

## READING TEST

35 Minutes—40 Questions

**DIRECTIONS:** There are several passages in this test. Each passage is accompanied 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

**LITERARY NARRATIVE:** Passage A is adapted from an essay by Marita Golden. Passage B is adapted from an essay by Larry L. King. Both essays are from the book *Three Minutes or Less: Life Lessons from America's Greatest Writers* (©2000 by The PEN/Faulkner Foundation).

## Passage A by Marita Golden

Writers are always headed or looking for home. Home is the first sentence, questing into the craggy terrain of imagination. Home is the final sentence, polished, perfected, nailed down. I am an American writer, and so my sense of place is fluid, ever shifting. The spaciousness of this land reigns and pushes against the borders of self-censorship and hesitation. I have claimed at one point or other everywhere as my home.

Like their creator, my fictional characters reject the notion of life lived on automatic pilot. The most important people in my books see life as a flame, something that when lived properly bristles and squirms, even as it glows. In the autobiography *Migrations of the Heart*, the heroine, who just happened to be me, came of age in Washington, D.C., and began the process of becoming an adult person everywhere else. If you sell your first piece of writing in Manhattan, give birth to your only child in Lagos, experience Paris in the spring with someone you love, and return to Washington after thirteen years of self-imposed exile to write the Washington novel nobody else had (and you thought you never would), tickets, visas, *lingua franca* will all become irrelevant. When all places fingerprint the soul, which grasp is judged to be the strongest? In my novel *A Woman's Place*, one woman leaves America to join a liberation struggle in Africa. In *Long Distance Life*, Naomi Johnson flees 1930s North Carolina and comes up south to Washington, D.C., to find and make her way. Thirty years later her daughter returns to that complex, unpredictable geography and is sculpted like some unexpected work of art by the civil-rights movement.

I am a Washington writer, who keeps one bag in the closet packed, just in case. I am an American, who knows the true color of the nation's culture and its heart, a stubborn, wrenching, rainbow. I am Africa's yearning stepchild, unforgotten, misunderstood, necessary. Writers are always headed or looking for home. The best of us embrace and rename it when we get there.

## Passage B by Larry L. King

If you live long enough, and I have, your sense of place or your place becomes illusionary. In a changing world, our special places are not exempt. The rural Texas where I grew up in the 1930s and 1940s simply does not exist anymore. It exists only in memory or on pages or stages where a few of us have attempted to lock it in against the ravages of time. And it is, of course, a losing battle. Attempting to rhyme my word of an earlier Texas, with the realities of today's urban tangle Texas, I sometimes feel that I am writing about pharaohs.

My friend Larry McMurtry a few years ago stirred up a Texas tornado with an essay in which he charged that Texas writers stubbornly insist on writing of old Texas, the Texas of myth and legend, while shirking our responsibilities to write of the complexities of modern Texas. Hardly had the anguished cries of the wounded faded away on the Texas wind, until Mr. McMurtry himself delivered a novel called *Lonesome Dove*, cracking good yarn, if a bit long on cowboy myths and frontier legends. And decidedly short of skyscraper observations or solutions to urban riddles. But not only did Larry McMurtry have a perfect right to change his mind, I'm delighted that he did.

I spent my formative years in Texas, my first seventeen years, before random relocation arranged by the U.S. Army. Uncle Sam sent me to Queens. I must admit, Queens failed to grow on me. But from it I discovered Manhattan, which did grow on me, and I vowed to return to Manhattan. And one day did. But before that, in 1954, at the age of twenty-five, I came to Washington, D.C., to work in Congress.

New York and Washington offered themselves as measuring sticks against the only world I had previously known. They permitted me to look at my natural habitat with fresh eyes and even spurred me to leave my native place. I have now tarried here in what I call the misty East for almost forty years. This has sometimes led to a confusion of place. I strangely feel like a Texan in New York and Washington, but when I return home to Texas, I feel like a New Yorker or a Washingtonian. So if my native place has been guilty of change, then so have I. Yet when I set out to write there is little of ambivalence. The story speaks patterns, and values that pop out are from an earlier time and of my original

85 place. I fancy myself a guide to the recent past. In an age when the past seems not much value, I think that is not a bad function for the writer.

