READING TEST

35 Minutes—40 Questions

DIRECTIONS: There are four passages in this test. Each passage is followed by several questions. After reading a passage, choose the best answer to each question and fill in the corresponding oval on your answer document. You may refer to the passages as often as necessary.

Passage I

PROSE FICTION: This passage is adapted from the novel *Tropic of Orange: A Novel* by Karen Tei Yamashita (©1997 by Karen Tei Yamashita).

This passage uses elements of a literary genre called *magic realism* to describe a mysterious thin line that is simultaneously real and imaginary.

The tree was a sorry one, and so was the orange. Rafaela knew it was an orange that should not have been. It was much too early. Everyone said the weather was changing. The rains came sooner this year. The tree had been fooled, and little pimples of budding flowers began to burst through its branches. And then came a sudden period of dry weather; the flowers withered away, except for this one. Perhaps it had been the industriousness of the African bees, their furry feet dusted heavily in yellow pollen, that had quickly mated the flower to its future, producing this aberrant orange—not to be picked, not expected, and probably not very sweet.

But from the very beginning Rafaela somehow felt this particular orange was special. Perhaps it was her desire to see a thing out of season struggle despite everything and become whole. As time went on, she found herself watching the orange, wandering out to the tree every day even in the rain, feeling great contentment in the transition of its small growing globe, first from green and then to its slow golden burnish.

But there was something else. Just where its tiny bud had broken through the tree's branch, Rafaela noticed a line—finer than the thread of a spiderweb—pulled with delicate tautness. It was most visible in the dewy mornings as the sun rose from the east; at other times, it was barely visible. But she had always sensed its presence. If she could not reach out and touch it, she sensed its peculiar, very supple strength. Rafaela knew that it ran across the property. In fact, she sensed that it continued farther in both directions, east and west, east across the highway and west toward the ocean and beyond.

In the days when the orange was a blossom of soft petals, its fragrance surprised her. She had passed beneath the orange several times, drawn to its sweet scent before she had discovered it. The perfume could only be emanating from that curious flower. She came often then to secure the whiff that tingled her deep memory. It was then that she noticed the line. And when the baby orange appeared, it seemed to grasp that line as its parent, if a line could be a parent. As expected, the orange did not grow to be very big or seem very succulent, but it did begin to hang rather heavily. And when the salty wind blew west from the sea rocking it back and forth like a small cradle, the curious line—now running through the growing orange—rocked back and forth with it like a lullaby.

Rafaela and her son Sol walked hand in hand past the orange tree, careful not to disturb the lizards and beetles waiting breathlessly beneath scattered leaves and brush. For three days now, it had not rained. And yet any cool surface bled the air's moisture. Rafaela felt this wetness; it gathered in tiny molecules over her skin. It was a little before noon, and the sun was particularly bright and oppressive that day. If Rafaela had bothered to look at the calendar, she would have noticed that it was Monday, June 22. She might have also noticed the lunar signs in the corner of the calendar and the small print that said summer solstice.

She glanced briefly at the orange with some satisfaction and hurried toward the house. "Come on Sol. It's much too hot out here today." His little quick steps pattered behind, dancing around the young trees, and then ran forward. She followed Sol who seemed to be following a path of his own, but upon closer inspection, he was tracing the path of a very thin but distinct shadow stretched in a perfectly straight line along the dirt and sand. There were no telephone cables or electric lines above, nothing to cast such a shadow, and yet it was clearly there. Rafaela glanced back toward the orange tree and the single orange, suddenly aware of the only possible and yet entirely impossible thing that could obstruct the intensity of the sun's light at this hour, slicing the heavy atmosphere with cruel precision. Indeed the sun was a great ball of fire directly above the orange tree. It seemed even to point at the tree, at the strange line, at the orange itself.

Rafaela ran after Sol into the cool shadows of the house. There was a sudden gust of tepid wind, and from the corner of her eye, she thought she saw the line's razor shadow dip away, south. Rafaela felt a dizzy nausea. She did not realize that the orange had fallen

irresistibly from a height of two meters, rolling in dusty turbulence down a small slope, under the barbed-wire fence, and just beyond the frontiers of the property to a neutral place between ownership and the highway.

