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# PRACTICE TEST 30

## October 1997

### Question 1-7

Hotels were among the earliest facilities that bound the United States together. They were both creatures and creators of communities, as well as symptoms of the frenetic quest for community. Even in the first part of the nineteenth century, Americans were already forming the habit of gathering from all corners of the nation for both public and private, business and pleasure purposes. Conventions were the new occasions, and hotels were distinctively American facilities making conventions possible. The first national convention of a major party to choose a candidate for President (that of the National Republican party, which met on December 12, 1831, and nominated Henry Clay for President) was held in Baltimore, at a hotel that was then reputed to be the best in the country. The presence in Baltimore of Barnum's City Hotel, a six-story building with two hundred apartments, helps explain why many other early national political conventions were held there.

In the longer run, too. American hotels made other national conventions not only possible but pleasant and convivial. The growing custom of regularly assembling from afar the representatives of all kinds of groups - not only for political conventions, but also for commercial, professional, learned, and avocational ones - in turn supported the multiplying hotels. By mid-twentieth century, conventions accounted for over a third of the yearly room occupancy of all hotels in the nation, about eighteen thousand different conventions were held annually with a total attendance of about ten million persons.

Nineteenth-century American hotelkeepers, who were no longer the genial, deferential "hosts" of the eighteenth-century European inn, became leading citizens. Holding a large stake in the community, they exercised power to make it prosper. As owners or managers of the local "palace of the public", they were makers and shapers of a principal community attraction. Travelers from abroad were mildly shocked by this high social position.

1. The word "bound" in line 1 is closest in meaning to  
(A) led (B) protected (C) tied (D) strengthened
2. The National Republican party is mentioned in line 8 as an example of a group  
(A) from Baltimore (B) of learned people  
(C) owning a hotel (D) holding a convention
3. The word "assembling" in line 14 is closest in meaning to  
(A) announcing (B) motivating (C) gathering (D) contracting
4. The word "ones" in line 16 refers to  
(A) hotels (B) conventions (C) kinds (D) representatives
5. The word "it" in line 23 refers to  
(A) European inn (B) host (C) community (D) public
6. It can be inferred from the passage that early hotelkeepers in the United States were  
(A) active politicians (B) European immigrants  
(C) Professional builders (D) Influential citizens

7. Which of the following statements about early American hotels is NOT mentioned in the passage?
- (A) Travelers from abroad did not enjoy staying in them.
  - (B) Conventions were held in them
  - (C) People used them for both business and pleasure.
  - (D) They were important to the community.

**Question 8-17**

Beads were probably the first durable ornaments humans possessed, and the intimate relationship they had with their owners is reflected in the fact that beads are among the most common items found in ancient archaeological sites. In the past, as  
Line today, men, women, and children adorned themselves with beads. In some cultures  
(5) still, certain beads are often worn from birth until death, and then are buried with their owners for the afterlife. Abrasion due to daily wear alters the surface features of beads, and if they are buried for long, the effects of corrosion can further change their appearance. Thus, interest is imparted to the bead both by use and the effects of time.

Besides their wearability, either as jewelry or incorporated into articles of attire,  
(10) beads possess the desirable characteristics of every collectible, they are durable, portable, available in infinite variety, and often valuable in their original cultural context as well as in today's market. Pleasing to look at and touch, beads come in shapes, colors, and materials that almost compel one to handle them and to sort them.

Beads are miniature bundles of secrets waiting to be revealed: their history,  
(15) manufacture, cultural context, economic role, and ornamental use are all points of information one hopes to unravel. Even the most mundane beads may have traveled great distances and been exposed to many human experiences. The bead researcher must gather information from many diverse fields. In addition to having to be a generalist while specializing in what may seem to be a narrow field, the researcher is  
(20) faced with the problem of primary materials that have little or no documentation. Many ancient beads that are of ethnographic interest have often been separated from their original cultural context.

The special attractions of beads contribute to the uniqueness of bead research. While often regarded as the "small change of civilizations", beads are a part of every culture,  
(25) and they can often be used to date archaeological sites and to designate the degree of mercantile, technological, and cultural sophistication.

8. What is the main subject of the passage?
- (A) Materials used in making beads
  - (B) How beads are made
  - (C) The reasons for studying beads
  - (D) Different types of beads
9. The word "adorned" in line 4 is closest in meaning to
- (A) protected
  - (B) decorated
  - (C) purchased
  - (D) enjoyed
10. The word "attire" in line 9 is closest in meaning to
- (A) ritual
  - (B) importance
  - (C) clothing
  - (D) history
11. All of the following are given as characteristics of collectible objects EXCEPT
- (A) durability
  - (B) portability
  - (C) value
  - (D) scarcity.
12. According to the passage, all of the following are factors that make people want to touch beads EXCEPT the
- (A) shape
  - (B) color
  - (C) material
  - (D) odor

13. The word "unravel" in line 16 is closest in meaning to  
 (A) communicate (B) transport (C) improve (D) discover
14. The word "mundane" in line 16 is closest in meaning to  
 (A) carved (B) beautiful (C) ordinary (D) heavy
15. It is difficult to trace the history of certain ancient beads because they  
 (A) are small in size  
 (B) have been buried underground  
 (C) have been moved from their original locations  
 (D) are frequently lost
16. Knowledge of the history of some beads may be useful in the studies done by which of the following?  
 (A) Anthropologists (B) Agricultural experts  
 (C) Medical researchers (D) Economists
17. Where in the passage does the author describe why the appearance of beads may change?  
 (A) Lines 3-4 (B) Lines 6-8 (C) Lines 12-13 (D) Lines 20-22

### Question 18-31

In the world of birds, bill design is a prime example of evolutionary fine-tuning. Shorebirds such as oystercatchers use their bills to pry open the tightly sealed shells of their prey; hummingbirds have stiletto-like bills to probe the deepest nectar-bearing  
 Line flowers; and kiwis smell out earthworms thanks to nostrils located at the tip of their  
 (5) beaks. But few birds are more intimately tied to their source of sustenance than are crossbills. Two species of these finches, named for the way the upper and lower parts of their bills cross, rather than meet in the middle, reside in the evergreen forests of North America and feed on the seeds held within the cones of coniferous trees.

The efficiency of the bill is evident when a crossbill locates a cone. Using a lateral  
 (10) motion of its lower mandible, the bird separates two overlapping scales on the cone and exposes the seed. The crossed mandibles enable the bird to exert a powerful biting force at the bill tips, which is critical for maneuvering them between the scales and spreading the scales apart. Next, the crossbill snakes its long tongue into the gap and draws out the seed. Using the combined action of the bill and tongue, the bird cracks  
 (15) open and discards the woody seed covering action and swallows the nutritious inner kernel. This whole process takes but a few seconds and is repeated hundreds of times a day.

The bills of different crossbill species and subspecies vary - some are stout and deep, others more slender and shallow. As a rule, large-billed crossbills are better at seeming seeds from large cones, while small-billed crossbills are more deft at  
 (20) removing the seeds from small, thin-scaled cones. Moreover, the degree to which cones are naturally slightly open or tightly closed helps determine which bill design is the best.

One anomaly is the subspecies of red crossbill known as the Newfoundland crossbill. This bird has a large, robust bill, yet most of Newfoundland's conifers have small cones, the same kind of cones that the slender-billed white-wings rely on.

18. What does the passage mainly discuss?  
(A) The importance of conifers in evergreen forests  
(B) The efficiency of the bill of the crossbill  
(C) The variety of food available in a forest  
(D) The different techniques birds use to obtain food
19. Which of the following statements best represents the type of "evolutionary fine-tuning" mentioned in line 1?  
(A) Different shapes of bills have evolved depending on the available food supply  
(B) White-wing crossbills have evolved from red crossbills  
(C) Newfoundland's conifers have evolved small cones  
(D) Several subspecies of crossbills have evolved from two species
20. Why does the author mention oystercatchers, hummingbirds, and kiwis in lines 2-4?  
(A) They are examples of birds that live in the forest  
(B) Their beaks are similar to the beak of the crossbill  
(C) They illustrate the relationship between bill design and food supply  
(D) They are closely related to the crossbill
21. Crossbills are a type of  
(A) shorebird                      (B) hummingbird                      (C) kiwi                      (D) finch
22. Which of the following most closely resembles the bird described in lines 6-8?  
Unable to find options for this question
23. The word "which" in line 12 refers to  
(A) seed                      (B) bird                      (C) force                      (D) bill
24. The word "gap" in line 13 is closest in meaning to  
(A) opening                      (B) flower                      (C) mouth                      (D) tree
25. The word "discards" in line 15 is closest in meaning to  
(A) eats                      (B) breaks                      (C) finds out                      (D) gets rid of
26. The word "others" in line 18 refers to  
(A) bills                      (B) species                      (C) seeds                      (D) cones
27. The word "deft" in line 19 is closest in meaning to  
(A) hungry                      (B) skilled                      (C) tired                      (D) pleasant
28. The word "robust" in line 24 is closest in meaning to  
(A) strong                      (B) colorful                      (C) unusual                      (D) sharp
29. In what way is the Newfoundland crossbill an anomaly?  
(A) It is larger than the other crossbill species  
(B) It uses a different technique to obtain food  
(C) The size of its bill does not fit the size of its food source  
(D) It does not live in evergreen forests.
30. The final paragraph of the passage will probably continue with a discussion of  
(A) other species of forest birds  
(B) the fragile ecosystem of Newfoundland  
(C) what mammals live in the forests of North America  
(D) how the Newfoundland crossbill survives with a large bill

31. Where in the passage does the author describe how a crossbill removes a seed from its cone?  
 (A) The first paragraph (B) The second paragraph  
 (C) The third paragraph (D) The fourth paragraph

### Question 32-38

If you look closely at some of the early copies of the Declaration of Independence, beyond the flourished signature of John Hancock and the other 55 men who signed it, you will also find the name of one woman, Mary Katherine Goddard. It was she, a  
 Line Baltimore printer, who published the first official copies of the Declaration, the first  
 (5) copies that included the names of its signers and therefore heralded the support of all thirteen colonies.

Mary Goddard first got into printing at the age of twenty-four when her brother opened a printing shop in Providence, Rhode Island, in 1762. When he proceeded to get into trouble with his partners and creditors, it was Mary Goddard and her mother  
 (10) who were left to run the shop. In 1765 they began publishing the Providence Gazette, a weekly newspaper. Similar problems seemed to follow her brother as he opened businesses in Philadelphia and again in Baltimore. Each time Ms. Goddard was brought in to run the newspapers. After starting Baltimore's first newspaper, The Maryland Journal, in 1773, her brother went broke trying to organize a colonial postal  
 (15) service. While he was in debtor's prison. Mary Katherine Goddard's name appeared on the newspaper's masthead for the first time.

When the Continental Congress fled there from Philadelphia in 1776, it commissioned Ms. Goddard to print the first official version of the Declaration of Independence in January 1777. After printing the documents, she herself paid the post  
 (20) riders to deliver the Declaration throughout the colonies.

During the American Revolution, Mary Goddard continued to publish Baltimore's only newspaper, which one historian claimed was "second to none among the colonies". She was also the city's postmaster from 1775 to 1789 - appointed by Benjamin Franklin - and is considered to be the first woman to hold a federal position.

32. With which of the following subjects is the passage mainly concerned?  
 (A) The accomplishments of a female publisher  
 (B) The weakness of the newspaper industry  
 (C) The rights of a female publisher  
 (D) The publishing system in colonial America
33. Mary Goddard's name appears on the Declaration of Independence because  
 (A) she helped write the original document (B) she published the document  
 (C) she paid to have the document printed (D) her brother was in prison
34. The word "heralded" in line 5 is closest in meaning to  
 (A) influenced (B) announced (C) rejected (D) ignored
35. According to the passage, Mary Goddard first became involved in publishing when she  
 (A) was appointed by Benjamin Franklin (B) signed the Declaration of Independence.  
 (C) took over her brother's printing shop (D) moved to Baltimore
36. The word "there" in line 17 refers to  
 (A) the colonies (B) the print shop (C) Baltimore (D) Providence
37. It can be inferred from the passage that Mary Goddard was  
 (A) an accomplished businesswoman (B) extremely wealthy

- (C) a member of the Continental Congress (D) a famous writer

38. The word "position" in line 24 is closest in meaning to  
 (A) job (B) election (C) document (D) location

**Question 39-50**

Galaxies are the major building blocks of the universe. A galaxy is giant family of many millions of stars, and it is held together by its own gravitational field. Most of the material universe is organized into galaxies of stars together with gas and dust.

- Line There are three main types of galaxy: spiral, elliptical, and irregular. The Milky  
 (5) Way is a spiral galaxy, a flattish disc of stars with two spiral arms emerging from its central nucleus. About one-quarter of all galaxies have this shape. Spiral galaxies are well supplied with the interstellar gas in which new stars form: as the rotating spiral pattern sweeps around the galaxy it compresses gas and dust, triggering the formation of bright young stars and in its arms. The elliptical galaxies have a symmetrical elliptical or  
 (10) spheroidal shape with no obvious structure. Most of their member stars are very old and since ellipticals are devoid of interstellar gas, no new stars are forming in them. The biggest and brightest galaxies in the universe are ellipticals with masses of about 10<sup>13</sup> times that of the Sun, these giants may frequently be sources of strong radio emission, in which case they are called radio galaxies. About two-thirds of all galaxies  
 (15) are elliptical. Irregular galaxies comprise about one-tenth of all galaxies and they come in many subclasses.

- Measurement in space is quite different from measurement on Earth. Some terrestrial distances can be expressed as intervals of time, the time to fly from one continent to another or the time it takes to drive to work, for example. By comparison  
 (25) with these familiar yardsticks, the distances to the galaxies are incomprehensibly large, but they too are made more manageable by using a time calibration, in this case the distance that light travels in one year. On such a scale the nearest giant spiral galaxy, the Andromeda galaxy, is two million light years away. The most distant luminous objects seen by telescopes are probably ten thousand million light years away. Their  
 (30) light was already halfway here before the Earth even formed. The light from the nearby Virgo galaxy set out when reptiles still dominated the animal world.

39. The word "major" in line 1 is closest in meaning to  
 (A) intense (B) principal (C) huge (D) unique

40. What does the second paragraph mainly discuss?  
 (A) The Milky Way  
 (B) Major categories of galaxies  
 (C) How elliptical galaxies are formed  
 (D) Differences between irregular and spiral galaxies

41. The word "which" in line 7 refers to  
 (A) dust (B) gas (C) pattern (D) galaxy

42. According to the passage, new stars are formed in spiral galaxies due to  
 (A) an explosion of gas (B) the compression of gas and dust  
 (C) the combining of old stars (D) strong radio emissions

43. The word "symmetrical" in line 9 is closest in meaning to  
 (A) proportionally balanced (B) commonly seen  
 (C) typically large (D) steadily growing

44. The word "obvious" in line 10 is closest in meaning to  
(A) discovered (B) apparent (C) understood (D) simplistic
45. According to the passage, which of the following is NOT true of elliptical galaxies?  
(A) They are the largest galaxies.  
(B) They mostly contain old stars.  
(C) They contain a high amount of interstellar gas.  
(D) They have a spherical shape.
46. Which of the following characteristics of radio galaxies is mentioned in the passage?  
(A) They are a type of elliptical galaxy.  
(B) They are usually too small to be seen with a telescope.  
(C) They are closely related to irregular galaxies.  
(D) They are not as bright as spiral galaxies.
47. What percentage of galaxies are irregular?  
(A) 10% (B) 25% (C) 50% (D) 75%
48. The word "they" in line 21 refers to  
(A) intervals (B) yardsticks (C) distances (D) galaxies
49. Why does the author mention the Virgo galaxy and the Andromeda galaxy in the third paragraph?  
(A) To describe the effect that distance has on visibility.  
(B) To compare the ages of two relatively young galaxies.  
(C) To emphasize the vast distances of the galaxies from Earth.  
(D) To explain why certain galaxies cannot be seen by a telescope.
50. The word "dominated" in line 26 is closest in meaning to  
(A) threatened (B) replaced  
(C) were developing in (D) were prevalent in

# PRACTICE TEST 31

## December 1997

### Questions 1-10

Before the mid-1860's, the impact of the railroads in the United States was limited, in the sense that the tracks ended at the Missouri River, approximately the centers of the country. At that point the trains turned their freight, mail, and passengers over to steamboats, wagons, and stagecoaches. This meant that wagon freighting, stagecoaching and steamboating did not come to an end when the first train appeared; rather they became supplements or feeders. Each new "end-of-track" became a center for animaldrawn or waterborne transportation. The major effect of the railroad was to shorten the distance that had to be covered by the older, slower, and more costly means. Wagon freighters continued operating throughout the 1870's and 1880's and into the 1890's, although over constantly shrinking routes, and coaches and wagons continued to crisscross the West wherever the rails had not yet been laid.

The beginning of a major change was foreshadowed in the later 1860's, when the Union Pacific Railroad at last began to build westward from the Central Plains city of Omaha to meet the Central Pacific Railroad advancing eastward from California through the formidable barriers of the Sierra Nevada. Although President Abraham Lincoln signed the original Pacific Railroad bill in 1862 and a revised, financially much more generous version in 1864, little construction was completed until 1865 on the Central Pacific and 1866 on the Union Pacific. The primary reason was skepticism that a railroad built through so challenging and thinly settled a stretch of desert, mountain, and semiarid plain could pay a profit. In the words of an economist, this was a case of "premature enterprise", where not only the cost of construction but also the very high risk deterred private investment. In discussing the Pacific Railroad bill, the chair of the congressional committee bluntly stated that without government subsidy no one would undertake so unpromising a venture; yet it was a national necessity to link East and West together.

- The author refers to the impact of railroads before the late 1860's as "limited" because
  - the tracks did not take the direct route from one city to the next
  - passenger and freight had to transfer to other modes of transportation to reach western destinations
  - passengers preferred stagecoaches
  - railroad travel was quite expensive
- The word "they" in line 5 refers to
  - tracks
  - trains
  - freight, mail, and passengers
  - steamboats, wagons, and stagecoaches
- The word "supplements" in line 6 is closest in meaning to
  - extensions
  - reformers
  - dependents
  - influences
- What can be inferred about coaches and wagon freighters as the railroads expanded?
  - They developed competing routes.
  - Their drivers refused to work for the railroads.
  - They began to specialize in transporting goods.
  - They were not used as much as before.

5. The word "crisscross" in line 11 is closest in meaning to  
 (A) lead the way (B) separate  
 (C) move back and forth (D) uncover
6. Why does the author mention the Sierra Nevada in line 15?  
 (A) To argue that a more direct route to the West could have been taken  
 (B) To identify a historically significant mountain range in the West  
 (C) To point out the location of a serious train accident  
 (D) To give an example of an obstacle face by the Central Pacific
7. The word "skepticism" in line 18 is closest in meaning to  
 (A) doubt (B) amazement (C) urgency (D) determination
8. The Pacific railroads were considered a "premature enterprise" (line 21) because  
 (A) the technology of railroad cars was not fully developed  
 (B) there was not enough wood and steel for the tracks  
 (C) the cost and risks discouraged private investment  
 (D) there were insufficient numbers of trained people to operate them
9. The word "subsidy" in line 23 is closest in meaning to  
 (A) persuasion (B) financing (C) explanation (D) penalty
10. Where in the passage does the author give example of geographical challenges to railroad construction?  
 (A) Lines 4-6 (B) Lines 8-11 (C) Lines 18-20 (D) Lines 22-25

### Questions 11-22

Humanity's primal efforts to systematize the concepts of size, shapes, and number are usually regarded as the earliest mathematics. However, the concept of number and the counting process developed so long before the time of recorded history (there is archaeological evidence that counting was employed by humans as far back as 50,000

Line (5) years ago) that the manner of this development is largely conjectural. Imagining how it probably came about is not difficult. The argument that humans, even in prehistoric times, had some number sense, at least to the extent of recognizing the concepts of more and less when some objects were added to or taken away from a small group, seems fair, for studies have shown that some animal possess such a sense.

