

4 Test Content

Sample Passage I

PROSE FICTION: This passage is adapted from the short story "The Boy on the Train" by Arthur Robinson (©1988 by Arthur Robinson).

In 1891, at the age of five, Lewis Barber Fletcher traveled alone from Jacksonville, Florida, to the little town of Camden, thirty-one miles northwest of Utica, in upstate New York. Fifty years later, his wife, children, and friends heard about his trip for the first time when this item appeared on the editorial page of the *Utica Daily Press* under a standing head, "50 Years Ago Today in the Press": "Lewis B. Fletcher, 5, arrived in Utica yesterday on a New York Central train on his way to join his mother in Camden. He was traveling alone from Jacksonville, Florida." A friend spotted the item and phoned Mrs. Fletcher, who called her husband at his office and read it to him. She had to read it twice before he got it straight; he was hard of hearing and even with an amplifying device on his telephone often had trouble understanding, mostly because he became tense when he had to use it. When he understood what she had read him, he gave an embarrassed "Ha!" and said he had forgotten about the trip. There was no further discussion—he disliked talking about personal matters at his office, possibly suspecting that all work stopped while the help listened for material for gossip. When he came home that evening, he had already read the item at work, clipped it, stuck it in his billfold, and developed an attitude toward it—a sort of amused, self-conscious pride that seemed to say yes, he had traveled nearly fourteen hundred miles by himself when he was five, with two changes of train, one of them involving a ferry from Jersey City to Manhattan, and had managed the whole thing, as he had everything else in his life, by strict application to business.

The item was a sort of one-day sensation. Two clippings were put away in a photograph album, and the subject was pretty much forgotten. Sarah, the youngest child, occasionally resurrected it when the family was together at Christmas, or, in later years, during vacations at the elder Fletchers' place outside Utica. In the evening, when their parents had gone to bed and the children stayed up talking, Sarah might say in a reverential tone, "Can you imagine him traveling alone from Jacksonville to Camden when he was five?" The two others—Howard, the oldest, and Edward—would say they could imagine it, that it was the easiest thing in the world to imagine. The picture they'd then conjure up was of a five-year-old old man with white hair, steel-rimmed bifocals, and a hearing aid that he kept turned off to save the flat, half-pint-shaped battery.

Edward did wonder that his father seemed to have forgotten about a trip that should have been a momentous experience for a five-year-old. He decided that his father may have felt there was something shameful about it and the shame had caused him to repress the memory. The children were dimly aware that their paternal grandparents had separated in Jacksonville and were later divorced, and that their grandmother had

brought up Lewis and Reginald in Camden, but they didn't know any details. What Edward learned later was that right after the separation their grandmother had returned to Camden with Reginald, leaving Lewis with their grandfather. The grandfather, who wasn't much good, had apparently decided he didn't want Lewis and had put him on a train for the two-day trip to his mother's. It was not an amusing picture: a five-year-old had been left behind by his mother and then sent off alone by his father—abandoned by one, rejected by the other. Edward would try to imagine him without white hair, hearing aid, or steel-rimmed bifocals, a small boy with brown hair and a grave face, being taken to the train by his father, so dumb with misery and fright that he couldn't cry, knowing only that he was going somewhere out there into unknown space.

Edward went over the trip from time to time, adding details, trying to get inside the boy to experience his anxiety and despair and very likely his distrust of people on the train, whose brief, unctuous kindnesses betrayed their fear of ending up with him on their hands.

This was the image of his father that could move Edward, and it seemed to bear no relation to the anxiety-ridden old man in his early forties who sat all evening with a *Saturday Evening Post* in his lap, his hands clasped over his stomach and his thumbs revolving first one way and then the other while he went over and over whatever was worrying him.

1. In what year did Lewis Barber Fletcher's wife and friends first hear about his momentous train trip?
 - A. 1891
 - B. 1896
 - C. 1941
 - D. 1946
2. Lewis Barber Fletcher's children, listed from oldest to youngest, are:
 - F. Sarah, Howard, and Edward.
 - G. Sarah, Edward, and Howard.
 - H. Howard, Sarah, and Edward.
 - J. Howard, Edward, and Sarah.

3. The person responsible for informing the Fletcher family about the trip Lewis Barber Fletcher had taken in 1891 was:
 - A. an unnamed friend of the family.
 - B. a client of Lewis Barber Fletcher.
 - C. a friend's daughter by the name of Sarah.
 - D. the narrator of this story.

4. According to the passage, Lewis Barber Fletcher was:
 - F. abandoned by his mother and rejected by his father.
 - G. abandoned by his grandfather and rejected by his mother.
 - H. abandoned by his grandmother and rejected by his mother.
 - J. rejected by his grandfather and his father.

5. It was Edward's father's habit, when nervous, to:
 - A. turn off his hearing aid.
 - B. be shamed by bad memories.
 - C. look at newspaper clippings.
 - D. twiddle his thumbs.