1. It can reasonably be inferred from the passage that which of the following events occurs first chronologically?
   - **A.** Rafaela follows Sol into the cool shadows.
   - **B.** Rafaela and Sol avoid disturbing the lizards and beetles.
   - **C.** The orange seems to take hold of the line.
   - **D.** The orange rolls off the property.

2. How do descriptions of the line in the fourth paragraph (lines 34–48) compare with those of the line's shadow in the sixth and seventh paragraphs (lines 61–87)?
   - **F.** Descriptions of the line indicate that the line stays in place, while those of the shadow suggest that the shadow rocks with the wind.
   - **G.** Descriptions of both the line and its shadow work together to suggest that the line is directly connected to the pattern of rainfall.
   - **H.** Descriptions of both the line and its shadow emphasize that the line is benevolent and brings hope to those who see it.
   - **J.** Descriptions of the line make the line seem positive and nurturing, while those of the shadow suggest that there is something ominous about the line.

3. The first paragraph establishes all of the following details about the orange EXCEPT that it:
   - **A.** was not expected to grow.
   - **B.** was likely a product of bee pollination.
   - **C.** grew in the path of a peculiar line.
   - **D.** grew as a result of unseasonal rains.

4. The main purpose of the fifth paragraph (lines 49–60) is to:
   - **F.** describe how the weather affects even the smallest creatures and add to the passage's overall sense of frenzied chaos.
   - **G.** emphasize Rafaela's grief by contrasting it with the apparent joyfulness of the creatures she sees on the property.
   - **H.** illustrate the intensity of the summer heat and convey a sense of the building tension in the passage.
   - **J.** highlight the increasing resentment between Rafaela and Sol by emphasizing the stillness of everything around them.

5. It can reasonably be inferred from the passage that when Sol runs ahead of Rafaela, Rafaela comes to believe that he is following a:
   - **A.** worn path formed by numerous people walking through the yard to the house.
   - **B.** shadow cast by a telephone line that runs across the property.
   - **C.** line through the dirt that he had drawn with a stick.
   - **D.** shadow cast by the line that goes through the orange.

6. The passage indicates that only one of the tree's flowers produced an orange because the:
   - **F.** African bees were so inactive that they pollinated only one flower.
   - **G.** other flowers wilted and shriveled from a sudden dry period.
   - **H.** flowers smelled so sweet that people picked all but one of them.
   - **J.** unusually strong winds blew the other flowers off the tree.

7. According to the passage, how often does Rafaela look at the orange?
   - **A.** Once each morning and once each evening
   - **B.** A couple of times a week
   - **C.** Every day, even when it rains
   - **D.** Constantly, never losing sight of it

8. In the passage, the line has all of the following characteristics EXCEPT:
   - **F.** dryness.
   - **G.** tautness.
   - **H.** strength.
   - **J.** fineness.

9. As it is used in line 39, the word *secure* most nearly means:
   - **A.** protect.
   - **B.** fasten.
   - **C.** guarantee.
   - **D.** obtain.

10. In the passage, Rafaela hurries Sol toward the house because she wants to:
    - **F.** get water for the withering plants.
    - **G.** escape from the summer heat.
    - **H.** get inside the house before it rains.
    - **J.** prevent Sol from picking the orange.

Passage II

SOCIAL SCIENCE: This passage is adapted from the article "The Green Monster" by James E. McWilliams (©2009 by Washington Post.Newsweek Interactive Co. LLC).

GMO refers to "genetically modified organisms." A genetically modified crop results from the laboratory insertion of a gene from one organism into the DNA sequence of another in order to confer an advantageous trait such as insect resistance, drought tolerance, or herbicide resistance. Today almost 90 percent of soy crops and 80 percent of corn crops in the United States sprout from genetically engineered seeds. Forty-five million acres of land worldwide contain genetically engineered crops. From the perspective of commercial agriculture, the technology has been seamlessly assimilated into traditional farming routines.