Questions 1–3 ask about Passage A.

1. According to Passage A, for the author of the passage, being an American writer means that her sense of place is:
  - A. deeply personal.
  - B. constantly shifting.
  - C. tied to her family.
  - D. somewhat irrelevant.
2. Which of the following statements regarding the passage author's Washington novel is best supported by Passage A?
  - F. She wrote the novel about people she met while traveling.
  - G. She could not finish writing it.
  - H. She patterned it after other novels about Washington, DC.
  - J. She thought that she would never write it.
3. Based on how she presents herself in the third paragraph (lines 32–39), the author of Passage A can best be described as someone who:
  - A. overcame many obstacles before achieving success.
  - B. embraces the various elements of her identity.
  - C. gets inspiration from people and everyday things.
  - D. found a place to live that suits her personality.

Questions 4–7 ask about Passage B.

4. The "losing battle" in line 47 of Passage B most nearly refers to the passage author's efforts to:
  - F. inspire a new generation of Texas authors to write about their home state.
  - G. understand the lives of those who lived in 1930s and 1940s rural Texas.
  - H. preserve 1930s and 1940s rural Texas through his writing.
  - J. find new ways to write about his childhood.
5. In the context of Passage B, when the passage author states, "I sometimes feel that I am writing about pharaohs" (lines 49–50), he most nearly means that he feels as if he is writing about:
  - A. a well-known subject.
  - B. an influential time period.
  - C. powerful tyrants.
  - D. the distant past.
6. Based on Passage B, McMurtry's comment that Texas authors write about old Texas too much was received with what can best be described as:
  - F. ambivalence; several writers had already written books that followed McMurtry's suggestion.
  - G. indignation; most writers thought McMurtry was a hypocrite because of *Lonesome Dove*.
  - H. displeasure; many writers openly disagreed with McMurtry's suggestion.
  - J. surprise; many writers didn't know that McMurtry cared about Texas literature.
7. As it is used in line 85, the word *fancy* most nearly means:
  - A. consider.
  - B. theorize.
  - C. enjoy.
  - D. favor.

Questions 8–10 ask about both passages.

8. It can reasonably be inferred from the passages that, regarding its effect on their lives, both passage authors would agree that leaving their native places:
  - F. led to their deciding to move away permanently.
  - G. influenced them to write about visiting new places.
  - H. changed their perspectives about home.
  - J. showed them the value of family.
9. The passages most strongly indicate that in their various moves, both passage authors have:
  - A. resided in Washington, DC.
  - B. written novels while living in New York City.
  - C. relocated because of the military.
  - D. lived in places outside of the United States.
10. Which of the following statements best compares the concluding lines of the passages?
  - F. Both passages end with the authors describing how they see their roles as writers.
  - G. Both passages end with the authors emphasizing the importance that history has for writers.
  - H. The author of Passage A describes her characters, whereas the author of Passage B emphasizes the value of home.
  - J. The author of Passage A describes her approach to starting new books, whereas the author of Passage B explains why his sense of place is illusionary.

## Passage II

**SOCIAL SCIENCE:** This passage is adapted from the article "Management Secrets of the Grateful Dead" by Joshua Green (©2010 by The Atlantic Monthly Group).

Since the 1970s, the Grateful Dead has invited academic examination. Musicologists showed interest, although the band's sprawling repertoire and tendency to improvise posed a significant challenge. Engineers studied the band's sophisticated sound system, radical at the time but widely emulated today. Other disciplines have also found relevant elements of the band's history and cultural impact to be worth examining.