- (10) With the gradual evolution of society, simple counting became imperative. A tribe had to know how many members it had and how many enemies, and shepherd needed to know if the flock of sheep was decreasing in size. Probably the earliest way of keeping a count was by some simple tally method, employing the principle of one-to-one correspondence. In keeping a count of sheep, for example, one finger per sheep could
- (15) be turned under. Counts could also be maintained by making scratches in the dirt or on a stone, by cutting notches in a piece of wood, or by tying knots in a string.

Then, perhaps later, an assortment of vocal sounds was developed as a word tally against the number of objects in a small group. And still later, with the refinement of writing, a set of signs was devised to stand for these numbers. Such an imagined

(20) development is supported by reports of anthropologists in their studies of present-day societies that are thought to be similar to those of early humans.

11. What does the passage mainly discuss?  
(A) The efforts of early humans to care for herds of animals  
(B) The development of writing  
(C) The beginnings of mathematics  
(D) Similarities in number sense between humans and animals
12. The word "conjectural" in line 5 is closest in meaning to  
(A) complex (B) based on guessing  
(C) unbelievable (D) supported by careful research
13. Why does the author mention animals in line 9?  
(A) To support a theory about the behavior of early humans  
(B) To identify activities that are distinctly human  
(C) To illustrate the limits of a historical record of human development  
(D) To establish that early human kept domesticated animals
14. The word "it" in line 11 refers to  
(A) evolution (B) counting (C) tribe (D) shepherd
15. What is the basic principle of the tally method described in the second paragraph?  
(A) The count is recorded permanently.  
(B) Calculations provide the total count.  
(C) Large quantities are represented by symbols.  
(D) Each marker represents a singly object.
16. The word "employing" in line 13 is closest in meaning to  
(A) using (B) paying (C) focusing (D) hiring
17. Which of the following is NOT mentioned as an early methods of counting?  
(A) Cutting notches (B) Bending fingers  
(C) Piling stones (D) Tying knots
18. The word "maintained" in line 15 is closest in meaning to  
(A) justified (B) asserted (C) located (D) kept
19. The word "assortment" in line 17 is closest in meaning to  
(A) instrument (B) variety (C) surplus (D) symbol
20. It can be inferred that research in other academic fields relates to research in the author's field in which of the following ways?  
(A) It contributes relevant information  
(B) It is carried out on a simpler level.  
(C) It is less reliable than research in the author's field.  
(D) It causes misunderstandings if applied to the author's field.
21. Which of the following conclusions is supported by the passage?  
(A) Counting processes did not develop until after writing became widespread.  
(B) Early counting methods required herds of animals.  
(C) Mathematics has remained unchanged since ancient times.  
(D) Early humans first counted because of necessity.
22. Where in the passage does the author mention the ability of animals to recognized small and large groups?  
(A) Lines 1-2 (B) Lines 6-9 (C) Lines 10-12 (D) Lines 17-18

### Questions 23-31

As the merchant class expanded in the eighteenth-century North American colonies, the silversmith and the coppersmith businesses rose to serve it. Only a few silversmiths were available in New York or Boston in the late seventeenth century, but in the  
 Line eighteenth century they could be found in all major colonial cities. No other colonial  
 (5) artisans rivaled the silversmiths' prestige. They handled the most expensive materials and possessed direct connections to prosperous colonies merchants. Their products, primarily silver plates and bowls, reflected their exalted status and testified to their customers' prominence.

Silver stood as one of the surest ways to store wealth at a time before neighborhood  
 (10) banks existed. Unlike the silver coins from which they were made, silver articles were readily identifiable. Often formed to individual specifications, they always carried the silversmith's distinctive markings and consequently could be traced and retrieved. Customers generally secured the silver for the silver objects they ordered. They saved coins, took them to smiths, and discussed the type of pieces they desired.  
 (15) Silversmiths complied with these requests by melting the money in a small furnace, adding a bit of copper to form a stronger alloy, and casting the alloy in rectangular blocks. They hammered these ingots to the appropriate thickness by hand, shaped them, and pressed designs into them for adornment. Engraving was also done by hand. In addition to plates and bowls, some customers sought more intricate products, such as  
 (20) silver teapots. These were made by shaping or casting parts separately and then soldering them together.

Colonial coppersmithing also came of age in the early eighteenth century and prospered in northern cities. Copper's ability to conduct heat efficiently and to resist corrosion contributed to its attractiveness. But because it was expensive in colonial  
 (25) America, coppersmiths were never very numerous. Virtually all copper worked by smiths was imported as sheets or obtained by recycling old copper goods. Copper was used for practical items, but it was not admired for its beauty. Coppersmiths employed it to fashion pots and kettles for the home. They shaped it in much the same manner as silver or melted it in a foundry with lead or tin. They also mixed it with zinc to make  
 (30) brass for maritime and scientific instruments.

23. According to the passage, which of the following eighteenth-century developments had a strong impact on silversmiths?
- (A) a decrease in the cost of silver  
 (B) the invention of heat-efficient furnaces  
 (C) the growing economic prosperity of colonial merchants  
 (D) the development of new tools used to shape silver
24. The word "They" in line 5 refers to
- (A) silversmiths  
 (B) major colonial cities  
 (C) other colonial artisans  
 (D) materials
25. The word "exalted" in line 7 is closest in meaning to
- (A) unusual  
 (B) uncertain  
 (C) surprising  
 (D) superior
26. In colonial America, where did silversmiths usually obtain the material to make silver articles?
- (A) From their own mines  
 (B) From importers  
 (C) From other silversmiths  
 (D) From customers

27. The word "ingots" in line 17 refers to  
(A) coins that people saved (B) blocks of silver mixed with copper  
(C) tools used to shape silver plates (D) casts in which to form parts of silver articles
28. The phrase "came of age" in line 22 is closest in meaning to  
(A) established itself (B) declined  
(C) became less expensive (D) was studied
29. The passage mentions all of the following as uses for copper in colonial America EXCEPT  
(A) cooking pots (B) scientific instruments  
(C) musical instruments (D) maritime instruments
30. According to the passage, silversmiths and coppersmiths in colonial America were similar in which of the following ways?  
(A) The amount of social prestige they had  
(B) The way they shaped the metal they worked with  
(C) The cost of the goods they made  
(D) The practicality of goods they made
31. Based on the information in paragraph 4, which of the following was probably true about copper in the colonies?  
(A) The copper used by colonists was not effective in conducting heat.  
(B) The copper items created by colonial coppersmiths were not skillfully made.  
(C) There were no local copper mines from which copper could be obtained.  
(D) The price of copper suddenly decreased.

### Questions 32-40

Fossils are the remains and traces (such as footprints or other marks) of ancient plant and animal life that are more than 10,000 years old. They range in size from microscopic structures to dinosaur skeletons and complete bodies of enormous animals.

Line Skeletons of extinct species of human are also considered fossils.

- (5) An environment favorable to the growth and later preservation of organisms is required for the occurrence of fossils. Two conditions are almost always present:  
(1) The possession of hard parts, either internal or external, such as bones, teeth, scales, shells, and wood; these parts remain after the rest of the organism has decayed. Organisms that lack hard parts, such as worms and jelly fish, have left a meager  
(10) geologic record. (2) Quick burial of the dead organism, so that protection is afforded against weathering, bacterial action, and scavengers.

- Nature provides many situations in which the remains of animals and plants are protected against destruction. Of these, marine sediment is by far the most important environment for the preservation of fossils, owing to the incredible richness of marine  
(15) life. The beds of former lakes are also prolific sources of fossils. The rapidly accumulating sediments in the channels, floodplains, and deltas of streams bury fresh-water organisms, along with land plants and animals that fall into the water. The beautifully preserved fossil fish from the Green River soil shale of Wyoming in the western United States lived in a vast shallow lake.

- (20) The frigid ground in the far north acts as a remarkable preservative for animal fossils. The woolly mammoth, long-haired rhinoceros, and other mammals have been periodically exposed in the tundra of Siberia, the hair and red flesh still frozen in cold storage.

Volcanoes often provide environments favorable to fossil preservation. Extensive  
 (25) falls of volcanic ash and coarser particles overwhelm and bury all forms of life, from flying insects to great trees.

Caves have preserved the bones of many animals that died in them and were subsequently buried under a blanket of clay or a cover of dripstone. Predatory animals and early humans alike sought shelter in caves and brought food to them to the eater,  
 (30) leaving bones that paleontologists have discovered.

32. The passage primarily discusses which of the following?

- (A) Types of fossils found in different climates
- (B) What is learned from studying fossils
- (C) Conditions favorable to the preservation of fossils
- (D) How fossils are discovered

33. The word "traces" in line 1 is closest in meaning to

- (A) structures
- (B) importance
- (C) skeletons
- (D) imprints

34. All of the following facts about fossils are referred to by the author (paragraph 1) EXCEPT the fact that they can be

- (A) microscopically small
- (B) skeletons of human ancestors
- (C) complete animal bodies
- (D) fragile

35. The fossil fish from the Green River (paragraph 3) were probably preserved because they were

- (A) in a deep lake
- (B) covered by sediment
- (C) protected by oil
- (D) buried slowly

36. The word "exposed" in line 22 is closest in meaning to

- (A) photographed
- (B) uncovered
- (C) located
- (D) preserved

37. Which of the following is LEAST likely to be found as a fossil, assuming that all are buried rapidly?

- (A) a dinosaur
- (B) a woolly mammoth
- (C) a human ancestor
- (D) a worm

38. It can be inferred that a condition that favors fossilization when volcanic ash falls to Earth is

- (A) quick burial
- (B) cold storage
- (C) high temperature
- (D) lack of water

39. The word "them" in line 29 refers to

- (A) predatory animals
- (B) early humans
- (C) caves
- (D) bones

40. Which of the following is true of the environments in which fossil are found?

- (A) Very different environments can favor fossilization.
- (B) There are few environments in which fossils are protected.
- (C) Environments that favor fossilization have similar climates.
- (D) Environments that favor fossilization support large populations of animals.

**Questions 41-50**

A useful definition of an air pollutant is a compound added directly or indirectly by humans to the atmosphere in such quantities as to affect humans, animals, vegetations, or materials adversely. Air pollution requires a very flexible definition that permits continuous change. When the first air pollution laws were established in England in the fourteenth century, air pollutants were limited to compounds that could be seen or smelled—a far cry from the extensive list of harmful substances known today. As technology has developed and knowledge of the health aspects of various chemicals has increased, the list of air pollutants has lengthened. In the future, even water vapor might be considered an air pollutant under certain conditions.

(10) Many of the more important air pollutants, such as sulfur oxides, carbon monoxide, and nitrogen oxides, are found in nature. As the Earth developed, the concentrations of these pollutants were altered by various chemical reactions; they became components in biogeochemical cycle. These serve as an air purification scheme by allowing the compounds to move from the air to the water or soil on a global basis, nature's

(15) output of these compounds dwarfs that resulting from human activities. However, human production usually occurs in a localized area, such as a city.

In this localized regions, human output may be dominant and may temporarily overload the natural purification scheme of the cycle. The result is an increased concentration of noxious chemicals in the air. The concentrations at which the adverse effects appear will be greater than the concentrations that the pollutants would have in the absence of human activities. The actual concentration need not be large for a substance to be a pollutant; in fact the numerical value tells us little until we know how much of an increase this represents over the concentration that would occur naturally in the area. For example, sulfur dioxide has detectable health effects at

(20) 0.08 parts per million (ppm), which is about 400 times its natural level. Carbon monoxide, however, has a natural level of 0.1 ppm and is not usually a pollutant until its level reaches about 15 ppm.

41. What does the passage mainly discuss?  
 (A) The economic impact of air pollution  
 (B) What constitutes an air pollutant  
 (C) How much harm air pollutants can cause  
 (D) The effects of compounds added to the atmosphere
42. The word "adversely" in line 3 is closest in meaning to  
 (A) negatively                      (B) quickly                      (C) admittedly                      (D) considerably
43. It can be inferred from the first paragraph that  
 (A) water vapor is an air pollutant in localized areas  
 (B) most air pollutants today can be seen or smelled  
 (C) the definition of air pollution will continue to change  
 (D) a substance becomes an air pollutant only in cities
44. The word "altered" in line 12 is closest in meaning to  
 (A) eliminated                      (B) caused                      (C) slowed                      (D) changed

45. Natural pollutants can play an important role in controlling air pollution for which of the following reasons?
- (A) They function as part of a purification process.
  - (B) They occur in greater quantities than other pollutants.
  - (C) They are less harmful to living beings than are other pollutants.
  - (D) They have existed since the Earth developed.
46. According to the passage, which of the following is true about human-generated air pollution in localized regions?
- (A) It can be dwarfed by nature's output of pollutants in the localized region.
  - (B) It can overwhelm the natural system that removes pollutants.
  - (C) It will damage areas outside of the localized regions.
  - (D) It will react harmfully with naturally occurring pollutants.
47. The word "noxious" in line 19 is closest in meaning to
- (A) harmful
  - (B) noticeable
  - (C) extensive
  - (D) weak
48. According to the passage, the numerical value of the concentration level of a substance is only useful if
- (A) the other substances in the area are known
  - (B) it is in a localized area
  - (C) the naturally occurring level is also known
  - (D) it can be calculated quickly
49. The word "detectable" in line 24 is closest in meaning to
- (A) beneficial
  - (B) special
  - (C) measurable
  - (D) separable
50. Which of the following is best supported by the passage?
- (A) To effectively control pollution local government should regularly review their air pollution laws.
  - (B) One of the most important steps in preserving natural lands is to better enforce air pollution laws.
  - (C) Scientists should be consulted in order to establish uniform limits for all air pollutants.
  - (D) Human activities have been effective in reducing air pollution.

# PRACTICE TEST 32

## January 1996

### Questions 1-9

In science, a theory is a reasonable explanation of observed events that are related. A theory often involves an imaginary model that helps scientists picture the way an observed event could be produced. A good example of this is found in the kinetic molecular theory, in which gases are pictured as being made up of many small particles that are in constant motion.

(5)

A useful theory, in addition to explaining past observations, helps to predict events that have not as yet been observed. After a theory has been publicized, scientists design experiments to test the theory. If observations confirm the scientists' predictions, the theory is supported. If observations do not confirm the predictions, the scientists must search further. There may be a fault in the experiment, or the theory may have to be revised or rejected.

(10)

Science involves imagination and creative thinking as well as collecting information and performing experiments. Facts by themselves are not science. As the mathematician Jules Henri Poincare said: "Science is built with facts just as a house is built with bricks, But a collection of facts cannot be called science any more than a pile of bricks can be called a house."

(15)

Most scientists start an investigation by finding out what other scientists have learned about a particular problem. After known facts have been gathered, the scientist comes to the part of the investigation that requires considerable imagination. Possible solutions to the problem are formulated. These possible solutions are called hypotheses. In a way, any hypothesis is a leap into the unknown. It extends the scientist's thinking beyond the known facts. The scientist plans experiments, performs calculations and makes observations to test hypotheses. For without hypotheses, further investigation lacks purpose and direction. When hypotheses are confirmed, they are incorporated into theories.

(20)

1. The word "related" in line 1 is closest in meaning to  
(A) connected                      (B) described                      (C) completed                      (D) identified
2. The word "this" in line 3 refers to  
(A) a good example                      (B) an imaginary model  
(C) the kinetic molecular theory                      (D) an observed event
3. According to the second paragraph, a useful theory is one that helps scientists to  
(A) find errors in past experiments                      (B) make predictions  
(C) observe events                      (D) publicize new findings
4. The word "supported" in line 9 is closest in meaning to  
(A) finished                      (B) adjusted                      (C) investigated                      (D) upheld
5. Bricks are mentioned in lines 14-16 to indicate how  
(A) mathematicians approach science  
(B) building a house is like performing experiments  
(C) science is more than a collection of facts  
(D) scientific experiments have led to improved technology

6. In the fourth paragraph, the author implies that imagination is most important to scientists when they  
 (A) evaluate previous work on a problem (B) formulate possible solutions to a problem  
 (C) gather known facts (D) close an investigation
7. In line 21, the author refers to a hypotheses as "a leap into the unknown" in order to show that hypotheses  
 (A) are sometimes ill-conceived (B) can lead to dangerous results  
 (C) go beyond available facts (D) require effort to formulate
8. In the last paragraph, what does the author imply a major function of hypotheses?  
 (A) Sifting through known facts  
 (B) Communicating a scientist's thoughts to others  
 (C) Providing direction for scientific research  
 (D) Linking together different theories
9. Which of the following statements is supported by the passage?  
 (A) Theories are simply imaginary models of past events.  
 (B) It is better to revise a hypothesis than to reject it.  
 (C) A scientist's most difficult task is testing hypotheses.  
 (D) A good scientist needs to be creative.

### Question 10-20

- By the mid-nineteenth century, the term "icebox" had entered the American language, but ice was still only beginning to affect the diet of ordinary citizens in the United States. The ice trade grew with the growth of cities. Ice was used in hotels, taverns, and hospitals, and by some forward-looking city dealers in fresh meat, fresh fish, and butter. After the Civil War (1860-1865), as ice used to refrigerate freight cars, it also came into household use. Even before 1880, half the ice sold in New York, Philadelphia, and Baltimore, and one-third of that sold in Boston and Chicago, went to families for their own use. This had become possible because a new household convenience, the icebox, a precursor of the modern refrigerator, had been invented.
- (5) Making an efficient icebox was not as easy as we might now suppose. In the early nineteenth century, the knowledge of the physics of heat, which was essential to a science of refrigeration, was rudimentary. The commonsense notion that the best icebox was one that prevented the ice from melting was of course mistaken, for it was the melting of the ice that performed the cooling. Nevertheless, early efforts to
- (10) economize ice included wrapping the ice in blankets, which kept the ice from doing its job. Not until near the end of the nineteenth century did inventors achieve the delicate balance of insulation and circulation needed for an efficient icebox.

- But as early as 1803, an ingenious Maryland farmer, Thomas Moore, had been on the right track. He owned a farm about twenty miles outside the city of Washington, for
- (20) which the village of Georgetown was the market center. When he used an icebox of his own design to transport his butter to market, he found that customers would pass up the rapidly melting stuff in the tubs of his competitors to pay a premium price for his butter, still fresh and hard in neat, one-pound bricks. One advantage of his icebox, Moore explained, was that farmers would no longer have to travel to market at night in order to keep their produce cool.