Not all consumers share the enthusiasm. It's as likely as not that you know GMOs by their stock term of derision: *Frankenfoods*. The moniker reflects a broad spectrum of concerns: Some anti-biotech activists argue that these organisms will contaminate their wild cousins with GM pollen and drive native plants extinct. Others suggest that they will foster the growth of "superweeds"—plants that develop a resistance to the herbicides many GMOs are engineered to tolerate. And yet others fear that genetic alterations will trigger allergic reactions in unsuspecting consumers. Whether or not these concerns collectively warrant a ban on GMOs—as many environmentalists would like to see—is a hotly debated topic. The upshot to these potential pitfalls, however, is beyond dispute: A lot of people find this technology to be creepy.

Whatever the specific cause of discontent over GM crops, popular resistance came to a head in 2000, when the National Organic Program solicited public input on the issue of whether GM crops should be included in an organic food program. In response, sustainable-food activists deluged officials with a rainforest's worth of letters—275,000, to be exact—beating the measure into oblivion. Today, in the same spirit, environmentalists instinctively deem GMOs the antithesis of environmental responsibility.

Many scientists, and even a few organic farmers, now believe the 2000 rejection was a fatal rush to judgment. Most recently, Pamela Ronald, a plant pathologist and chair of the Plant Genomics Program at the University of California–Davis, has declared herself one such critic. She argues that we should, in fact, be actively merging genetic engineering and organic farming to achieve a sustainable future for food production. Her research—which she conducts alongside her husband, an organic farmer—explores genetically engineered crops that, instead of serving the rapacity of agribusiness, foster the fundamentals of sustainability. Their endeavor, counterintuitive as it seems, points to an emerging green biotech frontier—a hidden realm of opportunity to feed the world's impending 9 billion a diet produced in an environmentally responsible way.

To appreciate how "responsible genetic modification" isn't an oxymoron, consider grass-fed beef. Cows that eat grass are commonly touted as the sustainable alternative to feedlot beef, a resource-intensive form of production that stuffs cows with a steady diet of grain fortified with antibiotics, growth hormones, steroids, and appetite enhancers that eventually pass through the animals into the soil and water. One overlooked drawback to grass-fed beef, however, is the fact that grass-fed cows emit four times more methane—a greenhouse gas that's more than 20 times as powerful as carbon dioxide—as regular, feedlot cows. That's because grass contains lignin, a substance that triggers a cow's digestive system to secrete a methane-producing enzyme. An Australian biotech company has recently produced a genetically modified grass with lower amounts of lignin. Lower amounts of lignin mean less methane, less methane means curbed global warming emissions, and curbed emissions means environmentalists can eat their beef without hanging up their green stripes.

When commercial farmers hear about GM grass, they're excited. And when they hear about other products in the works, they're also excited. And they're excited not only because these products have the potential to streamline production but also because GM technology allows them to play a meaningful role in reducing their carbon footprint.

Given the potential of these products to reduce the environmental impact of farming, it's ironic that traditional advocates for sustainable agriculture have led a successful campaign to blacklist GMOs irrespective of their applications. At the very least, they might treat them as legitimate ethical and scientific matters deserving of a fair public hearing.

11. The main purpose of the passage is to:

- **A.** argue in support of GMOs by challenging their critics to acknowledge some of the advantages of GMOs.
- **B.** explain the laboratory process used to create GMOs.
- **C.** discuss the extent to which GM crops have become part of conventional farming.
- **D.** describe in detail how GMOs compete with conventionally raised and organic food.

12. What role does the passage's author claim the National Organic Program played in bringing resistance to GM crops to a head?

- **F.** It organized a nationwide boycott of GM foods.
- **G.** It proved that commercial agriculture increased crop production through conventional farming practices.
- **H.** It conducted a study showing that consumers would not pay higher prices for GM food.
- **J.** It solicited public input on whether GM crops should be included in an organic food program.