6. As it is used in lines 39–40, the word *reverential* most nearly means:
 - F. very loud.
 - G. inaudible.
 - H. amused.
 - J. awed.

7. One of the main points of the second paragraph (lines 32–47) is that:
 - A. everyone found Lewis Barber Fletcher's trip very amusing and they mentioned it frequently.
 - B. Howard and Edward found Lewis Barber Fletcher's trip to be fascinating and easy to reconstruct.
 - C. the Fletcher children found it hard to imagine their father as a little child.
 - D. Lewis Barber Fletcher looked exactly the same as an old man as he had as a child.

8. It is implied in the fourth paragraph (lines 72–77) that the people Lewis Barber Fletcher met on the train who appeared to be quite kind:
 - F. were not trustworthy at all.
 - G. were not, perhaps, as kind as they seemed.
 - H. were themselves quite sad.
 - J. actually found Lewis to be quite charming.

9. The passage implies that most of the things Lewis Barber Fletcher did in his life were:
 - A. extremely unusual and challenging.
 - B. personally quite painful for him.
 - C. done in a businesslike manner.
 - D. material for gossip at his office.

10. When Edward tried to imagine what his father had been like as a child, the most moving image depicted his father as being:
 - F. businesslike but sad.
 - G. trusting yet nervous.
 - H. untrusting and anxious.
 - J. suspicious and angry.

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Sample Passage II

PROSE FICTION: This passage is adapted from Milan Kundera's novel *The Book of Laughter and Forgetting* (©1980 by Alfred A. Knopf, Inc.). This story takes place in 1968 in what was then known as Czechoslovakia.

Soon after the Russians occupied my country in 1968, I lost the privilege of working. No one was allowed to hire me. At about that time some young friends started paying me regular visits. They were so young that the Russians did not have them on their lists yet and they could remain in editorial offices, schools, and film studios. These fine young friends, whom I will never betray, suggested I use their names as a cover for writing radio and television scripts, plays, articles, columns, film treatments—anything to earn a living. I accepted a few of their offers, but most I turned down. I couldn't have gotten to them all, for one thing, and then too, it was dangerous. Not for me, for them. The secret police wanted to starve us out, cut off all means of support, force us to capitulate and make public confessions. They kept their eyes out for all the pitiful little escape routes we used to avoid encirclement, and they meted out severe punishments to the friends who gave me their names.

One of those generous donors was a girl by the name of R. Shy, delicate, and intelligent, she was an editor of an illustrated weekly for young people with a huge circulation. Since at the time the magazine was obliged to print an incredible amount of undigested political claptrap glorifying our brothers the Russians, the editors were constantly looking for something to attract the attention of the crowd. Finally they decided to make an exception and violate the purity of Marxist ideology with an astrology column.

When R. asked me to do an astrology column for her magazine under a pseudonym, I was delighted, of course, and I instructed her to explain to the editorial board that the texts would be written by an important nuclear physicist who had requested her not to divulge his name for fear his colleagues would laugh at him. That seemed to give our undertaking a double cover: a nonexistent scientist and his pseudonym.

Which is how, under an assumed name, I came to write a fine, long introductory article on astrology and short, rather silly monthly texts for individual signs, accompanying the latter with my own drawings of Taurus, Aries, Virgo, Pisces. The pay was miserable, the job itself not particularly amusing or remarkable. The only amusing part of it was my existence, the existence of a man erased from history, literary reference books, even the telephone book, a corpse brought back to life in the amazing reincarnation of a preacher sermonizing hundreds of thousands of young socialists on the great truths of astrology.

One day R. announced to me that the editor-in-chief was all excited about his astrologer and wanted a personal horoscope from him. That fascinated me. The editor-in-chief owed his job at the magazine entirely to

the Russians. He had spent half his life taking Marxism-Leninism courses in Prague and Moscow both!

"He was a little ashamed to tell me," laughed R. "He certainly wouldn't want it to get around he believed in medieval superstitions or anything. He just can't help himself."

"Fine, fine," I said. I was happy. I knew the man well. Besides being R.'s boss, he was a member of the highest Party committee dealing with hiring and firing, and he had ruined the lives of many of my friends.

"He wants complete anonymity. All I'm supposed to give you is his date of birth. You have no idea who he is."

"Even better." That was just what I wanted to hear.

"He says he'll give you a hundred crowns."

"A hundred crowns?" I laughed. "Who does he take me for, the cheapskate!"

He sent me a thousand crowns. I filled ten pages with a description of his character and future. I spent a whole week on the opus and consulted regularly with R. After all, a horoscope can greatly influence, even dictate, the way people act. It can recommend they do certain things, warn them against doing others, and bring them to their knees by hinting at future disasters.

R. and I had a good laugh over it later. She claimed he had improved. He yelled less. He had begun to have qualms about his hardheadedness—his horoscope warned against it. He made as much as he could out of the speck of kindness left in him, and staring out into nothingness, his eyes would show signs of sadness, the sadness of a man who has come to realize that the stars hold nothing but suffering in store for him.