10. What does the passage mainly discuss?  
(A) The influence of ice on the diet  
(B) The development of refrigeration  
(C) The transportation of goods to market  
(D) Sources of ice in the nineteenth century
11. According to the passage, when did the word "icebox" become part of the language of the United States?  
(A) In 1803  
(B) Sometime before 1850  
(C) During the Civil War  
(D) Near the end of the nineteenth century
12. The phrase "forward-looking" in line 4 is closest in meaning to  
(A) progressive  
(B) popular  
(C) thrifty  
(D) well-established
13. The author mentions fish in line 5 because  
(A) many fish dealers also sold ice  
(B) fish was shipped in refrigerated freight cars  
(C) fish dealers were among the early commercial users of ice  
(D) fish was not part of the ordinary person's diet before the invention of the icebox
14. The word "it" in line 6 refers to  
(A) fresh meat  
(B) the Civil War  
(C) ice  
(D) a refrigerator
15. According to the passage, which of the following was an obstacle to the development of the icebox?  
(A) Competition among the owners of refrigerated freight cars  
(B) The lack of a network for the distribution of ice  
(C) The use of insufficient insulation  
(D) Inadequate understanding of physics
16. The word "rudimentary" in line 12 is closest in meaning to  
(A) growing  
(B) undeveloped  
(C) necessary  
(D) uninteresting
17. According to the information in the second paragraph, an ideal icebox would  
(A) completely prevent ice from melting  
(B) stop air from circulating  
(C) allow ice to melt slowly  
(D) use blankets to conserve ice
18. The author describes Thomas Moore as having been "on the right track" (line 18-19) to indicate that  
(A) the road to the market passed close to Moore's farm  
(B) Moore was an honest merchant  
(C) Moore was a prosperous farmer  
(D) Moore's design was fairly successful
19. According to the passage, Moore's icebox allowed him to  
(A) charge more for his butter  
(B) travel to market at night  
(C) manufacture butter more quickly  
(D) produce ice all year round
20. The "produce" mentioned in line 25 could include  
(A) iceboxes  
(B) butter  
(C) ice  
(D) markets

## Question 21-30

- Aside from perpetuating itself, the sole purpose of the American Academy and Institute of Arts and Letters is to "foster, assist and sustain an interest" in literature, music, and art. This it does by enthusiastically handing out money. Annual cash awards are given to deserving artists in various categories of creativity: architecture, musical composition, theater, novels, serious poetry, light verse, painting, sculpture. One award subsidizes a promising American writer's visit to Rome. There is even an award for a very good work of fiction that fallen commercially--once won by the young John Updike for *The Poorhouse Fair* and, more recently, by Alice Walker for *In Love and Trouble*.
- (5) The awards and prizes total about \$750,000 a year, but most of them range in size from \$5,000 to \$12,500, a welcome sum to many young practitioners whose work may not bring in that much in a year. One of the advantages of the awards is that many go to the struggling artists, rather than to those who are already successful. Members of the Academy and Institute are not eligible for any cash prizes. Another advantage is that, unlike the National Endowment for the Arts or similar institutions throughout the world, there is no government money involved.
- (10) Awards are made by committee. Each of the three departments--Literature (120 members), Art(83), Music(47)--has a committee dealing with its own field. Committee membership rotates every year, so that new voices and opinions are constantly heard.
- (15) The most financially rewarding of all the Academy-Institute awards are the Mildred and Harold Strauss Livings. Harold Strauss, a devoted editor at Alfred A. Knopf, the New York publishing house, and Mildred Strauss, his wife, were wealthy any childless. They left the Academy-Institute a unique bequest: for five consecutive years, two distinguished (and financially needy) writers would receive enough money so they could devote themselves entirely to "prose literature" (no plays, no poetry, and no paying job that might distract). In 1983, the first Strauss Livings of \$35,000 a year went to short-story writer Raymond Carver and novelist-essayist Cynthia Ozick. By 1988, the fund had grown enough so that two winners, novelists Diane Johnson and Robert Stone, each got \$50,000 a year for five years.

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21. What does the passage mainly discuss?  
 (A) Award-winning works of literature (B) An organization that supports the arts  
 (C) The life of an artist (D) Individual patrons of the arts
22. The word "sole" in line 1 is closest in meaning to  
 (A) only (B) honorable (C) common (D) official
23. The word "subsidizes" in line 6 is closest in meaning to  
 (A) assures (B) finances (C) schedules (D) publishes
24. Which of the following can be inferred about Alice Walker's book *In Love and Trouble*?  
 (A) It sold more copies than *The Poorhouse Fair*.  
 (B) It described the author's visit to Rome.  
 (C) It was a commercial success.  
 (D) It was published after *The Poorhouse Fair*.

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25. Each year the awards and prizes offered by the Academy-Institute total approximately  
(A) \$12,500                      (B) \$53,000                      (C) \$50,000                      (D) \$750,000
26. The word "many" in line 13 refers to  
(A) practitioners                      (B) advantages                      (C) awards                      (D) strugglers
27. What is one of the advantages of the Academy-Institute awards mentioned in passage?  
(A) They are subsidized by the government.  
(B) They are often given to unknown artists.  
(C) They are also given to Academy-Institute members.  
(D) They influence how the National Endowment for the Arts makes its award decisions.
28. The word "rotates" in line 19 is closest in meaning to  
(A) alternates                      (B) participates                      (C) decides                      (D) meets
29. The word "they" in line 25 refers to  
(A) Mildred and Harold Strauss                      (B) years  
(C) writers                      (D) plays
30. Where in the passage does the author cite the goal of the Academy-Institute?  
(A) Lines 1-3                      (B) Lines 12-13                      (C) Line 19-20                      (D) Line 22-23

**Questions 31-41**

- Archaeological records—paintings, drawings and carvings of humans engaged in activities involving the use of hands—indicate that humans have been predominantly right-handed for more than 5,000 years. In ancient Egyptian artwork, for example, the right hand is depicted as the dominant one in about 90 percent of the examples. Fracture or wear patterns on tools also indicate that a majority of ancient people were right-handed.
- (5) Cro-Magnon cave paintings some 27,000 years old commonly show outlines of human hands made by placing one hand against the cave wall and applying paint with the other. Children today make similar outlines of their hands with crayons on paper. With few exceptions, left hands of Cro-Magnons are displayed on cave walls, indicating that
- (10) the paintings were usually done by right-handers.

- Anthropological evidence pushes the record of handedness in early human ancestors back to at least 1.4 million years ago. One important line of evidence comes from flaking patterns of stone cores used in tool making: implements flaked with a clockwise motion (indicating a right-handed toolmaker) can be distinguished from
- (15) those flaked with a counter-clockwise rotation (indicating a left-handed toolmaker).

- Even scratches found on fossil human teeth offer clues. Ancient humans are thought to have cut meat into strips by holding it between their teeth and slicing it with stone knives, as do the present-day Inuit. Occasionally the knives slip and leave scratches on the users' teeth. Scratches made with a left-to-right stroke direction (by right-handers)
- (20) are more common than scratches in the opposite direction (made by left-handers).

- Still other evidence comes from cranial morphology: scientists think that physical differences between the right and left sides of the interior of the skull indicate subtle physical differences between the two sides of the brain. The variation between the hemispheres corresponds to which side of the body is used to perform specific
- (25) activities. Such studies, as well as studies of tool use, indicate that right- or left-sided dominance is not exclusive to modern Homo sapiens. Population of Neanderthals,

such as Homo erectus and Homo habilis, seem to have been predominantly right-handed, as we are.

31. What is the main idea of the passage?  
 (A) Human ancestors became predominantly right-handed when they began to use tools.  
 (B) It is difficult to interpret the significance of anthropological evidence concerning tool use.  
 (C) Humans and their ancestors have been predominantly right-handed for over a million years.  
 (D) Human ancestors were more skilled at using both hands than modern humans.
32. The word "other" in line 8 refers to  
 (A) outline (B) hand (C) wall (D) paint
33. What does the author say about Cro-Magnon paintings of hands?  
 (A) Some are not very old. (B) It is unusual to see such paintings.  
 (C) Many were made by children. (D) The artists were mostly right-handed.
34. The word "implements" in line 13 is closest in meaning to  
 (A) tools (B) designs (C) examples (D) pieces
35. When compared with implements "flaked with a counter-clockwise rotation" (line 15), it can be inferred that "implements flaked with a clock-wise motion" (line 13-14) are  
 (A) more common (B) larger  
 (C) more sophisticated (D) older
36. The word "clues" in line 16 is closest in meaning to  
 (A) solutions (B) details (C) damage (D) information
37. The fact that the Inuit cut meat by holding it between their teeth is significant because  
 (A) the relationship between handedness and scratches on fossil human teeth can be verified  
 (B) it emphasizes the differences between contemporary humans and their ancestors  
 (C) the scratch patterns produced by stone knives vary significantly from patterns produced by modern knives  
 (D) it demonstrates that ancient humans were not skilled at using tools
38. The word "hemispheres" in line 24 is closest in meaning to  
 (A) differences (B) sides (C) activities (D) studies
39. Why does the author mention Homo erectus and Homo habilis in line 27?  
 (A) To contrast them with modern humans  
 (B) To explain when human ancestors began to make tools  
 (C) To show that early humans were also predominantly right handed  
 (D) To prove that the population of Neanderthals was very large
40. All of the follows are mentioned as types of evidence concerning handedness EXCEPT  
 (A) ancient artwork (B) asymmetrical skulls  
 (C) studies of tool use (D) fossilized hand bones
41. Which of the following conclusions is suggested by the evidence from cranial morphology (line 21)?  
 (A) Differences in the hemispheres of the brain probably came about relatively recently.  
 (B) there may be a link between handedness and differences in the brain's hemispheres  
 (C) Left-handedness was somewhat more common among Neanderthals  
 (D) variation between the brain hemispheres was not evident in the skill of Homo erectus and Homo Habilis

**Questions 42-50**

Plants are subject to attack and infection by a remarkable variety of symbiotic species and have evolved a diverse array of mechanisms designed to frustrate the potential colonists. These can be divided into preformed or passive defense mechanisms and inducible or active systems. Passive plant defense comprises physical and chemical

(5) barriers that prevent entry of pathogens, such as bacteria, or render tissues unpalatable or toxic to the invader. The external surfaces of plants, in addition to being covered by an epidermis and a waxy cuticle, often carry spiky hairs known as trichomes, which either prevent feeling by insects or may even puncture and kill insect larvae. Other trichomes are sticky and glandular and effectively trap and immobilize insects.

(10) If the physical barriers of the plant are breached, then preformed chemicals may inhibit or kill the intruder, and plant tissues contain a diverse array of toxic or potentially toxic substances, such as resins, tannins, glycosides, and alkaloids, many of which are highly effective deterrents to insects that feed on plants. The success of the Colorado beetle in infesting potatoes, for example, seems to be correlated with its high

(15) tolerance to alkaloids that normally repel potential pests. Other possible chemical defenses, while not directly toxic to the parasite, may inhibit some essential step in the establishment of a parasitic relationship. For example, glycoproteins in plant cell walls may inactivate enzymes that degrade cell walls. These enzymes are often produced by bacteria and fungi.

(20) Active plant defense mechanisms are comparable to the immune system of vertebrate animals, although the cellular and molecular bases are fundamentally different. Both, however, are triggered in reaction to intrusion, implying that the host has some means of recognizing the presence of a foreign organism. The most dramatic example of an inducible plant defense reaction is the hypersensitive response. In the

(25) hypersensitive response, cells undergo rapid necrosis--that is, they become diseased and die--after being penetrated by a parasite; the part of a site itself subsequently ceases to grow and is therefore restricted to one or a few cells around the entry site. Several theories have been put forward to explain the basis of hypersensitive resistance.

42. What does the passage mainly discuss?

- (A) The success of parasites in resisting plant defense mechanisms
- (B) Theories on active plant defense mechanisms
- (C) How plant defense mechanisms function
- (D) How the immune system of animals and the defense mechanisms of plants differ

43. The phrase "subject to" in line 1 is closest in meaning to

- (A) susceptible to
- (B) classified by
- (C) attractive to
- (D) strengthened by

44. The word "puncture" in line 8 is closest in meaning to

- (A) pierce
- (B) pinch
- (C) surround
- (D) cover

45. The word "which" in line 13 refers to

- (A) tissues                      (B) substances                      (C) barriers                      (D) insects
46. Which of the following substances does the author mention as NOT necessarily being toxic to the Colorado beetle?  
(A) Resins                      (B) Tannins                      (C) Glycosides                      (D) Alkaloids
47. Why does the author mention "glycoproteins" in line 17?  
(A) To compare plant defense mechanisms to the immune system of animals  
(B) To introduce the discussion of active defense mechanisms in plants  
(C) To illustrate how chemicals function in plant defense  
(D) To emphasize the importance of physical barriers in plant defense
48. The word "dramatic" in line 23 could best be replaced by  
(A) striking                      (B) accurate                      (C) consistent                      (D) appealing
49. Where in the passage does the author describe an active plant defense reaction ?  
(A) lines 1-3                      (B) lines 4-6                      (C) lines 15-17                      (D) lines 24-27
50. The passage most probably continues with a discussion of theories on  
(A) the basis of passive plant defense  
(B) how chemicals inhibit a parasitic relationship  
(C) how plants produce toxic chemicals  
(D) the principles of the hypersensitive response

# PRACTICE TEST 33

## March 1996

### Questions 1-7

Joyce Carol Oates published her first collection of short stories, *By The North Gate*, in 1963, two years after she had received her master's degree from the University of Wisconsin and become an instructor of English at the University of Detroit. Her productivity since then has been prodigious, accumulating in less than two decades to nearly thirty titles, including novels, collections of short stories and verse, play, and literary criticism. In the meantime, she has continued to teach, moving in 1967 from the University of Detroit to the University of Windsor, in Ontario, and, in 1978, to Princeton University. Reviewers have admired her enormous energy, but find a productivity of such magnitude difficult to assess.

- (5) In a period characterized by the abandonment of so much of the realistic tradition by authors such as John Barth, Donald Barthelme, and Thomas Pynchon, Joyce Carol Oates has seemed at times determinedly old-fashioned in her insistence on the essentially mimetic quality of her fiction. Hers is a world of violence, insanity, fractured love, and hopeless loneliness. Although some of it appears to come from her own direct observations, her dreams, and her fears, much more is clearly from the experiences of others. Her first novel, *With Shuddering Fall* (1964), dealt with stock car racing, though she had never seen a race. In *In Them* (1969) she focused on Detroit from the Depression through the riots of 1967, drawing much of her material from the deep impression made on her by the problems of one of her students. Whatever the source and however shocking the events or the motivations, however, her fictive world remains strikingly akin to that real one reflected in the daily newspapers, the television news and talk shows, and popular magazines of our day.

1. What is the main purpose of the passage?  
(A) To review Oates' *By the North Gate* (B) To compare some modern writers  
(C) To describe Oates' childhood (D) To outline Oates' career
2. Which of the following does the passage indicate about Joyce Carol Oates' first publication?  
(A) It was part of her master's thesis. (B) It was a volume of short fiction.  
(C) It was not successful. (D) It was about an English instructor in Detroit.
3. Which of the following does the passage suggest about Joyce Carol Oates in terms of her writing career?  
(A) She has experienced long nonproductive periods in her writing.  
(B) Her style is imitative of other contemporary authors.  
(C) She has produced a surprising amount of fictions in a relative short time.  
(D) Most of her work is based on personal experience.
4. The word "characterized" in line 10 can best be replaced by which of the following?  
(A) shocked (B) impressed (C) distinguished (D) helped
5. What was the subject of Joyce Carol Oates' first novel?  
(A) Loneliness (B) Insanity (C) Teaching (D) Racing
6. Why does the author mention Oates book *In Them*?  
(A) It is a typical novel of the 1960's.  
(B) It is her best piece of nonfiction.  
(C) It is a fictional work based on the experiences of another person.  
(D) It is an autobiography.

7. Which of the following would Joyce Carol Oates be most likely to write?

- (A) A story with an unhappy ending  
 (B) A romance novel set in the nineteenth century  
 (C) A science fiction novel  
 (D) A dialogue for a talk show

### Questions 8-18

Certainly no creature in the sea is odder than the common sea cucumber. All living creature, especially human beings, have their peculiarities, but everything about the little sea cucumber seems unusual. What else can be said about a bizarre animal that, among other eccentricities, eats mud, feeds almost continuously day and night but can live without eating for long periods, and can be poisonous but is considered supremely edible by gourmets?

For some fifty million years, despite all its eccentricities, the sea cucumber has subsisted on its diet of mud. It is adaptable enough to live attached to rocks by its tube feet, under rocks in shallow water, or on the surface of mud flats. Common in cool water on both Atlantic and Pacific shores, it has the ability to such up mud or sand and digest whatever nutrients are present.

Sea cucumbers come in a variety of colors, ranging from black to reddish-brown to sand-color and nearly white. One form even has vivid purple tentacle. Usually the creatures are cucumber-shaped-hence their name-and because they are typically rock inhabitants, this shape, combine with flexibility, enables them to squeeze into crevices where they are safe from predators and ocean currents.

Although they have voracious appetites, eating day and night, sea cucumbers have the capacity to become quiescent and live at a low metabolic rate-feeding sparingly or not at all for long periods, so that the marine organisms that provide their food have a chance to multiply. If it were not for this faculty, they would devour all the food available in a short time and would probably starve themselves out of existence. But the most spectacular thing about the sea cucumber is the way it defends itself. Its major enemies are fish and crabs, when attacked, it squirts all its internal organs into the water. It also casts off attached structures such as tentacles. The sea cucumber will eviscerate and regenerate itself if it is attached or even touched; it will do the same if the surrounding water temperature is too high or if the water becomes too polluted.

8. What does the passage mainly discuss?

- (A) The reason for the sea cucumber's name  
 (B) What makes the sea cucumber unusual  
 (C) How to identify the sea cucumber  
 (D) Places where the sea cucumber can be found

9. In line 3, the word "bizarre" is closest in meaning to

- (A) odd  
 (B) marine  
 (C) simple  
 (D) rare

10. According to the Passage, why is the shape of sea cucumbers important?

- (A) It helps the to digest their food.  
 (B) It helps them to protect themselves from danger.  
 (C) It makes it easier for them to move through the mud.  
 (D) It makes them attractive to fish.

11. The word "this faculty" in line 20 refer to the sea cucumber's ability to

- (A) squeeze into crevices  
 (B) devour all available food in a short time  
 (C) such up mud or sand  
 (D) live at a low metabolic rate

12. The fourth paragraph of the passage primarily discuss  
 (A) the reproduction of sea cucumbers (B) the food sources of sea cucumbers  
 (C) the eating habits of sea cucumbers (D) threats to sea cucumbers' existence
13. The phrase "casts off" in line 24 is closest in meaning to  
 (A) grows again (B) grabs  
 (C) gets rid of (D) uses as a weapon
14. Of all the characteristics of the sea cucumber, which of the following seems to fascinate the author most?  
 (A) What it does when threatened (B) Where it lives  
 (C) How it hides from predators (D) What it eats
15. Compared with other sea creatures the sea cucumber is very  
 (A) dangerous (B) intelligent (C) strange (D) fat
16. What can be inferred about the defense mechanisms of the sea cucumber?  
 (A) They are very sensitive to surrounding stimuli.  
 (B) They are almost useless.  
 (C) They require group cooperation.  
 (D) They are similar to those of most sea creatures.
17. Which of the following would NOT cause a sea cucumber to release its internal organs into the water?  
 (A) A touch (B) Food  
 (C) Unusually warm water (D) Pollution
18. Which of the following is an example of behavior comparable with the sea cucumber living at a low metabolic rate?  
 (A) An octopus defending itself with its tentacles  
 (B) A bear hibernating in the wintering  
 (C) A pig eating constantly  
 (D) A parasite living on its host's blood

### Questions 19-29

- A folk culture is small, isolated, cohesive, conservative, nearly self-sufficient group that is homogeneous in custom and race, with a strong family or clan structure and highly developed rituals. Order is maintained through sanctions based in the religion or family, and interpersonal relationships are strong. Tradition is paramount, and change comes infrequently and slowly. There is relatively little division of labor into specialized duties. Rather, each person is expected to perform a great variety of tasks, though duties may differ between the sexes. Most goods are handmade, and a subsistence economy prevails. Individualism is weakly developed in folk cultures, as are social classes. Unaltered folk cultures no longer exist in industrialized countries
- (5) such as the United States and Canada. Perhaps the nearest modern equivalent in Anglo-
- (10) -America is the Amish, a German American farming sect that largely renounces the products and labor saving devices of the industrial age. In Amish areas, horse-drawn buggies till serve as a local transportation device, and the faithful are not permitted to own automobiles. The Amish's central religious concept of Demut, "humility", clearly
- (15) reflects the weakness of individualism and social class so typical of folk cultures, and there is a corresponding strength of Amish group identity. Rarely do the Amish marry outside their sect. The religion, a variety of the Mennonite faith, provides the principal mechanism for maintaining order.