13. According to Ronald, one environmentally responsible way to feed the world's growing population would be to:
    - A. follow the rules made by the National Organic Program in 2000.
    - B. organize a global sustainable-food pantry to distribute food equitably.
    - C. merge genetic engineering with organic farming.
    - D. focus efforts on conventional farming practices.

14. It is reasonable to conclude from the passage that one drawback to raising feedlot beef is that:
    - F. feedlot cows emit four times more methane than grass-fed cows.
    - G. feedlot cows require GM grains, unlike the organic grasses that sustain grass-fed cows.
    - H. additives in the grain eaten by feedlot cows end up in the soil and water supply.
    - J. raising feedlot cows is costly, which makes feedlot beef more expensive than GM beef.

15. The statistics in lines 6–8 are most likely included to:
    - A. emphasize the disadvantages of planting GM crops.
    - B. illustrate that GM crops already play a vital role in commercial agriculture.
    - C. point out that the rest of the world lags behind the United States in its production of GM crops.
    - D. give examples of the way GM crops differ from their organic counterparts.

16. As it is used in line 14, the word *stock* most nearly means:
    - F. commonly used.
    - G. generic title.
    - H. easily available.
    - J. estimated amount.

17. As it is used by some consumers, the term *Frankenfoods* (line 15) is meant to:
    - A. advertise a new brand of food.
    - B. ridicule genetically modified products.
    - C. be a friendly nickname.
    - D. pay tribute to organic food.

18. It is logical to infer that when Ronald declared herself "one such critic" (lines 43–44), she meant that she:
    - F. only eats food grown organically.
    - G. believes she was wrong to think that GM crops cannot be grown organically.
    - H. continues to find GM crops objectionable.
    - J. finds the scarcity of organic food available in her grocery store frustrating.

19. According to the passage, lignin is a:
    - A. genetically modified grass produced by an Australian biotech company.
    - B. substance in grass that triggers the secretion of a methane-producing enzyme in cows.
    - C. specialized grain fortified with antibiotics and appetite enhancers.
    - D. greenhouse gas that is more than twenty times as powerful as carbon dioxide.

20. As it is used in lines 72 and 73, the word *curbed* most nearly means:
    - F. bent.
    - G. shortened.
    - H. parked.
    - J. reduced.

Passage III

HUMANITIES: This passage is adapted from the article "British Modernism's Many Manners . . . and Its American Admirers" by Steve Moyer, which appeared in 2009 in *Humanities: The Magazine of the National Endowment for the Humanities*.

Bloomsbury, the group of innovative writers and artists, came out of its embryonic phase around 1910 as the Victorian era finally expired with the funeral of Edward VII. Its young mix of writers, thinkers, and artists stood at the vanguard of a shift in manners away from nineteenth-century formality and reticence and toward twentieth-century candor and playfulness. Male and female, mostly in their twenties, the Bloomsbury lot addressed each other by their first names, and, till the wee hours of the morning, reflected on how to spend their lives.

Fascinated by the difference between the world of appearances and the world of reality, in the visual and literary arts, the Bloomsberries (as they were sometimes called) experimented with brush and pen to express above all the subjective qualities of their work. For the painters, who opened themselves up to the currents swirling around on the [European] Continent since the final days of Impressionism, this translated into an emphasis on line, mass, contour, and the rhythms they create.

If any one work by the Bloomsbury painters sums up adequately the era's avant-garde break with London's Victorian taste in art, and the influence of the French Post-Impressionists on British artists, it would be Vanessa Bell's 1915 oil on canvas of Mary St. John Hutchinson. With arched eyebrow, lips slightly pursed, and cool self-assurance, Mrs. Hutchinson sits noticing something to her left, and the viewer, disarmed at first perhaps by the flatness of the composition and the coarse brushwork, feels as much as sees the various tones of the few colors in the portrait—ochre, green, and pink, and, where the whites of the eyes should be, teal. The work broke all the reigning conventions in British painting. Treatment of subject, use of line and color, lack of shadowing, and the solidness of the background in relation to the figure are all in sync with the modernist modes that had been in style on the Continent, most notably in France.