11. According to the first paragraph, some of the narrator's friends were especially important to him because:

- A. the use of their names enabled the narrator to make a living.
- B. they told him all he needed to know about the editor-in-chief.
- C. they kept him informed of the clandestine movements of the secret police.
- D. they took the time to discuss events of intellectual import with the narrator.

12. It can reasonably be inferred from the passage that the narrator worked very carefully on the editor-in-chief's horoscope because the narrator:
- F. wanted to earn his thousand crowns fair and square.
 - G. hoped to affect the editor-in-chief's actions.
 - H. had always wanted to do the editor-in-chief a favor.
 - J. did not want the editor-in-chief to know he was a nuclear scientist.
13. It can reasonably be inferred from the passage that a true Marxist would view astrology as:
- A. a scientific method.
 - B. a tool for predicting events.
 - C. a foolish superstition.
 - D. an interesting ideology.
14. When the narrator asserts that "a horoscope can greatly influence, even dictate, the way people act" (lines 75-76), he means that to some people a horoscope:
- F. indicates to them how they should act.
 - G. forces them to change their personalities completely.
 - H. enables them to be more creative.
 - J. causes behavioral changes to subside.
15. According to the passage, prior to beginning his astrological column, the narrator knew that the editor-in-chief had:
- A. ruined the lives of many of his friends.
 - B. been teaching classes in Marxism in Prague.
 - C. held a deep and abiding interest in astrology.
 - D. been a member of the secret police.
16. According to the passage, the narrator's monthly articles about individual astrological signs are best characterized as:
- F. ludicrous but financially richly rewarding.
 - G. quite remarkable in terms of their literary style.
 - H. silly and insignificant yet very popular.
 - J. very popular with his audience and intellectually stimulating.
17. According to the passage, the methods employed by the secret police involved which of the following?
- I. Surveillance
 - II. Isolation
 - III. Execution
- A. I only
 - B. II only
 - C. I and II only
 - D. II and III only
18. According to the passage, including an astrology column in a Marxist magazine would be:
- F. an example of political claptrap.
 - G. in conformity with the purity of Marxist ideology.
 - H. a purification of Marxist journalistic practice.
 - J. inconsistent with pure Marxist ideology.
19. As he is depicted in the passage, the editor-in-chief is best described as a man who became:
- A. a good bit more cynical about astrological predictions.
 - B. more cheerful as he looked toward the future.
 - C. less easygoing than before but more professional overall.
 - D. much easier to work with but overall less happy.
20. The narrator was able to write a long and thorough horoscope for the editor-in-chief because he, the narrator, had:
- F. been well informed about the editor-in-chief's past.
 - G. spent a month producing that opus.
 - H. been certain that his horoscope could dictate future actions.
 - J. earned 1,000—and not 100—crowns for his work.

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Sample Passage III

SOCIAL SCIENCE: This passage is adapted from the article "Japan's Tansu: Cabinetry of the 18th and 19th Centuries" by Rosy Clarke (©1985 by W.R.C. Smith Publishing Company).

The Japanese, always pressed for room on their island empire, have long been masters at utilizing space. This is especially evident in the native handmade Japanese cabinetry known as *tansu*, produced from about 1750 to 1900. A prolific range of wooden *tansu* was created for a variety of needs, and a diverse group of pieces emerged, ranging from small, portable medicine chests to giant trunks on wheels.

Prior to Japan's Edo Period (1603–1867), ownership of furniture was limited to the nobility. Primarily, these were black-and-gold lacquered pieces of Chinese inspiration. But with the demise of Japan's feudal society and the rise of a moneyed merchant class by the mid-Edo Period, furniture in Japan took on its own personality, as craftsmen enjoyed the freedom to create original designs that combined function and beauty. Today, examples of these skillfully constructed chests tell us much about the lifestyle and accoutrements of people during the Edo Period and the Meiji Era (1868–1912).

The greatest demand was for clothing and merchants' chests; within these two categories, hundreds of stylistic variations occurred. Most clothing *tansu* were constructed with four long drawers for kimono storage and a small door compartment that opened to two or three tiny drawers for personal items. The chests were usually built in two pieces that stacked, a design that allowed for easy portability. A favorite wood used to build clothing *tansu* was paulownia, noted for its light weight and subtle, natural sheen. In the Edo Period, it was customary for Japanese fathers to plant a paulownia tree when a daughter was born. When she married, the tree was cut down and made into a trousseau chest.

Merchants' chests, used to store documents, writing brushes, inkstones and money, were usually constructed of thick zelkova or chestnut. Unlike clothing *tansu*, which were kept inside a sliding door closet in a home, a merchant's chest was in full view of customers. Thus, shop *tansu* was an important indicator of a shopkeeper's prosperity.