By contrast, a popular culture is a large heterogeneous group, often highly

- (20) individualistic and constantly changing. Relationships tend to be impersonal, and a pronounced division of labor exists, leading to the establishment of many specialized professions. Secular institutions, of control such as the police and army take the place of religion and family in maintaining order, and a money-based economy prevails. Because of these contrasts, "popular" may be viewed as clearly different from "folk".
- (25) The popular is replacing the folk in industrialized countries and in many developing nations, Folk-made objects give way to their popular equivalent, usually because the popular item is more quickly or cheaply produced, is easier or time saving to use, or lends more prestige to the owner.

19. What does the passage mainly discuss?

- (A) Two decades in modern society  
 (B) The influence of industrial technology  
 (C) The characteristics of "folk" and "popular" societies  
 (D) The specialization of labor in Canada and the United States

20. The word "homogeneous" in line 2 is closest in meaning to

- (A) uniform                      (B) general                      (C) primitive                      (D) traditional

21. Which of the following is typical of folk cultures?

- (A) There is a money-based economy.  
 (B) Social change occurs slowly.  
 (C) Contact with other cultures is encouraged.  
 (D) Each person develops one specialized skill.

22. What does the author imply about the United States and Canada?

- (A) They value folk cultures.                      (B) They have no social classes.  
 (C) They have popular cultures.                      (D) They do not value individualism.

23. The phrase "largely renounces" in line 11 is closest in meaning to

- (A) generally rejects                      (B) greatly modifies  
 (C) loudly declares                      (D) often criticizes

24. What is the main source of order in Amish society?

- (A) The government                      (B) The economy  
 (C) The clan structure                      (D) The religion

25. Which of the following statements about Amish beliefs does the passages support?

- (A) A variety of religious practices is tolerated.  
 (B) Individualism and competition are important.  
 (C) Premodern technology is preferred.  
 (D) People are defined according to their class.

26. Which of the following would probably NOT be found in a folk culture?

- (A) A carpenter                      (B) A farmer                      (C) A weaver                      (D) A banker

27. The word "prevails" in line 23 is closest in meaning to

- (A) dominates                      (B) provides                      (C) develops                      (D) invests

28. The word "their" in line 26 refers to

- (A) folk                      (B) nations                      (C) countries                      (D) objects

29. Which of following is NOT given as a reason why folk-made objects are replaced by mass-produced objects?

- (A) Cost                      (B) Prestige                      (C) Quality                      (D) Convenience

**Questions 30-40**

Many of the most damaging and life-threatening types of weather-torrential rains, severe thunderstorms, and tornadoes-begin quickly, strike suddenly, and dissipate rapidly, devastating small regions while leaving neighboring areas untouched. One such event, a tornado, struck the northeastern section of Edmonton, Alberta, in July 1987.

- (5) Total damages from the tornado exceeded \$ 250 million, the highest ever for any Canadian storm. Conventional computer models of the atmosphere have limited value in predicting short-live local storms like the Edmonton tornado, because the available weather data are generally not detailed enough to allow computers to discern the subtle atmospheric changes that precede these storms. In most nations, for example, weatherballoon observations are taken just once every twelve hours at locations typically separated by hundreds of miles. With such limited data, conventional forecasting models do a much better job predicting general weather conditions over large regions than they do forecasting specific local events.

- (15) Until recently, the observation-intensive approach needed for accurate, very shortrange forecasts, or "Nowcasts", was not feasible. The cost of equipping and operating many thousands of conventional weather stations was prohibitively high, and the difficulties involved in rapidly collecting and processing the raw weather data from such a network were insurmountable. Fortunately, scientific and technological advances have overcome most of these problems. Radar systems, automated weather instruments, and satellites are all capable of making detailed, nearly continuous observation over large regions at a relatively low cost. Communications satellites can transmit data around the world cheaply and instantaneously, and modern computers can quickly compile and analyzing this large volume of weather information. Meteorologists and computer scientists now work together to design computer programs and video equipment capable of transforming raw weather data into words, symbols, and vivid graphic displays that forecasters can interpret easily and quickly. As meteorologists have begun using these new technologies in weather forecasting offices, Nowcasting is becoming a reality.

30. What does the passage mainly discuss?  
 (A) Computers and weather (B) Dangerous storms  
 (C) Weather forecasting (D) Satellites
31. Why does the author mention the tornado in Edmonton, Canada?  
 (A) To indicate that tornadoes are common in the summer  
 (B) To give an example of a damaging storm  
 (C) To explain different types of weather  
 (D) To show that tornadoes occur frequently in Canada
32. The word "subtle" in line 8 is closest in meaning to  
 (A) complex (B) regular (C) imagined (D) slight
33. Why does the author state in line 10 that observations are taken "just once every twelve hours"?  
 (A) To indicate that the observations are timely  
 (B) To show why the observations are of limited value  
 (C) To compare data from balloons and computers  
 (D) To give an example of international cooperation
34. The word "they" in line 13 refers to

- (A) models                      (B) conditions                      (C) regions                      (D) events

35. Which of the following is NOT mentioned as an advance in short-range weather forecasting?  
 (A) Weather balloons                      (B) Radar systems  
 (C) Automated instruments                      (D) Satellites
36. The word "compile" in line 23 is closest in meaning to  
 (A) put together                      (B) look up                      (C) pile high                      (D) work over
37. With Nowcasting, it first became possible to provide information about  
 (A) short-lived local storms                      (B) radar networks  
 (C) long-range weather forecasts                      (D) general weather conditions
38. The word "raw" in line 25 is closest in meaning to  
 (A) stormy                      (B) inaccurate                      (C) uncooked                      (D) unprocessed
39. With which of the following statements is the author most likely to agree?  
 (A) Communications satellites can predict severe weather.  
 (B) Meteorologists should standardize computer programs.  
 (C) The observation-intensive approach is no longer useful.  
 (D) Weather predictions are becoming more accurate.
40. Which of the following would best illustrate Nowcasting?  
 (A) A five-day forecast  
 (B) A warning about a severe thunderstorm on the radio.  
 (C) The average rainfall for each month  
 (D) A list of temperatures in major cities

### Questions 41-50

People in the United States in the nineteenth-century were haunted by the prospect that unprecedented change in the nation's economy would bring social chaos. In the years following 1820, after several decades of relative stability, the economy entered a  
 Line period of sustained and extremely rapid growth that continued to the end of the  
 (5) nineteenth century. Accompanying that growth was a structural change that featured increasing economic diversification and a gradual shift in the nation's labor force from agriculture to manufacturing and other nonagricultural pursuits.

Although the birth rate continued to decline from its high level of the eighteenth and early nineteenth century, the population roughly doubled every generation during the rest  
 (10) of the nineteenth centuries. As the population grew, its makeup also changed. Massive waves of immigration brought new ethnic groups into the country. Geographic and social mobility-downward as well as upward-touched almost everyone. Local studies indicate that nearly three-quarters of the population-in the north and South, in the emerging cities of the northeast, and in the restless rural countries of the  
 (15) West-changed their residence each decade. As a consequence, historian David Donald has written, "Social atomization affected every segment of society", and it seemed to many people that "all the recognized values of orderly civilization were gradually being eroded".

Rapid industrialization and increased geographic mobility in the nineteenth century  
 (20) had special implications for women because these changes tended to magnify social distinctions. As the roles men and women played in society became more rigidly

defined, so did the roles they played in the home. In the context of extreme competitiveness and dizzying social change, the household lost many of its earlier functions and the home came to serve as a haven of tranquility and order. As the size (25) of families decreased, the roles of husband and wife became more clearly differentiated than ever before. In the middle class especially, men participated in the productive economy while women ruled the home and served as the custodians, of civility and culture. The intimacy of marriage that was common in earlier periods was rent, and a gulf that at times seemed unbridgeable was created between husbands and wives.

41. What does the passage mainly discuss?  
(A) The economic development of the United States in the eighteenth century  
(B) Ways in which economic development led to social changes in the United States  
(C) Population growth in the western United States  
(D) The increasing availability of industrial jobs for women in the United States
42. The word "Prospect" in line 1 is closest in meaning to  
(A) regret (B) possibility (C) theory (D) circumstance
43. According to the passage, the economy of the United States between 1820 and 1900 was  
(A) expanding (B) in sharp decline (C) stagnate (D) disorganized
44. The word "roughly" in line 9 is closest in meaning to  
(A) harshly (B) surprisingly (C) slowly (D) approximately
45. The word "its" in line 10 refers to  
(A) century (B) population (C) generation (D) birth rate
46. According to the passage, as the nineteenth century progressed, the people of the United States  
(A) emigrated to other countries  
(B) often settled in the West  
(C) tended to change the place in which they lived  
(D) had a higher rate of birth than ever before
47. Which of the following best describes the society about which David Donald wrote?  
(A) A highly conservative society that was resistant to new ideas  
(B) A society that was undergoing fundamental change  
(C) A society that had been gradually changing since the early 1700's  
(D) A nomadic society that was starting permanent settlements
48. The word "magnify" in line 20 is closest in meaning to  
(A) solve (B) explain (C) analyze (D) increase
49. Which of the following is NOT mentioned as an example of the social changes occurring in the United States after 1820?  
(A) Increased social mobility (B) Increased immigration  
(C) Significant movement of population (D) Strong emphasis on traditional social values
50. The word "distinctions" in line 21 is closest in meaning to  
(A) differences (B) classes  
(C) accomplishments (D) characteristics

# PRACTICE TEST 34

## May 1996

### Question 1-12

Orchids are unique in having the most highly developed of all blossoms, in which the usual male and female reproductive organs are fused in a single structure called the column. The column is designed so that a single pollination will fertilize hundreds of thousands, and in some cases millions, of seeds, so microscopic and light they are easily carried by the breeze. Surrounding the column are three sepals and three petals, sometimes easily recognizable as such, often distorted into gorgeous, weird, but always functional shapes. The most noticeable of the petals is called the labellum, or lip. It is often dramatically marked as an unmistakable landing strip to attract the specific insect the orchid has chosen as its pollinator.

To lure their pollinators from afar, orchids use appropriately intriguing shapes, colors, and scents. At least 50 different aromatic compounds have been analyzed in the orchid family, each blended to attract one, or at most a few, species of insects or birds. Some orchids even change their scents to interest different insects at different times. Once the right insect has been attracted, some orchids present all sorts of one-way obstacle courses to make sure it does not leave until pollen has been accurately placed or removed. By such ingenious adaptations to specific pollinators, orchids have avoided the hazards of rampant crossbreeding in the wild, assuring the survival of species as discrete identities. At the same time they have made themselves irresistible to collectors.

1. What does the passage mainly discuss?

- (A) Birds                      (B) Insects                      (C) Flowers                      (D) Perfume

2. The orchid is unique because of

- (A) the habitat in which it lives  
(B) the structure of its blossom  
(C) the variety of products that can be made from it  
(D) the length of its life

3. The word "fused" in line 2 is closest in meaning to

- (A) combined                      (B) hidden                      (C) fertilized                      (D) produced

4. How many orchid seeds are typically pollinated at one time?

- (A) 200                      (B) 2,000                      (C) 20,000                      (D) 200,000

5. Which of the following is a kind of petal?

- (A) The column                      (B) The sepal                      (C) The stem                      (D) The labellum

6. The labellum (line7) is most comparable to

- (A) a microscope                      (B) an obstacle course  
(C) an airport runway                      (D) a racetrack

7. The word "lure" in line 10 is closest in meaning to

- (A) attract                      (B) recognize                      (C) follow                      (D) help

8. Which of the following is NOT mentioned as a means by which an orchid attracts insects?

- (A) Size                      (B) Shape                      (C) Color                      (D) Perfume

9. The word "their" in line 13 refers to

- (A) orchids                      (B) birds                      (C) insects                      (D) species

10. Which of the following statements about orchids scents does the passage support?
- (A) They are effective only when an insect is near the blossom.
  - (B) Harmful insects are repelled by them.
  - (C) They are difficult to tell apart.
  - (D) They may change at different times.
11. The word "placed" in line 15 is closest in meaning to
- (A) estimated
  - (B) measured
  - (C) deposited
  - (D) identified
12. The word "discrete" in line 18 is closest in meaning to
- (A) complicated
  - (B) separate
  - (C) inoffensive
  - (D) functional

### Question 13-22

One of the most important social developments that helped to make possible a shift in thinking about the role of public education was the effect of the baby boom of the 1950's and 1960's on the schools. In the 1920's, but especially in the Depression conditions of the 1930's, the United States experienced a declining birth rate -every thousand women aged fifteen to forty-four gave birth to about 118 live children in 1920, 89.2 in 1930, 75.8 in 1936, and 80 in 1940. With the growing prosperity brought on by the Second World War and the economic boom that followed it, young people married and established households earlier and began to raise larger families than had their predecessors during the Depression. Birth rates rose to 102 per thousand in 1946, 106.2 in 1950, and 118 in 1955. Although economics was probably the most important determinant, it is not the only explanation for the baby boom. The increased value placed on the idea of the family also helps to explain this rise in birth rates. The baby boomers began streaming into the first grade by the mid-1940's and became a flood by 1950. The public school system suddenly found itself overtaxed. While the number of schoolchildren rose because of wartime and postwar conditions, these same conditions made the schools even less prepared to cope with the flood. The wartime economy meant that few new schools were built between 1940 and 1945. Moreover, during the war and in the boom times that followed, large numbers of teachers left their profession for better-paying jobs elsewhere in the economy.

Therefore, in the 1950's and 1960's, the baby boom hit an antiquated and inadequate school system. Consequently, the "custodial rhetoric" of the 1930's and early 1940's no longer made sense; that is, keeping youths aged sixteen and older out of the labor market by keeping them in school could no longer be a high priority for an institution unable to find space and staff to teach younger children aged five to sixteen. With the baby boom, the focus of educators and of laymen interested in education inevitably turned toward the lower grades and back to basic academic skills and discipline. The system no longer had much interest in offering nontraditional, new, and extra services to older youths.

13. What does the passage mainly discuss?
- (A) The teaching profession during the baby boom
  - (B) Birth rates in the United States in the 1930's and 1940
  - (C) The impact of the baby boom on public education
  - (D) The role of the family in the 1950's and 1960's
14. The word "it" in line 11 refers to
- (A) 1955
  - (B) economics
  - (C) the baby boom
  - (D) value

15. The word "overtaxed" in line 14 is closest in meaning to  
 (A) well prepared (B) plentifully supplied  
 (C) heavily burdened (D) charged too much
16. The public school of the 1950's and 1960's faced all of the following problems EXCEPT  
 (A) a declining number of students (B) old-fashioned facilities  
 (C) a shortage of teachers (D) an inadequate number of school buildings
17. According to the passage, why did teachers leave the teaching profession after the outbreak of the war?  
 (A) They needed to be retrained (B) They were dissatisfied with the curriculum.  
 (C) Other jobs provided higher salaries. (D) Teaching positions were scarce.
18. The word "inadequate" in line 20 is closest in meaning to  
 (A) deficient (B) expanded (C) innovative (D) specialized
19. The "custodial rhetoric" mentioned in line 21 refers to  
 (A) raising a family (B) keeping older individuals in school  
 (C) running an orderly household (D) maintaining discipline in the classroom
20. The word "inevitably" in line 25 is closest in meaning to  
 (A) unwillingly (B) impartially (C) irrationally (D) unavoidably
21. Where in the passage does the author refer to the attitude of Americans toward raising a family in the 1950's and 1960's?  
 (A) Lines 1-3 (B) Lines 11-12 (C) Lines 20-21 (D) Lines 24-26
22. Which of the following best characterizes the organization of the passage?  
 (A) The second paragraph presents the effect of circumstances described in the first paragraph.  
 (B) The second paragraph provides a fictional account to illustrate a problem presented in the first paragraph.  
 (C) The second paragraph argues against a point made in the first paragraph.  
 (D) The second paragraph introduces a problem not mentioned in the first paragraph.

### Questions 23-32

Nineteenth-century writers in the United States, whether they wrote novels, short stories, poems, or plays, were powerfully drawn to the railroad in its golden year. In fact, writers responded to the railroads as soon as the first were built in the 1830's. By  
 Line the 1850's, the railroad was a major presence in the life of the nation. Writers such as  
 (5) Ralph Waldo Emerson and Henry David Thoreau saw the railroad both as a boon to  
 democracy and as an object of suspicion. The railroad could be and was a despoiler of  
 nature; furthermore, in its manifestation of speed and noise, it might be a despoiler of  
 human nature as well. By the 1850's and 1860's, there was a great distrust among writer  
 and intellectuals of the rapid industrialization of which the railroad was a leading force.  
 (10) Deeply philosophical historians such as Henry Adams lamented the role that the new  
 frenzy for business was playing in eroding traditional values. A distrust of industry and  
 business continued among writers throughout the rest of the nineteenth century and into  
 the twentieth.

For the most part, the literature in which the railroad plays an important role belong  
 (15) to popular culture rather than to the realm of serious art. One thinks of melodramas,  
 boys' books, thrillers, romances, and the like rather than novels of the first rank. In the  
 railroads' prime years, between 1890 and 1920, there were a few individuals in the

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- United States, most of them with solid railroading experience behind them, who made a profession of writing about railroading-works offering the ambience of stations, yards, and locomotive cabs. These writers, who can genuinely be said to have created a genre, the "railroad novel." are now mostly forgotten, their names having faded from memory. But anyone who takes the time to consult their fertile writings will still find a treasure trove of information about the place of the railroad in the life of the United States.
20. With which of the following topics is the passage mainly concerned?  
(A) The role of the railroad in the economy of the United States.  
(B) Major nineteenth-century writers.  
(C) The conflict between expanding industry and preserving nature.  
(D) The railroad as a subject for literature.
23. The word "it" in line 7 refers to  
(A) railroad (B) manifestation (C) speed (D) nature
24. In the first paragraph, the author implies that writers' reactions to the development of railroads were  
(A) highly enthusiastic (B) both positive and negative  
(C) unchanging (D) disinterested
25. The word "lamented" in line 10 is closest in meaning to  
(A) complained about (B) analyzed (C) explained (D) reflected on
26. According to the passage, the railroad played a significant role in literature in all of the following kinds of books EXCEPT  
(A) thrillers (B) boys' books (C) important novels (D) romances
27. The phrase "first rank" in line 16 is closest in meaning to  
(A) largest category (B) highest quality  
(C) earliest writers (D) most difficult language
28. The word "them" in line 18 refers to  
(A) novels (B) years (C) individuals (D) works
29. The author mentions all of the following as being true about the literature of railroads EXCEPT that  
(A) many of its writers had experience working on railroads  
(B) many of the books were set in railroad stations and yards  
(C) the books were well known during the railroads' prime years.  
(D) quite a few of the books are still popular today.
30. The words "faded from" in line 21 are closest in meaning to  
(A) grew in (B) disappeared from  
(C) remained in (D) developed from
31. What is the author's attitude toward the "railroad novels" and other books about railroads written between 1890 and 1920?  
(A) They have as much literary importance as the books written by Emerson, Thoreau, and Adams.  
(B) They are good examples of the effects industry and business had on the literature of the United States.  
(C) They contributed to the weakening of traditional values.  
(D) They are worth reading as sources of knowledge about the impact of railroads on life in the United States.