If Bloomsbury had been an art department, Roger Fry would have been faculty chairman. Painter, curator, and instigator, Fry studied the sciences at Cambridge University in the 1880s, developing a habit of skepticism that would serve him well as he guided painters Vanessa Bell and Duncan Grant toward modernism in the years leading up to World War I.

Influenced by paintings they had seen in France, Fry, Grant, and Bell experimented early on with cubism and abstraction, which helped the latter two immensely in their designing and painting of objects. Fry had also convinced the traditionally trained Grant to lighten the colors of his palette and Bell to express her feelings more completely. The result was an outpouring of their creative energy. Bell wrote, "That autumn of 1910 is to me a time when everything seemed springing to new life—a time when all was a sizzle of excitement, new relationships, new ideas, different and intense emotions seemed to be crowding into one's life."

Bloomsbury's anti-Victorian revolt had, in fact, as much to do with getting back to Fry's perceptions of the great traditions in art as it did with youthful rebellion. In France, the painter Simon Bussy acted as cicerone for the group, introducing them to French artists and reaffirming the necessity to study the old masters.

A Victorian ideal the group chose to keep was the veneration of comfortable home life but with the subsequent Bloomsbury love of color, brightening what they saw as stuffy and stodgy in the homes of their youth. Fry felt, moreover, that nineteenth-century British artists in general, and Victorian painters in particular, had lost their way by becoming preoccupied with attempts at highly detailed and, in some cases, photographically accurate representations of reality.

The French painters Fry admired had been trending toward a new aesthetic for over two decades. But these artists, unlike the Impressionists, had little in common as a group except for the fact that they were all influenced in some way by Impressionism's ideals; they passed through the era, learning from it and reacting to it while continuing to develop their own visions. Gauguin had been vibrantly imbuing his work with desire and emotion; Matisse pared his down to a harmonious interplay of line and rhythm; and Cézanne had been looking back to the masterpieces of primitive and epic works in order to bring about a monumental effect. Fry's study of their painting taught him a new language of design, which he wanted to try out himself and convince other British painters to take up.

21. The main purpose of the passage is to:

- **A.** compare and contrast Impressionism and Modernism in European paintings.
- **B.** describe the philosophy and influences of the Bloomsbury artists.
- **C.** argue that Vanessa Bell was the most talented of the Bloomsbury artists.
- **D.** provide a historical overview of the end of the Victorian era.

22. In the passage, the Bloomsbury artists are described as being:

- **F.** naive and misguided.
- **G.** meticulous and skeptical.
- **H.** young and innovative.
- **J.** formal and reticent.

23. The main purpose of the third paragraph (lines 22–39) is to:

A. describe a painting that exemplifies the stylistic influences embraced and rejected by the Bloomsbury painters.
B. contradict the passage's claim that the Bloomsbury painters chose to keep some Victorian ideals in their art.
C. suggest that Vanessa Bell's artistic choices defined the reigning conventions in British painting.
D. imply that Mrs. Hutchinson's cool self-assurance was an attitude common among Bloomsbury artists.

24. As it is used in line 29, "the viewer" most nearly refers to:

F. the subject of the painting, who is "noticing something to her left" (lines 28–29).
G. an art critic famous for writing about the Bloomsbury artists' paintings.
H. the painter, Bell, who regarded her own work with a critical eye.
J. a generalized notion of anyone who might see the painting.

25. The author's characterization of the Bloomsbury painters as artists who "opened themselves up to the currents swirling around" (lines 17–18) most nearly conveys that they were:

A. inspired by the waters separating Britain from continental Europe.
B. vulnerable to negative outside influences.
C. receptive to new ideas and trends.
D. uncertain about their future.

26. The author refers to the "faculty chairman" (line 41) of an "art department" (line 40) primarily to make the point that:

F. the Bloomsbury artists were employed by Cambridge University.
G. the Bloomsbury artists rejected traditional academic studies.
H. Roger Fry was a leader within the group of Bloomsbury artists.
J. artists are continually learning and relearning their craft.