Some styles were surprisingly large, an example being the staircase *tansu*. Japanese homes and shops were often built with lofts, and for easy access from the ground floor, a freestanding staircase was designed by clever craftsmen who incorporated compartments and drawers throughout for maximum utility. Around six feet high, most staircase chests were made in two sections that stacked, though many one-piece chests were also produced. Because of the great amount of wood needed to build a staircase *tansu*, steps, risers and case were made of softwood, and hardwood was used for doors and drawer fronts.

Many households, especially rural homes, kept large kitchen *tansu* to store food and crockery. The wood of these practical kitchen chests was rarely finished, and those in original condition show a lovely natural patina developed from years of exposure to the smoke and heat of the cooking area. Kitchen *tansu* were designed strictly for utility with sliding door compartments, inner shelves and numerous small drawers. Like staircase *tansu*, they display a minimum of ironwork and rarely show locking drawers or doors.

After 1900, modern techniques replaced the original handcrafted construction methods. Sand-cast iron handles, for example, are common on furniture made from about 1890 to 1920. Traditional designs—dragons, cherry blossoms and mythical personalities—that were once etched by hand onto lock plates became simplified as machine-pressed patterns appeared. Thick pieces of wood originally used became thinner around 1900, when improved wood planing techniques resulted in mass-produced *tansu* of diminished quality. And the amazing range of handproduced, naturally pigmented lacquer finishes that hallmarked earlier *tansu* all but disappeared by about 1920. With rapid industrialization at hand, many of Japan's artisans abandoned their traditional crafts.

Appreciated today for their beauty, simplicity and functionality, *tansu* are now showing up in homes in America and Europe. But relatively few exceptional examples of the thousands produced now remain. Those pieces available document a special part of Japanese history and culture as well as the remarkable sense of space and design of Japan's unknown craftsmen.

21. The author states that the result of mass production techniques on the *tansu* was:
- A. diminished quality.
 - B. thicker pieces of wood.
 - C. renewed popularity.
 - D. greater variety.
22. The passage states that although handmade *tansu* were designed and used for many purposes, most were:
- F. fancy black-and-gold finished pieces.
 - G. kitchen cabinets.
 - H. clothing and merchants' chests.
 - J. staircase chests.

23. According to the passage, the original popularity of tansu resulted primarily from the:
- A. desire to display clothing and other personal items.
 - B. need to make good use of space.
 - C. need to disguise a merchant's wealth.
 - D. desire to be different from the Chinese.
24. According to the passage, modern production methods caused which of the following changes in the tansu?
- I. Sand-cast iron handles
 - II. Simplification of traditional designs
 - III. Thinner wood
- F. II only
 - G. III only
 - H. I and II only
 - J. I, II, and III
25. As it is used in the passage, the word *patina* (line 58) most nearly means the:
- A. design carved in the wood of the chests.
 - B. original finish applied to the chest.
 - C. destruction of the wood by smoke and heat.
 - D. surface appearance of the wood.
26. The author claims that by studying examples of hand-crafted Japanese tansu that are still available today, scholars can learn about which of the following?
- I. How mass production first began in Japan
 - II. How Japanese industrialists developed short-cuts in building furniture
 - III. How the Japanese lived during the Edo Period and the Meiji Era
- F. II only
 - G. III only
 - H. I and II only
 - J. I, II, and III
27. According to the account of tansu-making in the passage, improved wood-planing techniques resulted in:
- A. a need to change the types of wood used.
 - B. the need to apply thicker wood finishes.
 - C. the use of thinner wood.
 - D. a renewed interest in black-and-gold lacquered finishes.
28. The passage suggests that the Japanese tansu had changed by the mid-Edo Period in which of the following ways?
- F. It reflected increased creative freedom of the craftsmen.
 - G. It became a symbol of status and wealth for the nobility.
 - H. It became less important to the merchant class.
 - J. It became much larger.
29. According to the passage, the Chinese influence on Japanese furniture-making is reflected in which of the following characteristics of some Japanese furniture?
- I. The use of space
 - II. The black and gold lacquer
 - III. The use of paulownia wood
- A. II only
 - B. III only
 - C. I and II only
 - D. I, II, and III
30. The passage indicates about tansu that they were:
- I. used for aesthetic purposes only.
 - II. indicative of financial status.
 - III. hidden from view because they held important documents.
- F. I only
 - G. II only
 - H. I and II only
 - J. II and III only

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Sample Passage IV

NATURAL SCIENCE: This passage is adapted from the article "Probing the Cycle of Sleeping and Waking" by Edmund L. Andrews (©1990 by The New York Times).

It looks like a typical power plant control room, complete with back issues of Nuclear Engineering magazine. Operators sit at a console, studying computer screens that display ever-changing plant indicators. The lights are low, the sotto voce chatter is mostly technical and the computer hum is often the loudest sound in the room.

But there is one big difference here: This control center is designed to monitor the technicians, not the other way around. Each worker wears electrodes taped to his or her scalp, the outside corner of each eye and to their chins, to catch them if they fall asleep. If workers get drowsy, nearby recording equipment will log their sluggish brainwaves and their logy eye movements.