### Questions 33-44

By the 1820's in the United States, when steamboats were common on western waters, these boats were mostly powered by engines built in the West (Pittsburgh, Cincinnati, or Louisville), and of a distinctive western design specially suited to western needs. The first steam engines in practical use in England and the United States were of low-pressure design. This was the type first developed by James Watt, then manufactured by the firm of Boulton and Watt, and long the standard industrial engine. Steam was accumulated in a large, double-acting vertical cylinder, but the steam reached only a few pounds of pressure per square inch. It was low-pressure engines of this type that were first introduced into the United States by Robert Fulton. He imported such a Boulton and Watt engine from England to run the Clermont. But this type of engine was expensive and complicated, requiring many precision-fitted moving parts.

The engine that became standard on western steamboats was of a different and novel design. It was the work primarily of an unsung hero of American industrial progress, Oliver Evans(1755-1819). The self-educated son of a Delaware farmer. Evans early became obsessed by the possibilities of mechanized production and steam power. As early as 1802 he was using a stationary steam engine of high-pressure design in his mill. Engines of this type were not unknown, but before Evans they were generally considered impractical and dangerous.

Within a decade the high-pressure engine, the new type, had become standard on western waters. Critics ignorant of western conditions often attacked it as wasteful and dangerous. But people who really knew the Ohio, the Missouri, and the Mississippi insisted, with good reasons, that it was the only engine for them. In shallow western rivers the weight of vessel and engine was important; a heavy engine added to the problem of navigation. The high-pressure engine was far lighter in proportion to horsepower, and with less than half as many moving parts, was much easier and cheaper to repair. The main advantages of low-pressure engines were safe operation and economy of fuel consumption, neither of which meant much in the West.

33. What is the passage mainly about?

- (A) Steamboat engines in the western United States
- (B) River travel in the western United States
- (C) A famous United States inventor
- (D) The world's first practical steamboat

34. What was the Clermont (line 10)?

- (A) A river
- (B) A factory
- (C) A boat
- (D) An engine

35. Who developed the kind of steam engine used on western steamboats?

- (A) Watt
- (B) Boulton
- (C) Fulton
- (D) Evans

36. The word "novel" in line 14 is closest in meaning to

- (A) fictional
- (B) intricate
- (C) innovative
- (D) powerful

37. What opinion of Evans is suggested by the use of the term "unsung hero" in line 14?

- (A) More people should recognize the importance of his work .

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- (B) More of his inventions should be used today.
- (C) He should be credited with inventing the steam engine.
- (D) More should be learned about his early life.

**38.** What does the author imply about Evans?

- (A) He went to England to learn about steam power.
- (B) He worked for Fulton.
- (C) He traveled extensively in the West.
- (D) He taught himself about steam engines.

**39.** The word "stationary" in line 17 is closest in meaning to

- (A) single
- (B) fixed
- (C) locomotive
- (D) modified

**40.** The word "they" in line 18 refers to

- (A) engines
- (B) mechanized production and steam power
- (C) possibilities
- (D) steamboats

**41.** What does the author imply about the western rivers?

- (A) It was difficult to find fuel near them.
- (B) They flooded frequently.
- (C) They were difficult to navigate.
- (D) They were rarely used for transportation.

**42.** The word "it" in line 23 refers to

- (A) decade
- (B) high-pressure engine
- (C) weight
- (D) problem

**43.** The word "vessel" in line 24 is closest in meaning to

- (A) fuel
- (B) crew
- (C) cargo
- (D) craft

**44.** Which of the following points was made by the critics of high-pressure engines?

- (A) They are expensive to import.
- (B) They are not powerful enough for western waters.
- (C) They are dangerous.
- (D) They weigh too much.

**Questions 45-50**

Volcanic fire and glacial ice are natural enemies. Eruptions at glaciated volcanoes typically destroy ice fields, as they did in 1980 when 70 percent of Mount Saint Helens ice cover was demolished. During long dormant intervals, glaciers gain the upper hand cutting deeply into volcanic cones and eventually reducing them to rubble. Only rarely do these competing forces of heat and cold operate in perfect balance to create a phenomenon such as the steam caves at Mount Rainier National Park.

Located inside Rainier's two ice-filled summit craters, these caves form a labyrinth of tunnels and vaulted chambers about one and one-half miles in total length. Their creation depends on an unusual combination of factors that nature almost never brings together in one place. The cave-making recipe calls for a steady emission of volcanic gas and heat, a heavy annual snowfall at an elevation high enough to keep it from melting during the summer, and a bowl-shaped crater to hold the snow.

Snow accumulating yearly in Rainier's summit craters is compacted and compressed into a dense form of ice called firn, a substance midway between ordinary ice and the denser crystalline ice that makes up glaciers. Heat rising from numerous openings (called

fumaroles) along the inner crater walls melts out chambers between the rocky walls and the overlying ice pack. Circulating currents of warm air then melt additional opening in the firm ice, eventually connecting the individual chambers and, in the larger of Rainier's two craters, forming a continuous passageway that extends two-thirds of the way around the crater's interior.

(20)

To maintain the cave system, the elements of fire under ice must remain in equilibrium. Enough snow must fill the crater each year to replace that melted from below. If too much volcanic heat is discharged, the crater's ice pack will melt away entirely and the caves will vanish along with the snow of yesteryear. If too little heat is produced, the ice, replenished annually by winter snowstorms, will expand, pushing against the enclosing crater walls and smothering the present caverns in solid firm ice.

(25)

45. With what topic is the passage primarily concerned?

- (A) The importance of snowfall for Mount Rainier.
- (B) The steam caves of Mount Rainier.
- (C) how ice covers are destroyed .
- (D) The eruption of Mount Saint Helens in 1980.

46. The word "they" in line 2 refers to

- (A) fields
- (B) intervals
- (C) eruptions
- (D) enemies

47. According to the passage long periods of volcanic inactivity can lead to a volcanic cone's

- (A) strongest eruption
- (B) sudden growth
- (C) destruction
- (D) unpredictability

48. The second paragraph mentions all of the following as necessary elements in the creation of steam caves EXCEPT

- (A) a glacier
- (B) a crater
- (C) heat
- (D) snow

49. According to the passage, heat from Mount Rainier's summit craters rises from

- (A) crystalline ice
- (B) firns
- (C) chambers
- (D) fumaroles

50. In line 26 "smothering" the caverns means that they would be

- (A) eliminated
- (B) enlarged
- (C) prevented
- (D) hollowed

# PRACTICE TEST 35

## August 1996

### Question 1-10

The word laser was coined as an acronym for Light Amplification by the Stimulated Emission of Radiation. Ordinary light, from the Sun or a light bulb, is emitted spontaneously, when atoms or molecules get rid of excess energy by themselves, without any outside intervention. Stimulated emission is different because it occurs when an atom or molecule holding onto excess energy has been stimulated to emit it as light. Albert Einstein was the first to suggest the existence of stimulated emission in a paper published in 1917. However, for many years physicists thought that atoms and molecules always were much more likely to emit light spontaneously and that stimulated emission thus always would be much weaker. It was not until after the Second World War that physicists began trying to make stimulated emission dominate. They sought ways by which one atom or molecule could stimulate many other to emit light , amplifying it to much higher powers.

The first to succeed was Charles H. Townes, then at Columbia University in New York . Instead of working with light, however, he worked with microwaves, which have a much longer wavelength, and built a device he called a "maser" for Microwave Amplification by the Stimulated Emission of Radiation. Although he thought of the key idea in 1951, the first maser was not completed until a couple of years later. Before long, many other physicists were building masers and trying to discover how to produce stimulated emission at even shorter wavelength.

The key concepts emerged about 1957. Townes and Arthur Schawlow, then at Bell Telephone Laboratories, wrote a long paper outlining the conditions needed to amplify stimulated emission of visible light waves. At about the same time, similar ideas crystallized in the mind of Gordon Gould, then a 37-year-old graduate student at Columbia, who wrote them down in a series of notebooks. Townes and Schawlow published their ideas in a scientific journal, Physical Review Letter, but Gould filed a patent application. Three decades later, people still argue about who deserves the credit for the concept of the laser.

1. The word "coin" in line 1 could be replaced by  
(A) created                      (B) mentioned                      (C) understood                      (D) discovered
2. The word "intervention" in line 4 can best be replaced by  
(A) need                      (B) device                      (C) influence                      (D) source
3. The word "it" in line 5 refers to  
(A) light bulb                      (B) energy                      (C) molecule                      (D) atom
4. Which of the following statements best describes a laser?  
(A) A device for stimulating atoms and molecules to emit light  
(B) An atom in a high-energy state  
(C) A technique for destroying atoms or molecules  
(D) An instrument for measuring light waves
5. Why was Towne's early work with stimulated emission done with microwaves?  
(A) He was not concerned with light amplification  
(B) It was easier to work with longer wavelengths.  
(C) His partner Schawlow had already begun work on the laser.  
(D) The laser had already been developed

6. In his research at Columbia University, Charles Townes worked with all of the following EXCEPT  
 (A) stimulated emission (B) microwaves  
 (C) light amplification (D) a maser
7. In approximately what year was the first maser built?  
 (A) 1917 (B) 1951 (C) 1953 (D) 1957
8. The word "emerged" in line 20 is closest in meaning to  
 (A) increased (B) concluded (C) succeeded (D) appeared
9. The word "outlining" in line 21 is closest in meaning to  
 (A) assigning (B) studying (C) checking (D) summarizing
10. Why do people still argue about who deserves the credit for the concept of the laser?  
 (A) The researchers' notebooks were lost.  
 (B) Several people were developing the idea at the same time.  
 (C) No one claimed credit for the development until recently.  
 (D) The work is still incomplete.

### Question 11-21

Panel painting, common in thirteenth -and fourteenth -century Europe, involved a painstaking, laborious process. Wooden planks were joined, covered with gesso to prepare the surface for painting , and then polished smooth with special tools. On this  
 Line perfect surface, the artist would sketch a composition with chalk, refine it with inks,  
 (5) and then begin the deliberate process of applying thin layers of egg tempera paint (egg yolk in which pigments are suspended) with small brushes. The successive layering of these meticulously applied paints produced the final, translucent colors.

Backgrounds of gold were made by carefully applying sheets of gold leaf, and then embellishing of decorating the gold leaf by punching it with a metal rod on which a  
 (10) pattern had been embossed. Every step in the process was slow and deliberate. The quick-drying tempera demanded that the artist know exactly where each stroke be placed before the brush met the panel, and it required the use of fine brushes. It was, therefore, an ideal technique for emphasizing the hard linear edges and pure, fine areas of color that were so much a part of the overall aesthetic of the time. The notion that an  
 (15) artist could or would dash off an idea in a fit of spontaneous inspiration was completely alien to these deliberately produced works.

Furthermore, making these paintings was so time-consuming that it demanded assistance. All such work was done by collective enterprise in the workshops. The painter or master who is credited with having created painting may have designed  
 (20) the work and overseen its production, but it is highly unlikely that the artist's hand applied every stroke of the brush. More likely, numerous assistants, who had been trained to imitate the artist's style, applied the paint. The carpenter's shop probably provided the frame and perhaps supplied the panel, and yet another shop supplied the gold. Thus, not only many hands, but also many shops were involved in the final  
 (25) product.

In spite of problems with their condition, restoration, and preservation many panel paintings have survived, and today many of them are housed in museum collections.

11. What aspect of panel paintings does the passage mainly discuss?  
 (A) Famous examples (B) Different styles

- (C) Restoration (D) Production
12. According to the passage, what does the first step in making a panel painting ?  
(A) Mixing the paint (B) Preparing the panel  
(C) Buying the gold leaf (D) Making ink drawings
13. The word "it" in line 4 refers to .  
(A) chalk (B) composition (C) artist (D) surface
14. The word "deliberate" in line 5 is closest in meaning to  
(A) decisive (B) careful (C) natural (D) unusual
15. Which of the following processes produced the translucent colors found on panel paintings?  
(A) Joining wooden planks to form large sheets  
(B) Polishing the gesso  
(C) Applying many layers of paint  
(D) Covering the background with gold leaf
16. What characteristic of tempera paint is mentioned in the passage ?  
(A) It dries quickly (B) It is difficult to make  
(C) It dissolves easily (D) It has to be applied directly to wood
17. The word "demanded" in line 17 is closest in meaning to  
(A) ordered (B) reported (C) required (D) questioned
18. The "collective enterprise" mentioned in line 18 includes all of the following EXCEPT  
(A) supplying the gold leaf (B) building the panels  
(C) applying the paint (D) selling the painting
19. The word "imitate" in line 22 is closest in meaning to  
(A) copy (B) illustrate (C) promote (D) believe in
20. The author mentions all of the following as problems with the survival of panel painting EXCEPT  
(A) condition (B) theft (C) preservation (D) restoration
21. The word "them" in line 27 refers to  
(A) problems (B) condition, restoration, preservation  
(C) panel paintings (D) museum collections

### Question 22-32

Crows are probably the most frequently met and easily identifiable members of the native fauna of the United States. The great number of tales, legends, and myths about these birds indicates that people have been exceptionally interested in them for a long time. On the other hand, when it comes to substantive -- particularly behavioral -- information, crows are less well known than many comparably common species and, for that matter, not a few quite uncommon ones: the endangered California condor, to cite one obvious example. There are practical reasons for this.

Crows are notoriously poor and aggravating subjects for field research. Keen observers and quick learners, they are astute about the intentions of other creatures, including researchers, and adept at avoiding them. Because they are so numerous, active, and monochromatic, it is difficult to distinguish one crow from another. Bands, radio transmitters, or other identifying devices can be attached to them, but this of course requires catching live crows, who are among the wariest and most untrappable of birds.

- (15) Technical difficulties aside, crow research is daunting because the ways of these birds are so complex and various. As preeminent is generalists, members of this species ingeniously exploit a great range of habitats and resources, and they can quickly adjust to changes in their circumstances. Being so educable, individual birds have markedly different interests and inclinations, strategies and scams. For example, one pet crow
- (20) learned how to let a dog out of its kennel by pulling the pin on the door. When the dog escaped, the bird went into the kennel and ate its food.
- 22.** What is the main topic of the passage?  
 (A) The ways in which crows differ from other common birds  
 (B) The myths and legends about crows  
 (C) The characteristics that make crows difficult to study  
 (D) The existing methods for investigating crow behavior
- 23.** According to the first paragraph, what evidence is there that crows have interested people for a long time?  
 (A) The large number of stories about crows.  
 (B) The frequency with which crows are sighted  
 (C) The amount of research that has been conducted on crows  
 (D) The ease with which crows are identified
- 24.** The word "comparable" in line 5 is closest in meaning to  
 (A) interestingly (B) similar (C) otherwise (D) sometimes
- 25.** In line 6, the author mention the endangered California condor as an example of a species that is  
 (A) smaller than the crow (B) easily identifiable  
 (C) featured in legends (D) very rare
- 26.** The word "them" in line 10 refers to  
 (A) crows (B) subjects (C) intentions (D) researchers
- 27.** According to the second paragraph, crows are poor subjects for field research for all of the following reasons EXCEPT  
 (A) They can successfully avoid observers. (B) They are hard to distinguish from one another  
 (C) They can be quite aggressive. (D) They are difficult to catch.
- 28.** In the second paragraph, the author implies that using radio transmitters would allow a researcher who studies crow to  
 (A) identify individual crows  
 (B) follow flocks of crows over long distances  
 (C) record the times when crows are most active  
 (D) help crows that become sick or injured
- 29.** According to the third paragraph, which of the following is true about crows?  
 (A) They seldom live in any one place for very long.  
 (B) They thrive in a wide variety of environments.  
 (C) They have marked preferences for certain kinds of foods.  
 (D) They use up the resources in one area before moving to another.
- 30.** In line 19, the word "inclinations" is closest in meaning to  
 (A) tricks (B) opportunities (C) preferences (D) experiences
- 31.** In lines 19-21, the author mentions a pet crow to illustrate which of the following?  
 (A) The clever ways that crows solve problems  
 (B) The differences between pet crows and wild crows

- (C) The ease with which crows can be tamed
- (D) The affection that crows show to other creatures

32. Which of the following statements is supported by the passage?

- (A) Crows have relatively long lives.
- (B) Crows have keen vision
- (C) Crows are usually solitary
- (D) Crows are very intelligent.

### Questions 33-41

In the early days of the United States, postal charges were paid by the recipient and charges varied with the distance carried. In 1825, the United States Congress permitted local postmasters to give letters to mail carriers for home delivery, but these carriers  
Line received no government salary and their entire compensation depended on what they  
(5) were paid by the recipients of individual letters.

In 1847 the United States Post Office Department adopted the idea of a postage stamp, which of course simplified the payment for postal service but caused grumbling by those who did not like to prepay. Besides, the stamp covered only delivery to the post office and did not include carrying it to a private address. In Philadelphia, for example,  
(10) with a population of 150,000, people still had to go to the post office to get their mail. The confusion and congestion of individual citizens looking for their letters was itself enough to discourage use of the mail. It is no wonder that, during the years of these cumbersome arrangements, private letter-carrying and express businesses developed. Although their activities were only semilegal, they thrived, and actually advertised that  
(15) between Boston and Philadelphia they were a half-day speedier than the government mail. The government postal service lost volume to private competition and was not able to handle efficiently even the business it had.

Finally, in 1863, Congress provided that the mail carriers who delivered the mail from the post offices to private addresses should receive a government salary, and that  
(20) there should be no extra charge for that delivery. But this delivery service was at first confined to cities, and free home delivery became a mark of urbanism. As late as 1887, a town had to have 10,000 people to be eligible for free home delivery. In 1890, of the 75 million people in the United States, fewer than 20 million had mail delivered free to their doors. The rest, nearly three-quarters of the population, still received no mail unless they went to their post office.

33. What does the passage mainly discuss?

- (A) The increased use of private mail services
- (B) The development of a government postal system
- (C) A comparison of urban and rural postal services
- (D) The history of postage stamps.

34. The word "varied" in line 2 could best be replaced by

- (A) increased
- (B) differed
- (C) returned
- (D) started

35. Which of the following was seen as a disadvantage of the postage stamp?

- (A) It had to be purchased by the sender in advance.
- (B) It increased the cost of mail delivery.
- (C) It was difficult to affix to letters.
- (D) It was easy to counterfeit.

36. Why does the author mention the city of Philadelphia in line 9?  
 (A) It was the site of the first post office in the United States.  
 (B) Its postal service was inadequate for its population.  
 (C) It was the largest city in the United States in 1847.  
 (D) It was commemorated by the first United States postage stamp.
37. The word "cumbersome" in line 13 is closest in meaning to  
 (A) burdensome (B) handsome (C) loathsome (D) quarrelsome
38. The word "they" in line 15 refers to  
 (A) Boston and Philadelphia (B) businesses  
 (C) arrangements (D) letters
39. The private postal services of the nineteenth century claimed that they could do which of the following better than the government?  
 (A) Deliver a higher volume of mail. (B) Deliver mail more cheaply.  
 (C) Deliver mail faster. (D) Deliver mail to rural areas.
40. In 1863 the United States government began providing which of the following to mail carriers?  
 (A) A salary (B) Housing  
 (C) Transportation (D) Free postage stamps
41. The word "Confined" in line 21 is closest in meaning to  
 (A) granted (B) scheduled (C) limited (D) recommended

### Questions 43-50

Archaeology has long been an accepted tool for studying prehistoric cultures. Relatively recently the same techniques have been systematically applied to studies of the more immediate past. This has been called "historical archaeology," a term that is  
 Line used in the United States to refer to any archaeological investigation into North  
 (5) American sites that postdate the arrival of Europeans.