27. The passage states that Fry's, Grant's, and Bell's early experimentations with cubism and abstraction were influenced by:

A. London's Victorian taste in art.
B. paintings these artists had seen in France.
C. changing trends in interior design.
D. the looming threat of World War I.

28. According to the passage, the Bloomsbury artists' ideal of the veneration of comfortable home life differed from the same Victorian ideal primarily in choice of:

F. furniture.
G. lighting.
H. location.
J. color.

29. According to the passage, Fry's opinion of nineteenth-century British artists included disapproval of their:

A. preoccupation with accurately representing reality.
B. use of bold colors and their lack of shadowing.
C. emphasis on classical notions of beauty.
D. tendency to imitate each other's artwork.

30. The passage indicates that the Impressionists differed from the French painters that Fry admired in that the Impressionists:

F. were more interested in the subjective qualities of their work.
G. were less likely to challenge artistic conventions.
H. had fewer social restrictions to rebel against.
J. had more in common as a group.

Passage IV

NATURAL SCIENCE: This passage is adapted from the article "What Causes Ice Ages?" by Traci Watson (©2002 by U.S. News & World Report).

The Cenozoic era, the most recent of the four major subdivisions of geologic history, began about sixty-five million years ago and continues to the present.

Scientists have long known about the giant ice sheets that the Cenozoic Ice Age ushered in. Even in the mid-19th century they knew that glaciers had repeatedly raked swaths of Europe and North America in the not so distant past. Yet despite the efforts of marine geologists, atmospheric chemists, oceanographers, and more, no one knows what caused the ice ages.

If they tried, scientists could hardly invent a more difficult mystery to crack. Most of the events in question took place tens or hundreds of millions of years ago. The shift in the Earth's climate was subtle: The planet is only 10 degrees cooler today than it was in the tropical period just before the Cenozoic.

Sixty million years ago, the planet started to cool in earnest. Twenty-five million years later, Antarctica was buried under a thick sheet of ice; 18 million years after that, glaciers overran Greenland. Last of all, ice sheets invaded North America and Europe, retreated, advanced, retreated, and so on. Today, the planet is enjoying an "interglacial," one of the slightly warmer periods when the glaciers slink back to the poles.

The cause of the ice ages is a remarkably consensus-free scientific topic, but on one point most researchers agree: The cooling that started 60 million years ago was caused by a drop in carbon dioxide in the atmosphere. Carbon dioxide is a so-called greenhouse gas. It traps sunlight close to the Earth, raising the planet's temperature. Less carbon dioxide in the atmosphere means colder weather.

But why did carbon dioxide levels fall? The leading theory is because two of the Earth's tectonic plates collided, forming the Himalayas.

Marine geologist Maureen Raymo, now at the Massachusetts Institute of Technology, worked out a scenario that is widely cited in the scientific literature—both favorably and not. Raymo noted that the Himalayas are taller than any other mountain range on Earth and that they formed at nearly the same time as the start of the ice ages. Scientists realize that carbon dioxide from the atmosphere combines with rain to make an acid that erodes rock; in the process, minerals such as calcium silicate in the rocks react with carbon dioxide, removing the gas from the atmosphere. Therefore, erosion on slopes as vast as the Himalayas', says Raymo, could reduce carbon dioxide levels enough to give the ice ages a push.

Raymo acknowledges that her idea has holes. Weathering on the scale she theorizes would devour so much carbon dioxide that soon there wouldn't be any left at all. Other scientists point to an opposite problem: The kind of minerals in the Himalayan rocks rarely consume carbon dioxide when they erode. The mystery of Cenozoic cooling has encouraged researchers to propose many other candidate culprits. One recent scientific paper theorizes that the key factor is the tons of sediment shed by the mountains every year. The sediment runs into the Indian Ocean and buries large amounts of marine plankton and other plants. Entombed along with the plants is their carbon dioxide, meaning less carbon dioxide in the atmosphere and therefore less warming. Solutions championed by other scientists include the evolution of grasses, which happened at roughly the right time and would have stored large amounts of carbon dioxide in the soil; and weathering of the mountains in either New Guinea or Siberia.