When they finish their shift, the workers will walk through a door into a cozy compartment featuring a living room, an eating area, a kitchenette and bedrooms. Only two features are unusual: The video cameras over each bed and the absence of any windows or outside sound. Some of these workers spend weeks without seeing daylight.

Welcome to the world of circadian research, the inquiry into the rhythms of sleep and wakefulness. Why do a disproportionate number of crashes, explosions, derailments and other debacles of human error occur in the wee hours of the morning? How can workers on rotating shifts lead lives that are less miserable and more productive? Is there a cure for jet lag?

Circadian researchers argue that the answers lie in the biological pacemakers that regulate the daily cycles of human activity. They believe that a person's daily rhythms are controlled in large part by a small cluster of brain cells called the superchiasmatic nucleus. Located above the nerves linking the eye with the brain, these cells are believed to help synchronize cyclical changes in body temperatures, hormone rhythms and sleep-wake cycles. By understanding these natural clocks, they say, it is possible to devise better strategies for the armies of people who must contend with a 24-hour world.

"People who work shifts have special problems," said David Hayward, manager of an electrical generation and transmission control facility. "They have social problems and physical problems. If you have a better understanding of why these things occur, you can do something about it, and you're going to have better workers."

A growing body of research documents the toll such schedules can take. A study by the Battelle Memorial Institute, for example, found that more than 60 percent of accidents in nuclear plants occur during

night shifts. The accidents at Three Mile Island and Chernobyl, as well as the Bhopal chemical plant explosion in India, all took place during pre-dawn hours.

"We've created a world which now operates around the clock, but people still have a 9-to-5 mentality," said Dr. Martin Moore-Ede, founder of the Institute for Circadian Physiology. "Seventy to eighty percent of people who work night shifts will admit to falling asleep on the job. They'll fall asleep in airline cockpits. They'll fall asleep in nuclear power plant control rooms. They'll fall asleep in oil refineries, in hospitals and on board ships."

Circadian researchers argue that particular strategies can make it easier to reset the internal clocks. It turns out, for example, that adjusting to clockwise schedule rotations—from day shift to evening to night—is twice as fast as adjusting counterclockwise. Because the light signals of night and day are basic cues for the system, said Dr. Moore-Ede, travelers can use controlled exposure to light to adjust to new time zones within a few hours.

"Circadian rhythms also suggest that truck drivers might be better off with longer hours at different times," said Dr. Moore-Ede. Statistics indicate that accidents are correlated far more closely with the time of day than with the number of hours driven. But current law fosters the practice of driving at bad times, because truckers must stop for eight hours of rest after every ten hours of road time. "If, instead, truckers always started out at 7 A.M., and drove 14 hours," said Dr. Moore-Ede, "they could work the same schedule every day and would never have to drive during the deadly pre-dawn period." Yet they would cover the same number of total miles.

"Napping strategies" offer even additional possibilities. One emerging buzz phrase is "anchor sleep," designed to help workers who must constantly readjust to new schedules. The idea is to sleep one four-hour segment at the same time every day, and to catch the remaining rest in shorter increments when they are convenient. "Anchor hours," according to the institute, can keep a person on an even keel.

31. The passage suggests that which of the following incidents is(are) likely to be of considerable interest to circadian researchers?
- I. A nuclear power plant accident that occurs at 4 A.M. because of worker fatigue.
 - II. The closing of an automobile assembly line because of declining product demand.
 - III. A chemical plant explosion happening at 2 A.M. because of mistakes made by technicians on duty.
- A. III only
 - B. I and II only
 - C. I and III only
 - D. I, II, and III
32. According to the passage, researchers believe that a person's daily rhythms are mainly controlled by:
- F. circadian research.
 - G. the superchiasmatic nucleus.
 - H. sluggish brainwaves.
 - J. hormone rhythms.
33. According to the passage, napping strategies were developed to:
- A. assist workers who must often adjust to new schedules.
 - B. help those who work night shifts at power plants.
 - C. make four hours of sleep per day suffice for most workers.
 - D. allow workers to avoid clockwise shift rotations.
34. According to the information provided in the passage, circadian research is most accurately defined as being:
- F. the study of the frequency of night-shift accidents.
 - G. the regulation of a person's daily rhythms.
 - H. inquiry into the rhythms of sleep and wakefulness.
 - J. the study of how rotating shifts make workers more productive.
35. It seems reasonable to infer from the passage that the idea behind "anchor sleep" (line 87) is that:
- A. a person needs at least four hours of uninterrupted sleep daily.
 - B. four hours of sleep per day is all a person really needs.
 - C. when you sleep for more than four hours, you can avoid napping strategies.
 - D. it will suit perfectly those who work fixed schedules.
36. It can be reasonably inferred from the passage that which of the following is(are) approximately synonymous with the term *biological pacemakers* (line 30)?
- I. Natural clocks
 - II. Rotating shifts
 - III. Cyclical changes
 - IV. Anchor sleep
- F. I only
 - G. II only
 - H. I, II, and IV only
 - J. I, II, III, and IV
37. The passage suggests that solutions for reducing the accidents that occur in nuclear power plants may derive from:
- A. studying manufacturing plants during day shifts.
 - B. various federal regulations.
 - C. revising our notions of anchor sleep.
 - D. circadian research studies of plant workers.
38. One of the main observations made in the next-to-last paragraph (lines 73–85) is that:
- F. current law can be seen as encouraging truck drivers to drive at unsafe times.
 - G. truck drivers should work different hours every day.
 - H. truck drivers find it difficult to cover their required daily mileage.
 - J. the accidents truck drivers have occur when they've driven more than 14 hours.
39. It can reasonably be inferred from the passage that, if circadian researchers can reach a deep understanding of the body's natural clocks, then night-shift workers will:
- A. be able to obtain anchor sleep much more easily.
 - B. have exactly the same problems as day-shift workers.
 - C. have to learn to live without accidents.
 - D. be employed much more productively than previously.
40. The fourth paragraph (lines 22–28) poses several questions that, it can reasonably be inferred from the passage, might best be answered by:
- F. making sure that workers do not get drowsy.
 - G. referring to circadian researchers' work.
 - H. stabilizing each person's daily rhythms.
 - J. reducing worker misery and increasing worker productivity.