Oddly enough, the Dead's influence on the business world may turn out to be a significant part of its legacy. Without intending to—while intending, in fact, to do just the opposite—the band pioneered ideas and practices that were subsequently embraced by corporate America. One was to focus intensely on its most loyal fans. It established a telephone hotline to alert them to its touring schedule ahead of any public announcement, and reserved for them some of the best seats in the house, and capped the price of tickets, which the band distributed through its own mail-order house. If you lived in New York and wanted to see a show in Seattle, you didn't have to travel there to get tickets—and you could get really good tickets, without even camping out. "The Dead were masters of creating and delivering superior customer value," Barry Barnes, a business professor at Nova Southeastern University, in Florida, told me. Treating customers well may sound like common sense. But it represented a break from the top-down ethos of many organizations in the 1960s and 1970s. Only in the 1980s, faced with competition from Japan, did American CEOs and management theorists widely adopt a customer-first orientation.

As Barnes and other scholars note, the musicians who constituted the Dead were anything but naïve about their business. They incorporated early on, and established a board of directors (with a rotating CEO position) consisting of the band, road crew, and other members of the Dead organization. They founded a profitable merchandising division and, peace and love notwithstanding, did not hesitate to sue those who violated their copyrights. But they weren't greedy, and they adapted well. They famously permitted fans to tape their shows, ceding a major revenue source in potential record sales. According to Barnes, the decision was not entirely selfless: it reflected a shrewd assessment that tape sharing would widen their audience, a ban would be unenforceable, and anyone inclined to tape a show would probably spend money elsewhere, such as on merchandise or tickets. The Dead became one of the most profitable bands of all time.

It's precisely this flexibility that Barnes believes holds the greatest lesson for business—he calls it "strategic improvisation." It isn't hard to spot a few of its recent applications. Giving something away and earning money on the periphery is becoming the blue-

print for more and more companies doing business on the Internet. Today, everybody is *intensely* interested in understanding how communities form across distances, because that's what happens online.

Much of the talk about "Internet business models" presupposes that they are blindingly new and different. But the connection between the Internet and the Dead's business model was made years ago by the band's lyricist, John Perry Barlow, who became an Internet guru. In 1994, Barlow posited that in the information economy, "the best way to raise demand for your product is to give it away." As Barlow explained to me: "What people today are beginning to realize is what became obvious to us back then—the important correlation is the one between familiarity and value, not scarcity and value. Adam Smith taught that the scarcer you make something, the more valuable it becomes. In the physical world, that works beautifully. But we couldn't regulate [taping at] our shows, and you can't online. The Internet doesn't behave that way. But here's the thing: if I give my song away to 20 people, and they give it to 20 people, pretty soon everybody knows me, and my value as a creator is dramatically enhanced. That was the value proposition with the Dead." The Dead thrived for decades, in good times and bad. In a recession, Barnes says, strategic improvisation is more important than ever. "If you're going to survive an economic downturn, you better be able to turn on a dime," he says. "The Dead were exemplars." It can be only a matter of time until *Management Secrets of the Grateful Dead* or some similar title is flying off the shelves of airport bookstores everywhere.

11. One main idea of the passage is that the Grateful Dead:
  - A. used an innovative, recession-proof approach to business that other companies have learned from.
  - B. wouldn't have become financially successful if they hadn't used the Internet for marketing.
  - C. displayed a talent for songwriting that few other bands have matched.
  - D. organized the band in a way that mimicked the structure of Japanese companies.
12. The passage most strongly implies that one way Grateful Dead fans are similar to some Internet users is that the fans:
  - F. were willing to pay more for quality merchandise.
  - G. displayed a lack of generosity toward strangers.
  - H. formed communities across distances.
  - J. had diverse musical tastes.