Back in the 1930's and 1940's, when building restoration was popular, historical archaeology was primarily a tool of architectural reconstruction. The role of archaeologists was to find the foundations of historic buildings and then take a back seat to architects. The mania for reconstruction had largely subsided by 1950's. Most  
 (10) people entering historical archaeology during this period came out of university anthropology departments, where they had studied prehistoric cultures. They were, by training social scientists, not historians, and their work tended to reflect this bias. The questions they framed and the techniques they used were designed to help them understand, as scientists, how people behaved. But because they were treading on  
 (15) historical ground for which there was often extensive written documentation and because their own knowledge of these periods was usually limited, their contributions to American history remained circumscribed. Their reports, highly technical and sometimes poorly written, went unread.

More recently, professional archaeologists have taken over. These researchers have  
 (20) sought to demonstrate that their work can be a valuable tool not only of science but also of history, providing fresh insights into the daily lives of ordinary people whose existences might not otherwise be so well documented. This newer emphasis on archaeology as social history has shown great promise, and indeed work done in this area has led to a reinterpretation of the United States past.

(25) In Kingston, New York, for example, evidence has uncovered that indicates that

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English goods were being smuggled into that city at a time when the Dutch supposedly controlled trading in the area. And in Sacramento an excavation at site of a fashionable nineteenth-century hotel revealed that garbage had been stashed in the building's basement despite sanitation laws to the contrary.

42. What does the passage mainly discuss?  
(A) Why historical archaeology was first developed  
(B) How the methods and purpose of historical archaeology have changed  
(C) The contributions architects make to historical archaeology  
(D) The attitude of professional archaeologists toward historical archaeology
43. According to the first paragraph, what is a relatively new focus in archaeology?  
(A) Investigating the recess past  
(B) Studying prehistoric cultures  
(C) Excavating ancient sites in what is now the United States.  
(D) Comparing ancient sites in what is now the United States.
44. According to the passage, when had historical archaeologists been trained as anthropologists?  
(A) Prior to the 1930's  
(B) During the 1930's and 1940's  
(C) During the 1950's and 1960's  
(D) After the 1960's
45. The word "framed" in line 13 is closest in meaning to  
(A) understood                      (B) read                      (C) avoided                      (D) posed
46. In the third paragraph, the author implies that the techniques of history and the techniques of social science are  
(A) quite different from each other  
(B) equally useful in studying prehistoric cultures  
(C) usually taught to students of archaeology  
(D) both based on similar principles
47. The phrase "their contributions" in line 16 refers to the contributions of  
(A) social scientists                      (B) prehistoric cultures  
(C) historians                      (D) documentation and knowledge
48. The author mentions an excavation at the site of a hotel in Sacramento in order to give an example of  
(A) a building reconstruction project  
(B) the work of the earliest historical archaeologists  
(C) a finding that conflicts with written records  
(D) the kind of information that historians routinely examine
49. The word "supposedly" in line 26 is closest in meaning to  
(A) ruthlessly                      (B) tightly                      (C) barely                      (D) seemingly
50. The word "sanitation" in line 29 is closest in meaning to  
(A) city                      (B) housing                      (C) health                      (D) trade

# PRACTICE TEST 36

## October 1996

### Questions 1-8

When Jules Verne wrote *Journey to the Center of the Earth* in 1864, there were many conflicting theories about the nature of the Earth's interior. Some geologists thought that it contained a highly compressed ball of incandescent gas, while others suspected that it consisted of separate shells, each made of a different material. Today, well over a century later, there is still little direct evidence of what lies beneath our feet. Most of our knowledge of the Earth's interior comes not from mines or boreholes, but from the study of seismic waves - powerful pulses of energy released by earthquakes. The way that seismic waves travel shows that the Earth's interior is far from uniform. The continents and the seabed are formed by the crust - a thin sphere of relatively light, solid rock. Beneath the crust lies the mantle, a very different layer that extends approximately halfway to the Earth's center. There the rock is the subject of a battle between increasing heat and growing pressure.

In its high levels, the mantle is relatively cool; at greater depths, high temperatures make the rock behave more like a liquid than a solid. Deeper still, the pressure is even more intense, preventing the rock from melting in spite of a higher temperature. Beyond a depth of around 2,900 kilometers, a great change takes place and the mantle gives way to the core. Some seismic waves cannot pass through the core and others are bent by it. From this and other evidence, geologists conclude that the outer core is probably liquid, with a solid center. It is almost certainly made of iron, mixed with smaller amounts of other elements such as nickel.

The conditions in the Earth's core make it a far more alien world than space. Its solid iron heart is subjected to unimaginable pressure and has a temperature of about 9,000°F. Although scientists can speculate about its nature, neither humans nor machines will ever be able to visit it.

- The word "conflicting" in line 2 is closest in meaning to  
(A) controlling (B) outdated (C) opposing (D) important
- What is today's richest source of information about the Earth's interior for geologists?  
(A) Boreholes (B) Shells (C) Seismic waves (D) Mines
- The word "There" in line 11 refers to the  
(A) mantle (B) crust (C) seabed (D) Earth's center.
- Which of the following is a primary characteristic of the Earth's mantle?  
(A) Light, solid rock (B) Uniformity of composition  
(C) Dramatically increasing pressure (D) Compressed, incandescent gas
- The phrase "gives way to" in line 17 is closest in meaning to  
(A) runs along (B) rubs against (C) turns into (D) floats on
- The word "it" in line 18 refers to  
(A) mantle (B) core (C) change (D) depth
- Why does the author state in line 22 that the Earth's core is "more alien" than space?  
(A) Government funds are not available to study the Earth's core.  
(B) Scientists aren't interested in the characteristics of the Earth's core.  
(C) It is impossible to go to the Earth's core to do research.  
(D) The Earth's core is made of elements that are dangerous to humans.

8. The word "speculate" in line 23 is closest in meaning to  
 (A) report (B) learn (C) worry (D) hypothesize

**Question 9-20**

Despite the road improvements of the turnpike era (1790-1830). Americans continued as in colonial times to depend wherever possible on water routes for travel and transportation. The larger rivers, especially the Mississippi and the Ohio, became increasingly useful as steamboats grew in number and improved in design.

- (5) River boats carried to New Orleans the corn and other crops of northwestern farmers, the cotton and tobacco of southwestern planters. From New Orleans, ships took the cargoes on to eastern seaports. Neither the farmers of the west nor the merchants of the east were completely satisfied with this pattern of trade. Farmers could get better prices for their crops if the alternative existed of sending them directly eastward to market and merchants could sell larger quantities of their manufactured goods if these could be transported more directly and more economically to the west. New waterways were needed. Sectional jealousies and constitutional scruples stood in the way of action by the federal government and necessary expenditures were too great for private enterprise. If extensive canals were to be dug, the job would be up to the various states.

- New York was the first to act. It had the natural advantage of a comparatively level route between the Hudson River and Lake Erie, through the only break in the entire Appalachian Mountain chain. Yet the engineering tasks were imposing. The distance was more than 350 miles and there were ridges to cross and a wilderness of woods and swamps to penetrate. The Erie Canal begun in 1817 and completed in 1825, was by far the greatest construction job that Americans had ever undertaken. It quickly proved a financial success as well. The prosperity of the Erie encouraged the state to enlarge its canal system by building several branches.

- The range of the New York canal system was still further extended when the states of Ohio and Indiana, inspired by the success of the Erie Canal, provided water connections between Lake Erie and the Ohio River.

9. What does the passage suggest was the principal route for transporting crops to the east prior in 1825?  
 (A) River to road (B) Canal to river  
 (C) River to ocean (D) Road to canal.
10. It can be inferred from the passage that shipping cargo east by way of New Orleans was  
 (A) Advantageous for manufactures (B) Inexpensive for merchants  
 (C) Not economical for farmers (D) Considered economical by the government
11. The word "alternative" in line 9 is closest in meaning to  
 (A) option (B) transition (C) intention (D) authorization
12. The word "them" in line 9 refers to  
 (A) crops (B) farmers (C) prices (D) merchants
13. Which of the following products would a northwestern farmer in the early nineteenth century be most likely to purchase from the east?  
 (A) Grain (B) Vegetables (C) Textiles (D) Fruit.
14. According to the passage, where was the Erie Canal located?  
 (A) Between Ohio and Indiana. (B) Along the Appalachian Mountains

- (C) Between Lake Erie and the Ohio River      (D) Across New York State.
15. The word "imposing" in line 18 could best be replaced by  
 (A) impractical      (B) successful      (C) demanding      (D) misleading
16. The word "penetrate" in line 20 is closest in meaning to  
 (A) cut down      (B) go through      (C) fill up      (D) take over
17. The word "its" in line 22 refers to  
 (A) prosperity      (B) Erie      (C) System      (D) State
18. The word "extended" in line 24 is closest in meaning to  
 (A) increased      (B) constructed      (C) deepened      (D) measured
19. According to the passage, Indiana & Ohio supported the development of the New York canal system by  
 (A) helping to build the Erie Canal.  
 (B) Building branches to connect it with the Ohio River  
 (C) Providing much of the water for the Erie Canal.  
 (D) Contributing financially to the construction costs
20. What does the paragraph following the passage probably discuss?  
 (A) Industry on Lake Erie      (B) Canals in Ohio and Indiana  
 (C) Sectional jealousies in Indiana and Ohio      (D) Travel on the Erie Canal.

### Question 21-31

Legend has it that sometime toward the end of the Civil War (1861-1865) a government train carrying oxen traveling through the northern plains of eastern Wyoming was caught in a snowstorm and had to be abandoned. The driver returned  
 Line the next spring to see what had become of his cargo. Instead of the skeletons he had  
 (5) expected to find, he saw his oxen, living, fat, and healthy. How had they survived?  
 The answer lay in a resource that unknowing Americans lands trampled underfoot in their haste to cross the "Great American Desert" to reach lands that sometimes proved barren. In the eastern parts of the United States, the preferred grass for forage was a cultivated plant. It grew well with enough rain, then when cut and stored it would cure  
 (10) and become nourishing hay for winter feed. But in the dry grazing lands of the West that familiar bluejoint grass was often killed by drought. To raise cattle out there seemed risky or even hopeless.

Who could imagine a fairy-tale grass that required no rain and somehow made it possible for cattle to feed themselves all winter? But the surprising western wild  
 (15) grasses did just that. They had wonderfully convenient features that made them superior to the cultivated eastern grasses. Various known as buffalo grass, grama grass, or mesquite grass, not only were they immune to drought; but they were actually preserved by the lack of summer and autumn rains. They were not juicy like the cultivated eastern grasses, but had short, hard stems. And they did not need to be cured  
 (20) in a barn, but dried right where they grew on the ground. When they dried in this way, they remained naturally sweet and nourishing through the winter. Cattle left outdoors to fend for themselves thrived on this hay. And the cattle themselves helped plant the fresh grass year after year for they trampled the natural seeds firmly into the soil to be watered by the melting snows of winter and the occasional rains of spring. The dry  
 (25) summer air cured them much as storing in a barn cured the cultivated grasses.

21. What does the passage mainly discuss?  
(A) Western migration after the Civil War (B) The climate of the western United States  
(C) The raising of cattle. (D) A type of wild vegetation
22. What can be inferred by the phrase "Legend has it" in line 1?  
(A) The story of the train may not be completely factual.  
(B) Most history books include the story of the train.  
(C) The driver of the train invented the story.  
(D) The story of the train is similar to other ones from that time period.
23. The word "they" in line 5 refers to  
(A) plains (B) skeletons (C) oxen (D) Americans
24. What can be inferred about the "Great American Desert" mentioned in line 7?  
(A) It was not originally assumed to be a fertile area.  
(B) Many had settled there by the 1860's.  
(C) It was a popular place to raise cattle before the Civil War.  
(D) It was not discovered until the late 1800's.
25. The word "barren" in line 8 is closest in meaning to  
(A) lonely (B) dangerous (C) uncomfortable (D) infertile.
26. The word "preferred" in line 8 is closest in meaning to  
(A) ordinary (B) available (C) required (D) favored
27. Which of the following can be inferred about the cultivated grass mentioned in the second paragraph?  
(A) Cattle raised in the western United States refused to eat it.  
(B) It would probably not grow in the western United States.  
(C) It had to be imported into the United States.  
(D) It was difficult for cattle to digest.
28. Which of the following was NOT one of the names given to the Western grasses?  
(A) Grama grass (B) Bluejoint grass (C) Buffalo grass (D) Mesquite grass
29. Which of the following was NOT mentioned as a characteristic of western grasses?  
(A) They have tough stems. (B) They are not affected by dry weather.  
(C) They can be grown indoors. (D) They contain little moisture.
30. The word "hard" in line 19 is closest in meaning to  
(A) firm (B) severe (C) difficult (D) bitter
31. According to the passage, the cattle helped promote the growth of the wild grasses by  
(A) stepping on and pressing the seeds into the ground  
(B) naturally fertilizing the soil  
(C) continually moving from one grazing area to another  
(D) eating only small quantities of grass.

**Question 32-44**

- Seventeenth-century houses in colonial North America were simple structures that were primarily functional carrying over traditional designs that went back to the Middle Ages. During the first half of the eighteenth century, however, houses began to show a new elegance. As wealth increased, more and more colonists built fine houses.
- (5) Since architecture was not yet a specialized profession in the colonies, the design of buildings was left either to amateur designers or to carpenters who undertook to interpret architectural manuals imported from England. Inventories of colonial libraries show an astonishing number of these handbooks for builders, and the houses erected during the eighteenth century show their influence. Nevertheless, most domestic
- (10) architecture of the first three-quarters of the eighteenth century displays a wide divergence of taste and freedom of application of the rules laid down in these books. Increasing wealth and growing sophistication throughout the colonies resulted in houses of improved design, whether the material was wood, stone, or brick. New England still favored wood, though brick houses became common in Boston and other
- (15) towns, where the danger of fire gave an impetus to the use of more durable material. A few houses in New England were built of stone, but only in Pennsylvania and adjacent areas was stone widely used in dwellings. An increased use of brick in houses and outbuildings is noticeable in Virginia and Maryland, but wood remained that most popular material even in houses built by wealthy landowners. In the Carolinas, even in
- (20) closely packed Charleston, wooden houses were much more common than brick houses.

- Eighteenth-century houses showed great interior improvements over their predecessors. Windows were made larger and shutters removed. Large, clear panes replaced the small leaded glass of the seventeenth century. Doorways were larger and
- (25) more decorative. Fireplaces became decorative features of rooms. Walls were made of plaster or wood, sometimes elaborately paneled. White paint began to take the place of blues, yellows, greens, and lead colors, which had been popular for walls in the earlier years. After about 1730, advertisements for wallpaper styles in scenic patterns began to appear in colonial newspapers.

- 32.** What does the passage mainly discuss?
- (A) The improved design of eighteenth-century colonial houses.  
 (B) A comparison of eighteenth-century houses and modern houses.  
 (C) The decorations used in eighteenth-century houses.  
 (D) The role of carpenters in building eighteenth-century houses.
- 33.** What was one of the main reasons for the change in architectural style in eighteenth-century North America?
- (A) More architects arrived in the colonies.  
 (B) The colonists developed an interest in classical architecture.  
 (C) Bricks were more readily available.  
 (D) The colonists had more money to spend on housing.
- 34.** According to the passage, who was responsible for designing houses in eighteenth-century North America?
- (A) Professional architects (B) Customers

- (C) Interior decorators (D) Carpenters.
35. The passage implies that the rules outlined in architectural manuals were  
(A) generally ignored (B) legally binding  
(C) not strictly adhered to (D) only followed by older builders
36. The word "divergence" in line 11 is closest in meaning to  
(A) description (B) development (C) difference (D) display
37. The word "durable" in line 15 is closest in meaning to  
(A) attractive (B) expensive (C) refined (D) long-lasting
38. Where was stone commonly used to build houses?  
(A) Virginia (B) Pennsylvania (C) Boston (D) Charleston
39. The word "dwellings" in line 17 is closest in meaning to  
(A) houses (B) towns (C) outbuildings (D) rural areas
40. The word "predecessors" in line 23 refers to  
(A) colonist who arrived in North America in the seventeenth century.  
(B) houses constructed before the eighteenth century  
(C) interior improvements  
(D) wooden houses in Charleston
41. The author mentions elaborately paneled walls in line 26 as an example of  
(A) how the interior design of colonial houses was improved.  
(B) why walls were made of wood or plaster.  
(C) How walls were made stronger in the eighteenth century.  
(D) What kind of wood was used for walls after 1730.
42. The word "elaborately" in line 26 is closest in meaning to  
(A) done in great detail (B) put together carefully  
(C) using many colors (D) reinforced structurally
43. What does the author imply about the use of wallpaper before 1730?  
(A) Wallpaper samples appeared in the architectural manuals.  
(B) Wallpaper was the same color as the wall paints used  
(C) Patterned wallpaper was not widely used.  
(D) Wallpaper was not used in stone house.
44. Where in the passage does the author give a reason why brick was the preferred material for houses in some urban areas?  
(A) Lines 9-11 (B) Lines 13-15 (C) Lines 17-19 (D) Lines 23-24

### Question 45-50

Bloodhounds are biologically adapted to trailing their prey. The process by which the nose recognizes an odor is not fully understood, but there are apparently specific receptor sites for specific odors. In one explanation, recognition occurs when a scent molecule fits into its corresponding receptor site, like a key into a lock, causing a mechanical or chemical change in the cell. Bloodhounds apparently have denser concentrations of receptor sites tuned to human scents.

Line  
(5)

When a bloodhound trails a human being, what does it actually smell? The human body, which consists of about 60 trillion living cells, sheds exposed skin at a rate of 50 million cells a day. So even a trail that has been dispersed by breezes may still seem

- (10) rich to a bloodhound. The body also produces about 31 to 50 ounces of sweat a day. Neither this fluid nor the shed skin cells have much odor by themselves, but the bacteria working on both substances is another matter. One microbiologist estimates the resident bacteria population of a clean square centimeter of skin on the human shoulder at "multiples of a million." As they go about their daily business breaking
- (15) down lipids, or fatty substances, on the skin, these bacteria release volatile substances that usually strike the bloodhound's nose as an entire constellation of distinctive scents.
- 45.** What does the passage mainly discuss?  
(A) Why people choose bloodhounds for household pets  
(B) How a bloodhound's sense of smell works  
(C) How humans compensate for an underdeveloped sense of smell  
(D) The way in which bacteria work on skin cells and body sweat.
- 46.** The author compares a scent molecule with a  
(A) key (B) lock (C) cell (D) bloodhound
- 47.** In line 7, the word "it" refers to  
(A) bloodhound (B) human being (C) smell (D) body
- 48.** According to the passage, how many cells of skin does the human body rid itself of every day?  
(A) 60 trillion (B) 50 million (C) 1 million (D) Between 31 and 50
- 49.** In line 10, the word "rich" is used to mean that a trail is  
(A) paved with precious materials (B) a profitable business to get into  
(C) a very costly undertaking (D) filled with an abundance of clues.
- 50.** Which of the following acts as a stimulus in the production of the human scent?  
(A) Sweat (B) Dead skin cells (C) Bacteria (D) Fatty substances

# PRACTICE TEST 37

## December 1996

### Questions 1-9

It is commonly believed that in the United States that school is where people to get an education. Nevertheless, it has been said that today children interrupt their education to go to school. The distinction between schooling and education implied by this remark is important.

- (5) Education is much more open-ended and all-inclusive than schooling. Education knows no bounds. It can take place anywhere, whether in the shower or on the job, whether in a kitchen or on a tractor. It includes both the formal leaning that takes place in school sand the whole universe of informal leaning. The agents of education can range form a revered grandparent o the people debating politics on the radio, from a child to a distinguished scientist. Whereas schooling has a certain predictability, education quite often produces surprises. A chance conversation with stranger may lead a person to discover how little is known of other religions. People are engaged in education from infancy on. Education, then, is a very broad, inclusive term. It is a lifelong process, a process that starts long before the start of school, and one that should be an integral part of one's entire life.