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Sample Passage V

NATURAL SCIENCE: This passage is adapted from Jonathan Evan Maslow's *The Owl Papers* (©1983 by Jonathan Maslow). In this selection, the term *ornithologists* refers to scientists who specialize in the study of birds.

The owl's astounding auditory powers are probably second to none among living things. If you spent a cold, dark, sleeting January afternoon standing in front of the Great Horned Owl cage at the Bronx Zoo, as I did recently, you couldn't fail to notice that listening, for the owl, is hardly a passive activity. Take this grand old Great Horned perched on the barkless diorama stump the zoo has provided it, staring right through me as if I didn't exist. The bird's head rarely remains still for more than a few seconds. It dips, bobs, swivels, cranes forward, stretches up, twists down, retreats into the neck, rather like a radar scanner constantly repositioning. I hear nothing but the falling sleet. The owl is picking up sounds humans can't hear—too faint, or out of our frequency range. In fact, aside from the eyes, beak, and mouth, a sound scanner is exactly what the owl's face is—a large saucer designed to transmit and amplify sound waves to the ears and brain. The rounded facial disks, which give the grand old Great Horned its appealing, semihuman appearance, are actually composed of short, stiff layers of feathers. These feathers, controlled by the facial muscles, are oriented to oncoming sound waves. The facial disks are bordered by a narrow trough, where the sound waves are caught, concentrated, and funneled to the ears, hidden behind the disks (the owl's horns are actually false ears, having nothing to do with hearing). Like human ears, the owl's ear has a pre-aural flap, the operculum. But in an improvement over man, the bird can move the flap forward or backward like a cowl, orienting the ear to the sound source. Again, the actual and relative size of the ears is enormous. In a species like the Barn Owl, the outer ear reaches from the top of the cranium all the way down to the lower jaw. The eardrums within are equally great.

For more than a century, anatomists have noted that owl ears are neither symmetrically placed on the skull nor of the same size. The left ear is generally larger, lower, and opens downward, while the right ear is smaller, higher on the skull, and opens upward. They are also set relatively far apart, since the facial disks are so large. These asymmetries cause sound waves to arrive a fraction of a second later at one ear than the other. The sound will thus be slightly louder in the ear nearer the sound source, and the two ears will receive slightly different tonal messages. Using this information for comparison, the owl triangulates to form a precise impression of the sound's point of origin.

There is still another specialization to owl's hearing, a rare one in nature: owls hear higher-frequency sounds better than the lower-pitched sounds made by their own voices. Almost all other animals hear their own tonal range best. One need not be too clever to guess which animals most consistently produce the high-pitched sounds owl ears are especially

sensitive to: mice, rats, shrews, voles, rabbits, and the whole host of squeakers the owl hunts. It seems likely that the owl developed this ability to hear rodents best solely to do in more squeakers. But what if the cunning mouse makes nary a peep? Observant naturalists have noted that dry spells in the weather are accompanied by a marked increase in the owl's nightly catch, as read in their pellets, while precipitation decreases hunting success. In very rainy weather, many owls apparently won't even attempt to hunt. When modern ornithologists took these observations into the lab, they analyzed sounds made by rodents scurrying through dry leaves. They found that important components of these rustling and crackling sounds are high-pitched in the very same frequency range owls hear most efficiently. Then they analyzed the sound of mice chewing. And chewing, too, it turned out, produces high-frequency sounds. Which helps explain why people have reported seeing owls suddenly plunge into perfectly undisturbed, deep snowdrifts and come back up with mice in their talons.