13. The author includes quotations from Barnes and Barlow most likely in order to:
- A. illustrate that business leaders have implemented the Grateful Dead's methods.
  - B. provide expert support for the idea that the Grateful Dead used savvy business practices.
  - C. suggest that scholars find the band's history more instructive than that of other bands.
  - D. verify that the Grateful Dead were extremely naïve about running a business.
14. The passage indicates that one component of the Grateful Dead's business model was that the band:
- F. increased its fan base by giving away tickets and merchandise at performances.
  - G. discovered that a fan given something for free would buy other merchandise.
  - H. appointed one member as CEO to streamline decision making.
  - J. resisted significant change because being consistent produced financial stability.
15. What connection does Barlow make between the Grateful Dead's business model and Smith's teachings?
- A. By delaying the release of its music, the Grateful Dead illustrated Smith's teaching that scarcity decreases profits.
  - B. By successfully marketing its music on the Internet, the Grateful Dead disproved Smith's teaching that new markets should be entered cautiously.
  - C. By running its own company, the Grateful Dead exemplified Smith's teaching that controlling the image of a brand adds value.
  - D. By choosing to allow fans to share copies of its songs, the Grateful Dead acted counter to Smith's teaching that scarcity increases value.
16. The main point of the first paragraph is that various scholars have studied the Grateful Dead because:
- F. few bands have produced such an extensive catalog of music.
  - G. the band's fans found ways to make the band relevant to their own careers.
  - H. the band displayed rare qualities in a number of different areas.
  - J. the band's traditional approach to music made its members attractive subjects.
17. As it is used in line 5, the word *radical* most nearly means:
- A. dangerous.
  - B. revolutionary.
  - C. characteristic.
  - D. awesome.
18. Which of the following questions is directly answered by the passage?
- F. What aspect of the Grateful Dead's music most appeals to fans?
  - G. How did the Grateful Dead maintain contact with its fans?
  - H. Which businesses decided to ignore the Grateful Dead's strategies?
  - J. Why haven't more economists studied the Grateful Dead's success?
19. The passage indicates that the Grateful Dead "were masters of creating and delivering superior customer value" (lines 23–24) in part because they:
- A. reserved some of the best seats for loyal fans and capped the price of tickets.
  - B. copied methods displayed by successful Japanese corporations.
  - C. disguised but still used the top-down organizational strategy of many firms.
  - D. provided travel assistance for fans to see shows far from home.
20. According to the passage, American CEOs revised their approach to customers in the 1980s in response to:
- F. shareholder desire for reorganization.
  - G. incorporation by smaller, faster businesses.
  - H. demand for better value from customers.
  - J. increased competition from Japan.



### Passage III

**HUMANITIES:** This passage is adapted from the article "Out of Rembrandt's Shadow" by Matthew Gurewitsch (©2009 by Smithsonian Institution).

Telescopes trained on the night sky, astronomers observe the phenomenon of the binary star, which appears to the naked eye to be a single star but consists in fact of two, orbiting a common center of gravity. Sometimes, one star in the pair can so outshine the other that its companion may be detected only by the way its movement periodically alters the brightness of the greater one.

The binary stars we recognize in the firmament of art tend to be of equal brilliance: Raphael and Michelangelo, van Gogh and Gauguin, Picasso and Matisse. But the special case of an "invisible" companion is not unknown. Consider Jan Lievens, born in Leiden in western Holland on October 24, 1607, just 15 months after the birth of Rembrandt van Rijn, another Leiden native.

While the two were alive, admirers spoke of them in the same breath, and the comparisons were not always in Rembrandt's favor. After their deaths, Lievens dropped out of sight—for centuries. Though the artists took quite different paths, their biographies show many parallels. Both served apprenticeships in Amsterdam with the same master, returned to that city later in life and died there in their 60s. They knew each other, may have shared a studio in Leiden early on, definitely shared models and indeed modeled for each other. They painted on panels cut from the same oak tree, which suggests they made joint purchases of art supplies from the same vendor. They later showed the same unusual predilection for drawing on paper imported from the Far East.

The work the two produced in their early 20s in Leiden was not always easy to tell apart, and as time went on, many a superior Lievens was misattributed to Rembrandt. Quality aside, there are many reasons why one artist's star shines while another's fades. It mattered that Rembrandt spent virtually his entire career in one place, cultivating a single, highly personal style, whereas Lievens moved around, absorbing many different influences. Equally important, Rembrandt lent himself to the role of the lonely genius, a figure dear to the Romantics, whose preferences would shape the tastes of generations to come.

While Lievens' name will be new to many, his work may not be. The sumptuous biblical spectacular *The Feast of Esther*, for instance, was last sold, in 1952, as an early Rembrandt, and was long identified as such in 20th-century textbooks. It is one of more than 130 works featured in the current tour of the international retrospective "Jan Lievens: A Dutch Master Rediscovered."