- Schooling, on the other hand, is a specific, formalized process, whose general pattern varies little from one setting to the next. Throughout a country, children arrive at school at approximately the same time, take assigned seats, are taught by an adult, use similar textbooks, do homework, take exams, and so on. The slices of reality that are to be learned, whether they are the alphabet or an understanding of the workings of governments, have usually been limited by the boundaries of the subject being taught. For example, high schools students know that they are not likely to find out in their classes the truth about political problems in their communities or what the newest filmmakers are experimenting with. There are definite conditions surrounding the formalized process of schooling.

1. What is the main idea of the passage?  
(A) The best schools teach a wide variety of subjects.  
(B) Education and schooling are quite different experiences.  
(C) Students benefit from schools, which require long hours and homework.  
(D) The more years students go to school the better their education is.
2. What does the author probably mean by using the expression "Children interrupt their education to go to school" (lines 2-3)?  
(A) Going to several different schools is educationally beneficial.  
(B) School vacations interrupt the continuity of the school year.  
(C) Summer school makes the school year too long.  
(D) All of life is an education.
3. The word "bounds" in line 6 is closest in meaning to  
(A) rules                      (B) experiences                      (C) limits                      (D) exceptions
4. The word "chance" in line 11 is closest in meaning to  
(A) unplanned                      (B) unusual                      (C) lengthy                      (D) lively
5. The word "integral" in line 15 is closest in meaning to  
(A) an equitable                      (B) a profitable                      (C) a pleasant                      (D) an essential

6. The word "they" in line 20 refers to  
 (A) slices of reality      (B) similar textbooks      (C) boundaries      (D) seats
7. The phrase "For example", line 22, introduces a sentence that gives example of  
 (A) similar textbooks      (B) the results of schooling  
 (C) the working of a government      (D) the boundaries of classroom subject
8. The passage supports which of the following conclusions?  
 (A) Without formal education, people would remain ignorant.  
 (B) Education systems need to be radically reformed.  
 (C) Going to school is only part of how people become educated.  
 (D) Education involves many years of professional training.
9. The passage is organized by  
 (A) listing and discussing several educational problems  
 (B) contrasting the meanings of two related words  
 (C) narrating a story about excellent teachers  
 (D) giving examples of different kinds of schools

### Questions 10-18

The hard, rigid plates that form the outermost portion of the Earth are about 100 kilometers thick. These plates include both the Earth's crust and the upper mantle. The rocks of the crust are composed mostly of minerals with light elements, like aluminum and sodium, while the mantle contains some heavier elements, like iron and magnesium. Together, the crust and upper mantle that form the surface plates are called the lithosphere. This rigid layer floats on the denser material of the lower mantle the way a wooden raft floats on a pond. The plates are supported by a weak, plastic layer of the lower mantle called the asthenosphere. Also like a raft on a pond, the lithospheric plates are carried along by slow currents in this more fluid layer beneath them.

With an understating of plate tectonics, geologists have put together a new history for the Earth's surface. About 200 million years ago, the plates at the Earth's surface formed a "supercontinent" called Pangaea. When this supercontinent started to tear apart because of plate movement, Pangaea first broke into two large continental masses with a newly formed sea that grew between the land areas as the depression filled with water. The southern one-which included the modern continents of South America, Africa, Australia, and Antarctic- is called Gondwanaland. The northern one-with North America, Europe, and Asia-is called Laurasia. North America tore away from Europe about 180 million years ago, forming the northern Atlantic Ocean.

Some of the lithospheric plates carry ocean floor and others carry land masses or a combination of the two types. The movement of the lithospheric plates is responsible for earthquakes, volcanoes, and the Earth's largest mountain ranges. Current understating of the interaction between different plates explains why these occur where they do. For example, the edge of the Pacific Ocean has been called the "Ring of Fire" because so many volcanic eruptions and earthquakes happen there. Before the 1960's, geologist could not explain why active volcanoes and strong earthquakes were concentrated in that region. The theory of plate tectonics gave them an answer.

10. With which of the following topic is the passage mainly concerned?  
(A) The contributions of the theory of plate tectonics to geological knowledge  
(B) The mineral composition of the Earth's crust  
(C) The location of the Earth's major plates  
(D) The methods used by scientists to measure plate movement
11. According to the passage, the lithospheric plates are given support by the  
(A) upper mantle                      (B) ocean floor                      (C) crust                      (D) asthenosphere
12. The author compares the relationship between the lithosphere and the asthenosphere to which of the following?  
(A) Lava flowing from a volcano                      (B) A boat floating on the water  
(C) A fish swimming in a pond                      (D) The erosion of rocks by running water
13. The word "one" in line 16 refers to  
(A) movements                      (B) masses                      (C) sea                      (D) depression
14. According to the passage, the northern Atlantic Ocean was formed when  
(A) Pangaea was created  
(B) Plate movement ceased  
(C) Gondwanaland collided with Pangaea  
(D) Parts of Laurasia separated from the each other
15. The word "carry" in line 20 could best be replaced by  
(A) damage                      (B) squeeze                      (C) connect                      (D) support
16. In line 27, the word "concentrated" is closest in meaning to which of the following?  
(A) allowed                      (B) clustered                      (C) exploded                      (D) strengthened
17. Which of the following can be inferred about the theory of plate tectonics?  
(A) It is no longer of great interest to geologists.  
(B) It was first proposed in the 1960's.  
(C) It fails to explain why earthquakes occur.  
(D) It refutes the theory of the existence of a supercontinent.
18. The paragraph following the passage most probably discusses  
(A) why certain geological events happen where they do  
(B) how geological occurrences have changed over the years  
(C) the most unusual geological developments in the Earth's history  
(D) the latest innovations in geological measurement

### Questions 19-28

In the United States in the early 1800's, individual state governments had more effect on the economy than did the federal government. States chartered manufacturing, baking, mining, and transportation firms and participated in the

Line construction of various internal improvements such as canals, turnpikes, and railroads.

- (5) The states encouraged internal improvements in two distinct ways: first, by actually establishing state companies to build such improvements; second, by providing part of the capital for mixed public-private companies setting out to make a profit.

In the early nineteenth century, state governments also engaged in a surprisingly large amount of direct regulatory activity, including extensive licensing and inspection

- (10) programs. Licensing targets reflected both similarities in and differences between the economy of the nineteenth century and that of today: in the nineteenth century, state

- regulation through licensing fell especially on peddlers innkeepers, and retail merchants of various kinds. The perishable commodities of trade generally came under state inspection, and such important frontier staples as lumber and gunpowder were
- (15) also subject to state control. Finally, state governments experimented with direct labor and business regulation designed to help the individual laborer or consumer, including setting maximum limits on hours of work and restrictions on price-fixing by businesses.

- Although the states dominated economic activity during this period, the federal government was not inactive. Its goals were the facilitation of western settlement and
- (20) the development of native industries. Toward these ends the federal government pursued several courses of action. It established a national bank to stabilize banking activities in the country and, in part, to provide a supply of relatively easy money to the frontier, where it was greatly needed for settlement. It permitted access to public western lands on increasingly easy terms, culminating in the Homestead Act of 1862,
- (25) by which title to land could be claimed on the basis of residence alone. Finally, it set up a system of tariffs that was basically protectionist in effect, although maneuvering for position by various regional interests produced frequent changes in tariff rates throughout the nineteenth century.

19. What does the passage mainly discuss?  
 (A) States' rights versus federal rights  
 (B) The participation of state governments in railroad, canal, and turnpike construction  
 (C) The roles of state and federal governments in the economy of the nineteenth century  
 (D) Regulatory activity by state governments
20. The word "effect" in line 2 is closest in meaning to  
 (A) value (B) argument (C) influence (D) restraint
21. All of the following are mentioned in the passage as areas that involved state governments in the nineteenth century EXCEPT  
 (A) mining (B) banking (C) manufacturing (D) higher education
22. The word "distinct" in line 5 is closest in meaning to  
 (A) separate (B) innovative (C) alarming (D) provocative
23. It can be inferred from the first paragraph that in the nineteenth century canals and railroads were  
 (A) built with money that came from the federal government  
 (B) much more expensive to build than they had been previously  
 (C) built predominantly in the western part of the country  
 (D) sometimes built in part by state companies
24. The regulatory activities of state governments included all of the following EXCEPT  
 (A) licensing of retail merchants  
 (B) inspecting materials used in turnpike maintenance  
 (C) imposing limits on price fixing  
 (D) control of lumber
25. The word "setting" in line 17 is closest in meaning to  
 (A) discussing (B) analyzing (C) establishing (D) avoiding
26. The word "ends" in line 20 is closest in meaning to  
 (A) Benefits (B) decisions (C) services (D) goals
27. According to the passage, which of the following is true of the Homestead Act of 1862?  
 (A) It made it increasingly possible for settlers to obtain land in the West.

- (B) It was a law first passed by state governments in the West.
- (C) It increased the money supply in the West.
- (D) It established tariffs in a number of regions

28. Which of the following activities was the responsibility of the federal government in the nineteenth century?

- (A) Control of the manufacture of gunpowder
- (B) Determining the conditions under which individuals worked
- (C) Regulation of the supply of money
- (D) Inspection of new homes built on western lands

### Questions 29-38

Life originated in the early seas less than a billion years after the Earth was formed. Yet another three billion years were to pass before the first plants and animals appeared on the continents. Life's transition from the sea to the land was perhaps as much of an evolutionary challenge as was the genesis of life.

- (5) What forms of life were able to make such a drastic change in lifestyle? The traditional view of the first terrestrial organisms is based on megafossils—relatively large specimens of essentially whole plants and animal. Vascular plants, related to modern seed plants and ferns, left the first comprehensive megafossil record. Because of this, it has been commonly assumed that the sequence of terrestrialization reflected the evolution of modern terrestrial ecosystems. In this view, primitive vascular plants first colonized the margins of continental waters, followed by animals that fed on the plants, and lastly by animals that preyed on the plant-eater. Moreover, the megafossils suggest that terrestrial life appeared and diversified explosively near the boundary between the Silurian and the Devonian periods, a little more than 400 million
- (10) years ago.
- (15)

- Recently, however, paleontologists have been taking a closer look at the sediments below this Silurian-Devonian geological boundary. It turns out that some fossils can be extracted from these sediments by putting the rocks in an acid bath. The technique has uncovered new evidence from sediments that were deposited near the shores of the ancient oceans—plant microfossils and microscopic pieces of small animals. In many instances the specimens are less than one-tenth of a millimeter in diameter. Although they were entombed in the rocks for hundreds of millions of years, many of the fossils consist of the organic remains of the organism.
- (20)

- These newly discovered fossils have not only revealed the existence of previously unknown organisms, but have also pushed back these dates for the invasion of land by multicellular organisms. Our views about the nature of the early plant and animal communities are now being revised. And with those revisions come new speculations about the first terrestrial life-forms.
- (25)

29. The word "drastic" in line 5 is closest in meaning to

- (A) widespread
- (B) radial
- (C) progressive
- (D) risky

30. According to the theory that the author calls "the traditional view", what was the first form of life to appear on land?

- (A) Bacteria
- (B) Meat-eating animals
- (C) Plant-eating animals
- (D) Vascular plants

31. According to the passage, what happened about 400 million years ago?

- (A) Many terrestrial life-forms died out.  
 (B) New life-forms on land developed at a rapid rate.  
 (C) The megafossils were destroyed by floods.  
 (D) Life began to develop in the ancient seas.
32. The word "extracted" in line 18 is closest in meaning to  
 (A) located (B) preserved (C) removed (D) studied
33. What can be inferred from the passage about the fossils mentioned in lines 17-20?  
 (A) They have not been helpful in understanding the evolution of terrestrial life.  
 (B) They were found in approximately the same numbers as vascular plant fossils.  
 (C) They are older than the megafossils.  
 (D) They consist of modern life forms.
34. The word "instances" in line 21 is closest in meaning to  
 (A) methods (B) processes (C) cases (D) reasons
35. The word "they" in line 22 refers to  
 (A) rocks (B) shores (C) oceans (D) specimens
36. The word "entombed" in line 22 is closest in meaning to  
 (A) crushed (B) trapped (C) produced (D) excavated
37. Which of the following resulted from the discovery of microscopic fossils?  
 (A) The time estimate for the first appearance of terrestrial life-forms was revised  
 (B) Old techniques for analyzing fossils were found to have new uses.  
 (C) The origins of primitive sea life were explained.  
 (D) Assumptions about the locations of ancient seas were changed.
38. With which of the following conclusions would the author probably agree?  
 (A) The evolution of terrestrial life was as complicated as the origin of life itself.  
 (B) The discovery of microfossils supports the traditional view of how terrestrial life evolved.  
 (C) New species have appeared at the same rate over the course of the last 400 million years.  
 (D) The technology used by paleontologists is too primitive to make accurate determinations about ages of fossils.

### Questions 39-50

- What we today call America folk art was, indeed, art of, by, and for ordinary, everyday "folks" who, with increasing prosperity and leisure, created a market for art of all kinds, and especially for portraits. Citizens of prosperous, essentially  
 Line middle-class republics-whether ancient Romans, seventeenth-century Dutch  
 (5) burghers, or nineteenth-century Americans-have always shown a marked taste for portraiture. Starting in the late eighteenth century, the United States contained increasing numbers of such people, and of the artists how could meet their demands. The earliest American folk art portraits come, not surprisingly, from New  
 England-especially Connecticut and Massachusetts-for this was a wealthy and  
 (10) populous region and the center of a strong craft tradition. Within a few decades after the signing of the Declaration of Independence in 1776, the population was pushing westward, and portrait painters could be found at work in western New York, Ohio, Kentucky, Illinois, and Missouri. Midway through its first century as a nation, the United States' population had increased roughly five time, and eleven new states had  
 (15) been added to the original thirteen. During these years the demand for portraits grew and grew, eventually to be satisfied by the camera. In 1839 the daguerreotype was

introduced to America, ushering in the age of photography, and within a generation the new invention put an end to the popularity of painted portraits. One again an original portrait became a luxury, commissioned by the wealthy and executed by the professional.

(20) But in the heyday of portrait painting—from the late eighteenth century until the 1850's—anyone with a modicum of artistic ability could become a limner, as such a portraitist was called. Local craftspeople—sign, coach, and house painters—began to paint portraits as a profitable sideline; sometimes a talented man or woman who began (25) by sketching family members gained a local reputation and was besieged with requests for portraits; artists found it worth their while to pack their paints, canvases, and brushes and to travel the countryside, often combining house decorating with portrait painting.

39. In lines 4-5 the author mentions seventeenth-century Dutch burghers as an example of a group that
- (A) consisted mainly of self taught artists                      (B) appreciated portraits  
(C) influenced American folk art                                      (D) had little time for the arts
40. The word "market" in line 5 is closest in meaning to
- (A) pronounced                      (B) fortunate                      (C) understandable                      (D) mysterious
41. According to the passage, where were many of the first American folk art portraits painted?
- (A) In western New York                      (B) In Illinois and Missouri  
(C) In Connecticut and Massachusetts                      (D) In Ohio
42. The word "this" in line 9 refers to
- (A) a strong craft tradition                      (B) American folk art  
(C) New England                      (D) western New York
43. How much did the population of United States increase in the first fifty years following independence?
- (A) It became three times larger.                      (B) It became five times larger.  
(C) It became eleven times larger.                      (D) It became thirteen times larger.
44. The phrase "ushering in" in line 17 is closest in meaning to
- (A) beginning                      (B) demanding                      (C) publishing                      (D) increasing
45. The relationship between the daguerreotype (line 16) and the painted portrait is similar to the relationship between the automobile and the
- (A) highway                      (B) driver  
(C) horse-drawn carriage                      (D) engine
46. According to the passage, which of the following contributed to a decline in the demand for painted portraits?
- (A) The lack of a strong craft tradition  
(B) The westward migration of many painters  
(C) The growing preference for landscape paintings  
(D) The invention of the camera
47. The word "executed" in line 19 is closest in meaning to
- (A) sold                      (B) requested                      (C) admired                      (D) created
48. The author implies that most limners (line 22)
- (A) received instruction from traveling teachers  
(B) were women

- (C) were from wealthy families
- (D) had no formal art training

49. The word "sketching" in line 25 is closest in meaning to

- (A) drawing
- (B) hiring
- (C) helping
- (D) discussing

50. Where in the passage does the author provide definition?

- (A) Lines 3-6
- (B) Lines 8-10
- (C) Lines 13-15
- (D) Lines 21-23

# PRACTICE TEST 38

## January 1995

### Passage 1

The Cajun people, descendants of the French Acadians who resettled in south Louisiana in the mid-1700's, have been producing their own traditional style of music for nearly two centuries. However, by the late 1940's, commercially recorded Cajun music had begun to lose its individual character in favor of new sounds heavily influenced by hillbilly music and western swing. Then, in 1948, Iry Lejeune recorded "La Valse du Pont d'Amour." Greatly inspired by the recordings of Amede Ardoin and by his own relatives and neighbors in Pointe Noire, Louisiana. Lejeune went against the grain to perform in the old, traditional style long forced underground. Some said the young singer from rural Louisiana who carried his accordion in a flour sack didn't know better, but crowds rushed to hear his highly emotional music. His unexpected popular success focused attention on cultural values that Cajuns had begun to fear losing.

Iry Lejeune became a pivotal figure in the revitalization of Cajun music; his untimely death in 1955 only added to his legendary stature. Following his lead, musicians like Joe Falcon, Lawrence Walker, Austin Pitre, and Nathan Abshire dusted off long - abandoned accordions to perform and record traditional - style Cajun music. Interest and demand were especially strong after the Second World War among returning soldiers, tired of foreign wars and foreign affairs, who wanted only to get back to the comfort and security of their own culture. Local music store owners pioneered their own local recording industry since national record companies had abandoned regional traditional styles and were only producing music with a broader, national appeal.

1. Cajun music recordings in the 1940's were
  - (A) imitations of Amede Ardoin's work
  - (B) performed in the traditional style
  - (C) influenced by other forms of American music
  - (D) a huge commercial success
2. To say that Lejeune went "against the grain" (line 7) when performing in the old, traditional style suggests which of the following?
  - (A) He played music most other musicians weren't playing.
  - (B) He preferred to play modern music.
  - (C) He performed badly when he played traditional music.
  - (D) He could not make a living playing music.
3. The word "who" in line 8 refers to which of the following?
  - (A) Neighbors
  - (B) Crowds
  - (C) Ardoin
  - (D) Lejeune
4. The word "revitalization" in line 12 is closest in meaning to which of the following.
  - (A) Interpretation
  - (B) Introduction
  - (C) Rebirth
  - (D) Relevance
5. It can be inferred from the passage that when Lejeune died
  - (A) his popularity increased
  - (B) people stopped playing accordions
  - (C) musicians lost interest in traditional music
  - (D) local music store owners lost money
6. Why did interest in traditional Cajun music increase after the Second World War?
  - (A) It had a broad, national appeal.
  - (B) Returning soldiers had missed their culture.
  - (C) The recording industry became more interested in it.
  - (D) Modern music had become distasteful.

## Passage 2

One of the most remarkable of migrations is that taken each fall by the North American monarch butterfly. Often called "the wanderer", it is tough and powerful as butterflies go, and is capable of long flights at speeds of 20 miles per hour or more. Monarch butterflies have been observed within 200 miles of the coast of England, although they are not native to Europe. They are now also found in Asia and Australia, perhaps having been carried there by the wind.

The monarch produces as many as four generations a year, each one of which ventures a little farther north. It is the last of these that migrates before the onset of winter. From as far north as Canada, swarms of butterflies begin gathering from their homes in the fields, clinging to trees and bushes by the thousands. Then, on just the right breeze, they rise in a red cloud and head south. Not all get there. But enough do to ensure the survival of the species until the following spring.

