, and clusters of species are not so integrated that they must always occur together.

36. What did the ecologists in paragraph 4 hope to determine with their measurements?
- (A) Whether different species compete for the same environments
 - (B) Whether habitats are sharply separated or gradually flow into each other
 - (C) Whether succession differs in different types of habitats
 - (D) Whether integrated communities survive better than independent communities

It now appears that Gleason was far closer to the truth than Clements. The ecological community is largely an accidental assemblage of species with similar responses to a particular climate. Green ash trees are found in association with plains cottonwood trees because both can survive well on floodplains and the competition between them is not so strong that only one can persevere. One ecological community often flows into another so gradually that it is next to impossible to say where one leaves off and the other begins. Communities are individualistic.

37. In paragraph 5, why does the author mention green ash trees and plains cottonwood trees?
- (A) To support the current view about how ecological communities develop
 - (B) To provide an example of species that prefer to live on floodplains
 - (C) To provide evidence that supports the theory of Clements
 - (D) To show where one ecological community stops and the other begins
38. The word "persevere" in the passage is closest in meaning to
- (A) reproduce
 - (B) fail
 - (C) expand
 - (D) continue

This is not to say that precise harmonies are not present within communities. Most flowering plants could not exist were it not for their pollinators—and vice versa. Predators, disease organisms, and competitors all influence the abundance and distribution of everything from oak trees to field mice. But if we see a precise balance of nature, it is largely an artifact of our perception, due to the illusion that nature, especially a complex system like a forest, seems so unchanging from one day to the next.

39. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 6? Incorrect choices change the meaning in important ways or leave out essential information.
- (A) We see nature as precisely balanced because nature is unchanging.
 - (B) A precise balance of nature is not possible because of the complexity of natural systems.
 - (C) Our sense that nature is precisely balanced results from the illusion that it is unchanging.
 - (D) Because nature is precisely balanced, complex systems do not seem to change.

■ Who was right? ■ Many ecologists have made precise measurements, designed to test the assumptions of both the Clements and Gleason models. ■ For instance, along mountain slopes, does one life zone, or habitat type, grade sharply or gradually into another? ■ If the divisions are sharp, perhaps the reason is that the community is so well integrated, so holistic, so like Clements viewed it, that whole clusters of species must remain together. If the divisions are gradual, perhaps, as Gleason suggested, each species is responding individually to its environment, and clusters of species are not so integrated that they must always occur together.

40. Look at the four squares [■] that indicate where the following sentence can be added to the passage.

Their research has helped to decide between the two views because it has focused on questions to which Clements and Gleason would give opposing answers.

Where would the sentence best fit?

- (A) **Their research has helped to decide between the two views because it has focused on questions to which Clements and Gleason would give opposing answers.** Who was right? ■ Many ecologists have made precise measurements, designed to test the assumptions of both the Clements and Gleason models. ■ For instance, along mountain slopes, does one life zone, or habitat type, grade sharply or gradually into another? ■ If the divisions are sharp, perhaps the reason is that the community is so well integrated, so holistic, so like Clements viewed it, that whole clusters of species must remain together. If the divisions are gradual, perhaps, as Gleason suggested, each species is responding individually to its environment, and clusters of species are not so integrated that they must always occur together.

- (B)** ■ Who was right? **Their research has helped to decide between the two views because it has focused on questions to which Clements and Gleason would give opposing answers.** Many ecologists have made precise measurements, designed to test the assumptions of both the Clements and Gleason models. ■ For instance, along mountain slopes, does one life zone, or habitat type, grade sharply or gradually into another? ■ If the divisions are sharp, perhaps the reason is that the community is so well integrated, so holistic, so like Clements viewed it, that whole clusters of species must remain together. If the divisions are gradual, perhaps, as Gleason suggested, each species is responding individually to its environment, and clusters of species are not so integrated that they must always occur together.
- (C)** ■ Who was right? ■ Many ecologists have made precise measurements, designed to test the assumptions of both the Clements and Gleason models. **Their research has helped to decide between the two views because it has focused on questions to which Clements and Gleason would give opposing answers.** For instance, along mountain slopes, does one life zone, or habitat type, grade sharply or gradually into another? ■ If the divisions are sharp, perhaps the reason is that the community is so well integrated, so holistic, so like Clements viewed it, that whole clusters of species must remain together. If the divisions are gradual, perhaps, as Gleason suggested, each species is responding individually to its environment, and clusters of species are not so integrated that they must always occur together.
- (D)** ■ Who was right? ■ Many ecologists have made precise measurements, designed to test the assumptions of both the Clements and Gleason models. ■ For instance, along mountain slopes, does one life zone, or habitat type, grade sharply or gradually into another? **Their research has helped to decide between the two views because it has focused on questions to which Clements and Gleason would give opposing answers.** If the divisions are sharp, perhaps the reason is that the community is so well integrated, so holistic, so like Clements viewed it, that whole clusters of species must remain together. If the divisions are gradual, perhaps, as Gleason suggested, each species is responding individually to its environment, and clusters of species are not so integrated that they must always occur together.

- 41. Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

Write your answer choices in the spaces where they belong. You can either write the letter of your answer choice or you can copy the sentence.

Over time, a variety of views have been formed on the structure of ecological communities.

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Answer Choices

- A Clements held that ecological communities were like organisms that compete with each other for dominance in a particular climatic region.
- B Clements saw the community as a collection of thoroughly interdependent species progressing toward a single climax community.
- C Gleason held that within a single climatic region, differing local factors would cause ecological communities to develop in different ways.
- D Gleason believed that sharp divisions would exist between species in different habitats.
- E Today's ecologists recognize that ecological communities must be precisely and permanently balanced.
- F The current thinking is that communities are individualistic and largely accidental collections of species with similar needs and tolerances.

- 1. The first part of the document is a list of items that are to be reviewed. These items are listed in the following order:
 - a. Item 1
 - b. Item 2
 - c. Item 3
 - d. Item 4
 - e. Item 5
 - f. Item 6
 - g. Item 7
 - h. Item 8
 - i. Item 9
 - j. Item 10
- 2. The second part of the document is a list of items that are to be reviewed. These items are listed in the following order:
 - a. Item 1
 - b. Item 2
 - c. Item 3
 - d. Item 4
 - e. Item 5
 - f. Item 6
 - g. Item 7
 - h. Item 8
 - i. Item 9
 - j. Item 10
- 3. The third part of the document is a list of items that are to be reviewed. These items are listed in the following order:
 - a. Item 1
 - b. Item 2
 - c. Item 3
 - d. Item 4
 - e. Item 5
 - f. Item 6
 - g. Item 7
 - h. Item 8
 - i. Item 9
 - j. Item 10