The artworks, in so many genres, are hardly the works of an also-ran. "We've always seen Lievens

through the bright light of Rembrandt, as a pale reflection," says Arthur K. Wheelock Jr., curator of northern Baroque paintings at the National Gallery. "This show lets you embrace Lievens from beginning to end, to understand that this man has his own trajectory and that he wasn't always in the gravity pull of Rembrandt." Wheelock has been particularly struck by the muscularity and boldness of Lievens, which is in marked contrast to most Dutch painting of the time. "The approach is much rougher, much more aggressive," he says. "Lievens was not a shy guy with paint. He manipulates it, he scratches it. He gives it a really physical presence."

Lievens painted *The Feast of Esther* around 1625, about the time Rembrandt returned to Leiden. It is approximately four and a half by five and a half feet, with figures shown three-quarter length, close to the picture plane. (At that time, Rembrandt favored smaller formats.) At the luminous center of the composition, a pale Queen Esther points an accusing finger at Haman, the royal counselor. Her husband, the Persian King Ahasuerus, shares her light, his craggy face set off by a snowy turban and a mantle of gold brocade. Seen from behind, in shadowy profile, Haman is silhouetted against shimmering white drapery, his right hand flying up in dismay.

Silks, satins and brocades, elegant plumes and gemstones—details like these give Lievens ample scope to show off his flashy handling of his medium. Not for him the fastidious, enamel-smooth surfaces of the Leiden *Fijnschilders*—"fine painters," in whose meticulously rendered oils every brush stroke disappeared. Lievens reveled in the thickness of the paint and the way it could be shaped and scratched and swirled with a brush, even with the sharp end of a handle. This tactile quality is one of Rembrandt's hallmarks as well; there are now those who think he picked it up from Lievens.

21. The main purpose of the passage is to:

- A. argue that Lievens's artworks are superior to Rembrandt's and deserve to be shown in their own retrospective.
- B. bring Lievens out of obscurity by discussing him as both a peer of Rembrandt and an artist in his own right.
- C. criticize the art world's belated recognition of Rembrandt and Lievens as an artistic pair.
- D. illustrate the profound differences between Lievens's artistic training and Rembrandt's.

22. In the passage, both the author and Wheelock describe the effect that Rembrandt's popularity had on Lievens by:

- F. analyzing biographical similarities between the two artists.
- G. comparing Lievens's early work to his later work.
- H. personifying Lievens's painting style.
- J. using astronomy metaphors.

23. In the context of the passage, the main purpose of the first paragraph is to introduce:
- A. a scientific phenomenon that mirrors the relationship between Rembrandt and Lievens.
  - B. an exceptional painting by Lievens that was attributed to Rembrandt.
  - C. the innovative culture in which Rembrandt and Lievens lived.
  - D. a historical event that inspired both Rembrandt and Lievens.
24. The passage most nearly suggests that, in contrast to Rembrandt and Lievens, other artists who are considered members of artistic pairs have tended to:
- F. build their reputations by staying in just one city.
  - G. be underappreciated during their lifetimes.
  - H. achieve equal recognition in the art world.
  - J. have few biographical similarities.
25. In the context of the passage, the description of the subjects featured in the painting *The Feast of Esther* (lines 72–79) mainly serves to:
- A. provide an analogy for the tense relationship between Rembrandt and Lievens.
  - B. demonstrate how Lievens's art reflected Dutch political dynamics.
  - C. illustrate Lievens's bold painting style and attention to detail.
  - D. exemplify techniques common to Dutch painting of the time.
26. The passage indicates that Lievens's recognition in the art community declined most significantly at which of the following times?
- F. When Lievens returned to Amsterdam
  - G. While Lievens was painting *The Feast of Esther*
  - H. When Rembrandt returned to Leiden
  - J. After Rembrandt and Lievens died
27. The passage most strongly suggests that Lievens might have attained more recognition if he had painted:
- A. in collaboration with other artists.
  - B. more historical subjects.
  - C. in one specific style.
  - D. in smaller formats.
28. The passage indicates that Rembrandt appealed to the Romantics because:
- F. he fit their ideal of the lonely and brilliant artist.
  - G. he traveled widely and absorbed many influences.
  - H. his artwork featured scenes of courtship and love.
  - J. his artwork shaped the tastes of later generations.
29. The fact that *The Feast of Esther* was misidentified as an early Rembrandt painting is most directly used in the passage to support the author's claim that Lievens's work:
- A. is considered by modern art critics to be inferior to Rembrandt's.
  - B. peaked in quality during Lievens's early adulthood.
  - C. may be familiar to some even though Lievens's name is not.
  - D. can be difficult for art exhibitors to obtain.
30. The last sentence of the passage most nearly serves to:
- F. summarize the passage's arguments about why Lievens did not achieve lasting fame.
  - G. suggest that Lievens may have influenced Rembrandt artistically.
  - H. argue that Lievens and Rembrandt collaborated while they were in Leiden.
  - J. outline a controversy regarding the authenticity of some Rembrandt paintings.