There is equally great bafflement over the much more recent Northern Hemisphere glaciations. For most of the Cenozoic Ice Age, the polar regions were the only place to suffer heavy invasions of ice. But 2.5 million years ago, glaciers moved into Europe and North America and have paid regular visits since. Scientists can explain the *timing* of these local ice ages. As the Earth's orbit slowly changes, so does the pattern of the sunlight falling on a given spot on the globe, triggering the glaciers' advance and retreat. The problem is that the orbital changes are not big enough to make or to melt ice sheets.

What ice age scholars need are cold, hard data. For example, there are no direct measurements of atmospheric carbon dioxide beyond 200,000 years ago. Carbon dioxide levels are revealed by long cylinders of ice extracted from Antarctica. But there is no ice old enough to reveal the composition of the atmosphere millions of years ago.

"Information is pouring in now, and it is not converging on a simple explanation," says Isaac Winograd, a hydrologist at the U.S. Geological Survey.

Until scientists can explain changes in Earth's climatic past, they cannot be sure they aren't overlooking factors that could either counteract a human-made warming—or amplify it.

31. The main purpose of the passage is to:

- **A.** sketch some points of scientific agreement and disagreement about the causes of the ice ages.
- **B.** explain the techniques used by scientists to discover the causes of the ice ages.
- **C.** describe the evidence for and against one particular theory about the causes of the ice ages.
- **D.** defend the practical relevance of discovering the causes of ancient climate change.

32. According to the passage, the causes of the ice ages are mysterious partly because:

F. geological evidence about ice formation is nonexistent.
G. precise data about historically distant atmospheric changes are sometimes impossible to obtain.
H. Earth is currently in an interglacial period, making research on ice formation difficult.
J. the processes by which mountains are formed aren't fully understood.

33. According to the passage, which of the following events occurred last chronologically?

A. Glaciers overran Greenland.
B. Ice sheets invaded Europe.
C. Antarctica was buried under ice.
D. Earth started to cool.

34. According to the passage, the feature of the Himalayas that makes Raymo's theory of the cause of the ice ages both appealing and problematic is the mountains':

F. sheer size.
G. formation by tectonic collisions.
H. age.
J. geographical location.

35. The passage indicates that, compared to the immediate pre-Cenozoic period, the present temperature of Earth is:

A. much cooler.
B. slightly cooler.
C. unchanged.
D. slightly warmer.

36. The passage states that which of the following occurs during an interglacial period?

F. Existing glaciers recede.
G. New glaciers begin to form.
H. Old glaciers grow rapidly.
J. Glaciers remain unchanged.

37. The passage states that most researchers studying the causes of the ice ages agree on which of the following points?

A. The rise of the Himalayas was responsible for the onset of the Cenozoic Ice Age.
B. The cause of the Cenozoic Ice Age will shortly be well understood thanks to new data.
C. More recent glaciations in the Northern Hemisphere were caused by changes in Earth's orbit.
D. A drop in the level of atmospheric carbon dioxide led to the cooling of the planet.

38. The passage indicates that changes in Earth's orbit do not provide a complete explanation of Northern Hemisphere glaciations because:

F. the timing of these changes does not match the timing of the retreats and advances of glaciers.
G. these changes affect the distribution of sunlight rather than its intensity.
H. the nature and extent of these changes is not yet fully understood.
J. these changes are too small in degree to affect glaciations profoundly.

39. As it is used in line 79, the phrase *cold, hard data* most nearly means data that would be:

A. extracted from cylinders of ice.
B. clearly supportive of one theory.
C. reliable and accurate.
D. relevant to discovering how mountains form.

40. It can most reasonably be inferred from the passage that Winograd thinks a simple explanation of the causes of the ice ages:

F. has already emerged.
G. is about to emerge.
H. is unlikely to emerge.
J. will emerge within his lifetime.

END OF TEST 3

STOP! DO NOT TURN THE PAGE UNTIL TOLD TO DO SO.

DO NOT RETURN TO A PREVIOUS TEST.