41. According to the passage, the size and arrangement of its ears on its head enables an owl to:
- A. compare tonalities with other animals.
 - B. balance its rather sizable facial disks.
 - C. funnel sound into its ears more easily.
 - D. fix the exact location of a sound.
42. As it is used in line 62, the word *marked* most nearly means:
- F. noticeable.
 - G. slight.
 - H. scientific.
 - J. written down.

43. According to the passage, anatomists studying the size and position of the ears of owls have realized that an owl's ears are:
- A. precisely symmetrical but not the same size on either side.
 - B. asymmetrical on the owl's head but identically sized.
 - C. larger on the right than the left and asymmetrally placed on the owl's head.
 - D. asymmetrally placed on the owl's head and of differing sizes.
44. According to the passage, all of the following contribute to the owl's extraordinary sound scanning EXCEPT its:
- F. facial muscles.
 - G. operculum.
 - H. beak.
 - J. feathers.
45. According to the passage, the Great Horned Owl's horns are:
- A. immensely beautiful and delicate.
 - B. a secondary pair of ears that catch lower-frequency sounds.
 - C. hidden behind rather substantial facial disks.
 - D. not ears, even though they look like ears.
46. According to the passage, an owl that dives into a snowbank and emerges holding a mouse was able to capture its prey most probably because the:
- F. owl heard the mouse in the snowbank, figured out its location, and attacked.
 - G. owl was actually able to see into the snowbank and spot the mouse.
 - H. mouse made a noise in a tonal range identical to the owl's tonal range.
 - J. owl read the mouse's pellets and realized exactly where it would be.
47. The passage suggests that one quite unusual feature of owl hearing is that the owl:
- A. enjoys the low-pitched sound of its own voice.
 - B. can usually guess at a sound's point of origin.
 - C. hears its own tonal range best.
 - D. does not hear its own tonal range best.
48. The author of the passage feels that the feature which contributes to the Great Horned Owl's somewhat human appearance is its:
- F. operculum.
 - G. pre-aural flap.
 - H. facial disks.
 - J. asymmetrical ears.
49. The author of the passage compares the ears of owls and humans, and states that one way in which an owl's ears are superior is that the owl:
- A. has a pre-aural flap, which triangulates.
 - B. uses them for low-frequency hearing.
 - C. can direct its operculum at the sound source.
 - D. has a larger left ear than right ear.
50. One inference that can be made from the passage is that owls can hear higher frequency sounds better than lower frequency sounds because:
- F. owls triangulate to learn the exact origin of a sound in their habitat.
 - G. an owl's prey makes high-pitched noises.
 - H. high-frequency sounds are more audible for most animals.
 - J. most animals hear their own tonal range best.

4 Test Content

Sample Passage VI

HUMANITIES: This passage is adapted from *A Guide to Orchestral Music* by Ethan Mordden (©1980 by Ethan Mordden). In this selection, Beethoven refers to Ludwig van Beethoven, a German composer during the early nineteenth century. Haydn and Mozart were both Austrian composers during the late eighteenth century.

"I don't want to know anything about your whole system of ethics," he once wrote. "*Power* is the morality of men who stand out from the rest, and it is also mine."

5 Power was Beethoven's ethic, power of such pre-
sumption that the musical forms of his day were not
large enough to contain that ethic. Beethoven made
them titanic. Power: this was the morality of his sym-
phonic outlook, power to extend the limits of the sym-
10 phony, to free it for more imposing articulations of
human will than his predecessors Haydn and Mozart
could conceive of. Inheriting a model art from them,
one of precision, balance, and tensile beauty,
Beethoven evolved it over the course of a quarter-
15 century into a grander form, no less precise but capable of
greater drama, building a music of ideas as well as of
melodies. With his Third Symphony, he fulfilled the
symphony's potential for tragic poetry. With his Fifth,
20 he devised a unity of heroic transformation through the
use of one basic theme that grows more triumphant
from movement to movement. With his Ninth, he ideal-
ized ecumenical communion, an elitist's populism,
using text and singers to celebrate the fraternity of
mankind.

25 Classicism was, on one level, a preference for
equilibrium. Romanticism was a rage for power.
Beethoven spanned the two eras, and by the time of his
death he had so fully remotivated the symphony as a
musicoemotional form that one may safely call his the
30 single most significant achievement in the development
of the Romantic Symphony, with its dramatic and
heroic focus. No less famous for his expansion of the
piano sonata and the string quartet, Beethoven remains
the quintessential composer for many listeners.

35 Biographers have emphasized Beethoven the
wretched man—uncouth, bad-tempered, sometimes
malign in his business and personal relationships, and
[physically ill] (this to explain his loss of hearing,
aggravated from a worrisome nuisance in his twenties
40 to total deafness in his fifties). The catalogue of
Beethoven's squabbles with publishers, musicians,
patrons, family, and friends is inexhaustible, it seems.
But all this is of little assistance in placing Beethoven
the creator: a man's achievements far outweigh a man.