## Passage IV

**NATURAL SCIENCE:** This passage is adapted from the article "Call of the Leviathan" by Eric Wagner (©2011 by Smithsonian Institution).

In 1839, in the first scientific treatise on the sperm whale, Thomas Beale, a surgeon aboard a whaler, wrote that it was "one of the most noiseless of marine animals." While they do not sing elaborate songs, like humpbacks or belugas, in fact they are not silent. Whalers in the 1800s spoke of hearing loud knocking, almost like hammering on a ship's hull, whenever sperm whales were present. Only in 1957 did two scientists from the Woods Hole Oceanographic Institution confirm the sailors' observations. Aboard a research vessel, the *Atlantis*, they approached five sperm whales, shut off the ship's motors and listened with an underwater receiver. At first, they assumed the "muffled, smashing noise" they heard came from somewhere on the ship. Then they determined the sounds were coming from the whales.

Biologists now believe that the sperm whale's massive head functions like a powerful telegraph machine, emitting pulses of sound in distinct patterns. At the front of the head are the spermaceti organ, a cavity that contains the bulk of the whale's spermaceti, and a mass of oil-saturated fatty tissue. Two long nasal passages branch away from the bony nares of the skull, twining around the spermaceti organ and the fatty tissue. The left nasal passage runs directly to the blowhole at the top of the whale's head. But the other twists and turns, flattens and broadens, forming a number of air-filled sacs capable of reflecting sound. Near the front of the head sit a pair of clappers called "monkey lips."

Sound generation is a complex process. To make its clicking sounds, a whale forces air through the right nasal passage to the monkey lips, which clap shut. The resulting *click!* bounces off one air-filled sac and travels back through the spermaceti organ to another sac nestled against the skull. From there, the click is sent forward, through the fatty tissue, and amplified out into the watery world. Sperm whales may be able to manipulate the shape of both the spermaceti organ and the fatty tissue, possibly allowing them to aim their clicks.

Biologist Dr. Hal Whitehead has identified four patterns of clicks. The most common clicks are used for long-range sonar. So-called "creaks" sound like a squeaky door and are used at close range when prey capture is imminent. "Slow clicks" are made only by large males, but no one knows precisely what they signify. ("Probably something to do with mating," Whitehead guesses.) Finally, "codas" are distinct patterns of clicks most often heard when whales are socializing.

Codas are of particular interest. Whitehead has found that different groups of sperm whales, called vocal clans, consistently use different sets; the reper-

toire of codas the clan uses is its dialect. Vocal clans can be huge—thousands of individuals spread out over thousands of miles of ocean. Clan members are not necessarily related. Rather, many smaller, durable matrilineal units make up clans, and different clans have their own specific ways of behaving.

A recent study in *Animal Behaviour* took the specialization of codas a step further. Not only do clans use different codas, the authors argued, but the codas differ slightly among individuals. They could be, in effect, unique identifiers: names.

Whitehead cautions that a full understanding of codas is still a long way off. Even so, he believes the differences represent cultural variants among the clans. "Think of culture as information that is transmitted socially between groups," he says. "You can make predictions about where it will arise: in complex societies, richly modulated, among individuals that form self-contained communities." That sounds to him a lot like sperm whale society.

But most of a sperm whale's clicking, if not most of its life, is devoted to one thing: finding food. And in the Sea of Cortez, the focus of its attention is *Dosidicus gigas*, the jumbo squid.

The most celebrated natural antagonism between sperm whales and squid almost certainly involves the jumbo squid's larger cousin, the giant squid, a species that grows to 65 feet long. The relationship between sperm whales and squid is pretty dramatic. A single sperm whale can eat more than one ton of squid per day. They do eat giant squid on occasion, but most of what whales pursue is relatively small and over-matched. With their clicks, sperm whales can detect a squid less than a foot long more than a mile away, and schools of squid from even farther away. But the way that sperm whales find squid was until recently a puzzle.

31. The main purpose of the passage is to:

- A. describe how sperm whales use clicks to hunt their prey.
- B. evaluate historical theories regarding sperm whale clicks.
- C. provide details about the antagonism between sperm whales and squid.
- D. explain how sperm whales generate and use clicks.

32. In the eighth paragraph (lines 74–77), the passage begins to focus on the relationship between:

- F. squid and their prey.
- G. sperm whales and sonar.
- H. sperm whales and codas.
- J. squid and sperm whales.

33. The main purpose of the second paragraph (lines 17–30) is to:
- A. compare sperm whales to telegraph machines.
  - B. explain the function of the spermaceti organ.
  - C. outline how scientists came to understand the anatomy of the sperm whale.
  - D. describe the sperm whale anatomy involved in creating sound.
34. It can reasonably be inferred from the passage that codas are of particular interest because scientists don't yet fully understand:
- F. how codas help sperm whales hunt.
  - G. how codas function in sperm whale socialization.
  - H. why codas are emitted only by male whales.
  - J. why codas are so difficult to detect.
35. As it is presented in the passage, the study that appeared in *Animal Behaviour* concluded that sperm whale vocal clans:
- A. each use a distinct dialect, and individuals within each clan have unique codas.
  - B. can adopt the codas of other clans, but individuals within each clan maintain unique dialects.
  - C. each use many dialects, and individuals within each clan develop complex codas.
  - D. can adopt the codas of other clans, but individuals within each clan retain unique identifiers.
36. The passage indicates that compared to the sounds beluga whales and humpback whales make, the sounds sperm whales make are:
- F. more complex and varied.
  - G. more frequent and melodic.
  - H. less elaborate and songlike.
  - J. less enigmatic and repetitive.
37. According to the passage, who confirmed the observation that sperm whales make loud knocking noises?
- A. Beale
  - B. Nineteenth-century whalers
  - C. Woods Hole scientists
  - D. Whitehead
38. As it is used in line 25, the word *runs* most nearly means:
- F. acts.
  - G. hastens.
  - H. operates.
  - J. leads.
39. Based on the passage, the notion that slow clicks are related to sperm whale mating behavior is best described as a:
- A. fact that is supported by several scientific studies.
  - B. fact that whalers discovered in the 1800s.
  - C. reasoned judgment from an expert in biology.
  - D. reasoned judgment from the passage author.
40. Which of the following statements about the mystery of how sperm whales locate squid is best supported by the passage?
- F. The mystery was solved in the 1800s.
  - G. The mystery was solved recently.
  - H. The mystery is likely to be solved in the near future.
  - J. The mystery is likely to remain unsolved until better technology is invented.

**END OF TEST 3**

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

**DO NOT RETURN TO A PREVIOUS TEST.**



# December 2016 ACT Test answers

## Reading

1. B	11. A	21. B	31. D
2. J	12. H	22. J	32. J
3. B	13. B	23. A	33. D
4. H	14. G	24. H	34. G
5. D	15. D	25. C	35. A
6. H	16. H	26. J	36. H
7. A	17. B	27. C	37. C
8. H	18. G	28. F	38. J
9. A	19. A	29. C	39. C
10. F	20. J	30. G	40. G