45 Moreover, we can only admire the man who dra-
matizes himself in such noble music as this. His work
was a statement on man, on life: on power. Thus, his
Third Symphony, the "*Eroica*," marked a major break
with the "moderation" of Classicism. Similarly,
50 Beethoven's sole opera, *Fidelio*, revitalized the genre
known as "rescue opera" with a saga of tyranny over-

thrown by faith and endurance, capped by a scene of
the liberation of political prisoners that has never been
equalled for humanistic exhilaration. Power made him
55 reinvent the very usage of music, its form and content.

It was Vincent D'Indy, a composer of a later era,
who divided Beethoven's oeuvre into three periods:
Imitation, Externalization, and Reflection. This is
astutely observed. Beethoven's Imitation is the appren-
60 ticeship of a traveler learning the routes. His
Externalization (the period covering Symphonies 3
through 8, the last two piano concertos, and the violin
concerto) is that of the pioneer who strikes out on his
own. The Reflection is that of the discoverer laureate,
65 retraversing his old trails to seek their profoundest
mysteries. This third period, that of the last five piano
sonatas, the last five string quartets, the *Missa
Solemnis* (Solemn Mass), and the Ninth Symphony, is
one of sublimation, of perfecting the innovations.
70 Rather than break further with tradition, Beethoven
draws closer to it, fulfilling his personal language to the
utmost while working toward an abstraction of the
forms that he had overthrown—the Ninth as the ulti-
mate symphony, the *Missa Solemnis* as the ultimate
75 Mass, the "*Hammerklavier*" as the ultimate piano
sonata.

Musicians argue over whether Beethoven might be
thought of as a Classicist or a Romantic; but what is
important is that he supervised, in music, the transition
from one to the other. The key, of course, is in the word
80 "power." Beethoven's was a time of great upheaval, a
revolutionary time in many ways. A new urgency
inflamed life, thought, and art—a need to force wide
the structures set up in the past. Romantics were the
85 agents provocateurs as poets and politicians; Romantic
art had to develop more complex forms than were
known to—or needed by—Classicism. "In the begin-
ning," says Goethe's *Faust*, "was the Deed." This is
what Beethoven means by power.

51. The main idea of the passage is that:

- A. the distinction between the Classical period of music and the Romantic period of music is artificial.
- B. the music of the Classical period is far superior to the music of the Romantic period.
- C. Beethoven was such a masterful musician that he virtually transformed the musical forms of his day.
- D. Beethoven was a power-hungry individual who sublimated his music to his quest for political power.

52. According to the passage, composer Vincent D'Indy classified Beethoven's career into three periods. The first period is known as the:
- F. Externalization period.
 - G. Romantic period.
 - H. Imitation period.
 - J. Classical period.
53. The attitude of the author of the passage toward Beethoven is apparently one of:
- A. admiration.
 - B. disdain.
 - C. ambivalence.
 - D. envy.
54. As it is used in line 8 of the passage, the word *titanic* most nearly means:
- F. colossal.
 - G. doomed.
 - H. understandable.
 - J. grotesque.
55. The passage suggests that one of the main themes of Beethoven's *Fidelio* is that:
- A. all prisoners are, in essence, political prisoners.
 - B. faith and human endurance can defeat tyranny.
 - C. the liberation of prisoners is a politically wise move.
 - D. humanistic exhilaration can be a dangerous force.
56. In the third paragraph of the passage, the statement that "Beethoven remains the quintessential composer for many listeners" (lines 33-34) means that many people consider Beethoven to be:
- F. the standard against which all other composers are measured.
 - G. a tyrannical composer who forced his views on his listeners.
 - H. the model of a supremely successful and modest composer.
 - J. a composer who showed extraordinary promise, but who did not live up to that promise.
57. According to the passage, what distinguishes Beethoven's Fifth Symphony?
- A. It used text and singers to celebrate the unity of mankind.
 - B. It created unity by taking one basic theme and using it in each movement.
 - C. It created an idealized ecumenical communion.
 - D. It combined opera and symphonic music to create a totally new musical form.
58. According to the passage, which of the following of Beethoven's works belong(s) to the Externalization period?
- I. The Missa Solemnis
 - II. The Fifth Symphony
 - III. The Ninth Symphony
- F. I only
 - G. II only
 - H. I and II only
 - J. II and III only
59. According to the passage, Beethoven composed how many operas?
- A. None
 - B. One
 - C. Between five and ten
 - D. More than ten
60. According to the passage, Beethoven's biographers would probably agree with which of the following statements?
- I. Beethoven was more concerned with pleasing his musical patrons than he was with his own artistic integrity.
 - II. Beethoven had frequent disagreements with his family and friends.
 - III. Beethoven was exemplary in all aspects of his business relationships.
- F. I only
 - G. II only
 - H. I and II only
 - J. I and III only