- What is the main topic of the passage?
  - The migration of insects to Europe
  - A butterfly with extraordinary powers of flight
  - The reproductive cycle of the monarch butterfly
  - Remarkable insects of the Western Hemisphere
- The phrase "as butterflies go" (line 2) could best be replaced by which of the following?
  - In the direction butterflies fly
  - Flying as do other butterflies
  - Since butterflies leave
  - Compared to other butterflies
- The phrase "as many as" (line 7) could best be replaced by
  - exactly
  - at least
  - up to
  - more than
- In line 8 the word "these" refers to
  - generations
  - species
  - migrations
  - swarms
- According to the author, what must occur before the butterflies can depart?
  - Spring
  - A storm
  - A suitable wind
  - Evening

## Passage 3

Both Mercy Warren and Abigail Adams admired Catharine Macaulay, the radical author of *A History of England* (1763), who supported the cause of the American patriots. Under Macaulay's influence Mercy Warren conceived her plan to write a history of the American Revolution, living to complete it in 1805. Abigail Adams rejected literary ambitions for herself and never lost her sense of inferiority about her poor spelling and ignorance of Latin. Yet her letters, rather than Warren's plays and verse, have become the greater source in documenting signs of a dawning feminist consciousness.

Abigail Adams welcomed every advance for women and foresaw more than could be realized in her lifetime. She urged her husband, the second President of the United States, to "remember the ladies" in the new code of laws, and to give married women protection from tyrannical husbands. As she pointed out the terrible deficiencies in education for women at all levels, she finally made the significant request to her husband, that the new constitution "be distinguished for Learning and Virtue," and suggested that "if we mean to have Heroes. Statesmen and Philosophers, we should have learned women." This awareness of education's value, rooted in the Enlightenment faith in human potentiality, had feminist implications before there was a feminist ideology.

A younger contemporary of similar background gave the reading public an explicit feminist argument for the education of women. The views of Judith Sargent Murray (1751-1820) reflected both personal and family experience. Murray's *Cleaner* essays published in the 1790's transcended the boundaries of her world in recognizing the need for training women to earn their own living. Although, like Mercy Warren and Abigail Adams, she was brought up with the values of gentility, she knew through personal hardship that even women of her class might be forced to be self-supporting: education could provide independence for women in need, whether they were unmarried women or widows or wives.

1. What does the passage mainly discuss?  
(A) Abigail Adams' life  
(B) Women historians  
(C) Early sources of feminist thinking  
(D) The literary ambitions of Judith Sargent Murray
2. What does the author mean by the statement that Abigail Adams "foresaw more than could be realized in her lifetime" (lines 8~9)?  
(A) No progress was made during her life.  
(B) She made predictions that eventually came true.  
(C) Her life was very short.  
(D) She didn't want to become a public figure.
3. Which of the following statements best expresses Judith Sargent Murray's position?  
(A) Women should be well educated in order to support themselves.  
(B) Women's rights must be protected by new laws.  
(C) The accomplishments of women are ignored in most historical documents.  
(D) Women need to become more active in political affairs.
4. Where in the passage does the author mention Abigail Adams' position regarding education for women?  
(A) Lines 1-2  
(B) Lines 4-5  
(C) Lines 11-14  
(D) Lines 21-24
5. What did Mercy Warren, Abigail Adams, and Judith Sargeant Murray have in common.  
(A) They all wrote books.  
(B) They were all responsible for the financial support of their families.  
(C) They were all interested in women's accomplishments.  
(D) They all had influential families.

## Passage 4

Some cacti, like the saguaro, grow to tree size, but true trees need more moisture than most desert environments can supply, so they are scarce on deserts. Close to streambeds, cottonwoods can sometimes be found. Though these streams are dry most of the year, water flows there longest and is usually available fairly close to the surface. Elsewhere, trees must send taproots deep into the hard-baked desert soil to draw on underground water. Perhaps the most widespread family of trees on the world's deserts is the acacia, whose taproots drill down as far as 25 feet (7.5 meters). The mesquite, common on North American deserts in both tree and shrub forms, does not begin to grow above ground until its root system is completely developed, ensuring the plant a supply of moisture.

The roots of shrubs and trees help to hold the desert soil in place. Their stalks and branches also act as screens to keep the wind from sweeping great drifts of sand along the surface. These services are vital if a desert is to support life. Scientists estimate that a desert needs year-round plant cover over 20 to 40 percent of its surface. If shrubs are too far apart-separated by a distance greater than five times their height-soil around them is likely to blow away. Without the shelter of established shrubs, new seedlings will have difficulty getting a start.

On the other hand, plants that are too close together may compete for underground moisture. To protect themselves from this competition, some shrubs give off a substance that kills young plants that sprout too close to them.

In addition to a few varieties of trees and tough shrubs, most deserts have grasses, herbs, and other annual plants. These do not compete for moisture with the longer-lived growth. They spring up quickly after rains, when the surface is moist. Then, for a brief time, the desert can be literally carpeted with color. Almost as quickly as they appeared, these small plants die away. But they have developed special ways of ensuring the life of another generation when rains come again.

- What is the main topic of the passage?
 

(A) The effect of extreme heat on plants	(B) Difficulties of survival in the desert
(C) The regeneration of annual plants	(D) Water sources in the desert
- What can be inferred about cottonwoods from the passage?
 

(A) They are a kind of cactus	(B) They produce a soft wood
(C) They are true trees	(D) They grow only in the desert
- The root system of which of the following grows before the upper part?
 

(A) A cottonwood	(B) An acacia
(C) A mesquite	(D) A saguaro
- Which of the following is NOT mentioned in the passage as a function of trees and shrubs in the desert?
 

(A) Their roots keep the earth in place
(B) They shelter new seedlings
(C) Their branches and stalks prevent soil from drifting
(D) They provide shelter to animals
- Shrubs that are each 1 foot high should be how far apart from each other?
 

(A) Less than 5 feet	(B) Approximately 10 feet
(C) Between 20 and 40 feet	(D) More than 40 feet
- Which of the following is NOT mentioned as a characteristic of the annual plants of the desert?
 

(A) They grow only after it rains
(B) Their lifetime is often very brief
(C) Some of them are very brightly colored
(D) Larger plants compete with them for moisture

## Passage 5

There are two ways to create colors in a photograph. One method, called additives, starts with three basic colors and adds them together to produce some other color. The second method, called subtractive, starts with white light (a mixture of all colors in the spectrum) and, by taking away some or all other colors, leaves the one desired.

In the additive method, separate colored lights combine to produce various other colors. The three additive primary colors are green, red, and blue (each providing about one-third of the wavelengths in the total spectrum). Mixed in varying proportions, they can produce all colors. Green and red light mix to produce yellow; red and blue light mix to produce magenta; green and blue mix to produce cyan. When equal parts of all three of these primary-colored beams of light overlap, the mixture appears white to the eye.

In the subtractive process, colors are produced when dye (as in paint or color photographic materials) absorbs some wavelengths and so passes on only part of the spectrum. The subtractive primaries are cyan (a bluish green), magenta (a purplish pink), and yellow; these are the pigments or dyes that absorb red, green, and blue wavelengths, respectively, thus subtracting them from white light. These dye colors are the complementary colors to the three additive primaries of red, green, and blue. Properly combined, the subtractive primaries can absorb all colors of light, producing black. But, mixed in varying proportions, they too can produce any color in the spectrum.

Whether a particular color is obtained by adding colored lights together or by subtracting some light from the total spectrum, the result looks the same to the eye. The additive process was employed for early color photography. But the subtractive method, while requiring complex chemical techniques, has turned out to be more practical and is the basis of all modern color films.

1. What does the passage mainly discuss?  
(A) Recent developments in camera technology  
(B) How to make white light  
(C) The additive and subtractive methods of producing color  
(D) The discovery of the spectrum
2. The word "one" in line 4 refer to  
(A) color (B) method (C) mixture (D) light
3. The picture below represents the addition of the red, green, and blue light. What color would be expected in the region marked "X"  
(A) White (B) Black (C) Yellow (D) Magenta
4. Which of the following is closest in meaning to the phrase "passes on" as used in line 12 ?  
(A) judges (B) lets through (C) dies (D) goes over
5. What color filter would absorb red wave-lengths?  
(A) Red (B) Cyan (C) Magenta (D) Yellow
6. Which of the following is NOT a pair of additive and subtractive primary colors?  
(A) Yellow and blue (B) Magenta and green  
(C) Black and white (D) Cyan and red
7. What explanation is given for the use of the subtractive method in modern color films?  
(A) Subtractive colors are more realistic.  
(B) The subtractive process is more efficient.  
(C) Additive chemical techniques are too complex.  
(D) The additive process is still being developed.
8. How is the passage organized?  
(A) The reasons for a choice are explained in depth.  
(B) A general statement is justified by a series of historical examples.  
(C) Two basic causes are compared.  
(D) Related processes are described one after the other.

# PRACTICE TEST 39

## May 1995

### Passage 1

Before the 1850's the United States had a number of small colleges, most of them dating from colonial days. They were small, church-connected institutions whose primary concern was to shape the moral character of their students.

Throughout Europe, institutions of higher learning had developed, bearing the ancient name of university. In Germany a different kind of university had developed. The German university was concerned primarily with creating and spreading knowledge, not morals. Between midcentury and the end of the 1800's, more than nine thousand young Americans, dissatisfied with their training at home, went to Germany for advanced study. Some of them returned to become presidents of venerable colleges-Harvard, Yale, Columbia-and transform them into modern universities. The new presidents broke all ties with the churches and brought in a new kind of faculty. Professors were hired for their knowledge of a subject, not because they were of the proper faith and had a strong arm for disciplining students. The new principle was that a university was to create knowledge as well as pass it on, and this called for a faculty composed of teacher - scholars. Drilling and learning by rote were replaced by the German method of lecturing. in which the professor's own research was presented in class. Graduate training leading to the Ph. D, an ancient German degree signifying the highest eve: of advanced scholarly attainment, was introduced. With the establishment of the seminar system, graduate students learned to question, analyze, and conduct their own research.

At the same time, the new university greatly expanded in size and course offerings, breaking completely out of the old, constricted curriculum of mathematics, classics, rhetoric, and music. The president of Harvard pioneered the elective system, by which students were able to choose their own courses of study. The notion of major fields of study emerged. The new goal was to make the university relevant to the real pursuits of the world. Paying close heed to the practical needs of society, the new universities trained men and women to work at its tasks, with engineering students being the most characteristic of the new regime. Students were also trained as economists, architects, agriculturalists, social welfare workers, and teachers.

1. The word "this" in line 13 refers to which of the following?  
(A) Creating and passing on knowledge  
(B) Drilling and learning by rote  
(C) Disciplining students  
(D) Developing moral principles
2. According to the passage, the seminar system encouraged students to  
(A) discuss moral issues  
(B) study the classics, rhetoric, and music  
(C) study overseas  
(D) work more independently
3. The word "constricted" in line 20 is closest in meaning to which of the following"  
(A) Mandatory  
(B) Limited  
(A) Challenging  
(D) Competitive
4. It can be inferred from the passage that before 1850, all of the following were characteristic of higher education EXCEPT  
(A) the elective system  
(B) drilling  
(C) strict discipline  
(D) rote learning

5. Those who favored the new university would be most likely to agree with which of the following statements?
- (A) Learning is best achieved through discipline and drill.
  - (B) Shaping the moral character of students should be the primary goal
  - (C) Higher education should prepare students to contribute to society.
  - (D) Teachers should select their students' courses.
6. Where does the author mention why many students decided to study abroad?
- (A) Lines 1-2
  - (B) Lines 7-8
  - (C) Lines 21-22
  - (D) Lines 25-26

## Passage 2

Most of our planet is covered by water. There is so much of it that if all the mountains of the world were leveled and their debris dumped into the oceans, the surface of the globe would be entirely submerged beneath water to a depth of several thousand meters. The great basins between the continents, in which all this water lies, are themselves more varied topographically than the surface of the land. The highest terrestrial mountain, Mount Everest, would fit into the deepest part of the ocean, the Mariana Trench, with its peak a kilometer beneath the surface. On the other hand, the biggest mountains of the sea are so huge that they rise above the surface of the water to form chains of islands. Mauna Kea, the highest of the Hawaiian volcanoes, measured from its base on the ocean floor, is more than 10,000 meters high and so can claim to be highest mountain on the planet.

The seas first formed when the Earth began to cool soon after its birth and hot water vapor condensed on its surface. They were further fed by water gushing through volcanic vents from the interior of the Earth. The water of these young seas was not pure, like rainwater, but contained significant quantities of chlorine, bromine, iodine, boron, and nitrogen, as well as traces of many rarer substances. Since then other ingredients have been added. As continental rocks weather and erode, they produce salts that are carried in solution down to the sea by rivers. So, over millennia, the sea has been getting saltier and saltier.

Life first appeared in this chemically rich water some 3.5 billion years ago. We know from fossils that the first organisms were simple single-celled bacteria and algae. Organisms very like them still exist in the sea today. They are the basis of all marine life, indeed. Were it not for these algae, the seas would still be completely sterile and the land uninhabited.

1. The word "debris" in line 2 is closest in meaning to
- (A) fragments
  - (B) decay
  - (C) composition
  - (D) foundation
2. The writer mentions Mount Everest in line 5 in order to
- (A) show how comparatively small underwater mountains are
  - (B) reveal the proportions of the underwater terrain
  - (C) explain how volcanoes are formed
  - (D) identify the largest mountain on the planet
3. The word "they" in line 16 refers to
- (A) ingredients
  - (B) rocks
  - (C) substances
  - (D) salts
4. According to the passage, which of the following has contributed to the sea becoming increasingly salty?
- (A) Water vapor condensing on the surface of the sea
  - (B) Single-celled organisms decaying in the sea
  - (C) Products of erosion being transported to the sea
  - (D) Sterile rainwater falling into the sea

5. Which of the following is mentioned as part of the foundation of all life in the sea?  
 (A) Algae (B) Fossils (C) Seaweed (D) Rainwater
6. Where in the passage does the author mention the processes that led to the creation of the seas on Earth?  
 (A) Lines 1-3 (B) Lines 5 – 7 (C) Lines 11 – 13 (D) Lines 15-17

### Passage 3

The most striking single fact about chimpanzees is the flexibility of their social life, the lack of any rigid form of organization. It represents about as far a departure from the baboon type of organization as one can find among the higher primates, and serves to emphasize the great variety of primate adaptations. Chimpanzees are more human than baboons, or rather they jibe better with the way we like to picture ourselves, as free - wheeling individuals who tend to be unpredictable, do not take readily to any form of regimentation, and are frequently charming. (Charm is relatively rare among baboons.)

Two researchers have described what they found during more than eight months spent among chimpanzees in their natural habitat, the forest: "We were quite surprised to observe that there is no single distinct social unit in chimpanzee society. Not only is there no 'family' or 'harem' organization; neither is there a 'troop' organization-that is to say, no particular chimpanzees keep permanently together. On the contrary, individuals move about at will alone or in small groups best described as bands, which sometimes form into large aggregations. They leave their associates if they want to, and join up with new ones without conflict.

The general practice is best described as "easy come, easy go," although there are certain group-forming tendencies. As a rule chimpanzees move about in one of four types of band: adult males only; mothers and offspring and occasionally a few other females; adults and adolescents of both sexes, but no mothers with young; and representatives of all categories mixed together. The composition of bands may change a number of times during the course of a day as individuals wander off and groups split or combine with other groups. On the other hand, certain individuals prefer one another's company. One of the researchers observed that four males often roamed together over a four-month period, and mothers often associated with their older offspring.

1. The author's main purpose is to explain  
 (A) how chimpanzees mate  
 (B) the differences between baboons and chimpanzees  
 (C) why chimpanzees live in the forest  
 (D) the relationships among chimpanzees
2. The author implies that the social behavior of baboons is  
 (A) predictable (B) practical (C) political (D) primitive
3. According to the passage, the researchers were surprised that chimpanzees had such  
 (A) temporary associations (B) humanlike families  
 (C) violent conflicts (D) large harems
4. In line 16, the phrase "easy come, easy go" could best be replaced by  
 (A) immobile (B) nonchalant (C) functional (D) aggressive
5. According to the passage, the membership of a chimpanzee band may change several times in a  
 (A) day (B) week (C) month (D) year

6. Where in the passage does the author concede that individual chimpanzees may have a preference for certain companions?

(A) Lines 2-4

(B) Lines 10-12

(C) Lines 16-17

(D) Lines 21-22

### Passage 4

Perhaps no poet's career was more closely associated with the imagist movement than was that of H. D. (Hilda Doolittle). Her verse, with its precise, clear images, typified the imagists' rebellion against what they perceived as the sentimentalism and careless techniques of nineteenth century poetry.

H. D. attended private schools in Philadelphia and then Bryn Maws College. The love of classical antiquity she acquired during these years later surfaced in the many references in her poetry to figures from Greek and Egyptian mythology and in her classical notions of beauty and form. While in Philadelphia she also began rewarding friendships with Ezra Pound, William Carlos Williams, and Harriet Monroe.

In 1910, H. D. sailed for Europe, where her career began. Soon after arriving in London, she renewed her friendship with Pound and met and married Richard Aldington, an imagist poet and novelist who also directly influenced the shape of her writing. She began writing short poems that so impressed Pound with their precise description and diction that he insisted she submit them to Harriet Monroe's Poetry magazine signed "H. D., Imagist." She persisted in using her initials for the remainder of her career, a career, a closely linked to the Imagist rebellion against more traditional poetry.

The clear, spare, and energetic lyrics of H. D.'s early poems, with their classical images, later became fuller, freer, and more "pen" philosophic explorations of the world. By then, the destruction of the Second World War that she witnessed elicited deeper visions of the relationship of ancient truths to modern realities. That vision is expressed in such works as *Trilogy* (1946), *Helen in Egypt* (1961), and her last work *Hermetic Definition* (1961).

H. D.'s industry and literary achievement are just beginning to be recognized and appreciated. In addition to her poetry, she wrote several novels, including *Palimpsest* (1926), *Hedys* (1928), and *Bid Me to Live* (1960). Many of her other poems, essays, and short stories have been published posthumously.

1. What does the passage mainly discuss?

(A) H.D.'s early works

(B) H. D. 's contributions to a literary movement

(C) The influence of nineteenth century Poetry on H.D. s work

(D) The role of mythology in H. D. 's poetry

2. According to the passage, the Imagists revolted against earlier poets' emphasis on

(A) strict technique

(B) the classics

(C) beauty and form

(D) emotion

3. According to the passage, H. D. 's interest in the classics was inspired by

(A) Imagist poetry

(B) the Second World War

(C) her travel experiences

(D) her formal education

4. H. D. was encouraged to submit her work to poetry magazine by which of the following?

(A) Richard Adlington

(B) Ezra Pound

(C) Harriet Monroe

(D) William Carlos Williams

5. It can be inferred from the passage that H. D.'s work

(A) discussed personal relationships

- (B) was typical of nineteenth century work
- (C) was difficult to understand
- (D) became more widely known after her death

## Passage 5

Fully outfitted for work on the range, a cowboy, in the days of the western frontier, was covered from head to foot in a protective costume that identified him as distinctly as a knight's armor identified its owner. But every item of dress had a useful purpose, from the broad-brimmed hat that kept sun and rain off his head to the spurs fastened to the backs of his boots. Even the cowboy's ornamental-looking bandanna had various functions—as a mask to keep out trail dust, as insulation against the desert sun when wadded up and stuck in a hat crown, even as a tourniquet in case of a rattlesnake bite.

Beneath this glamorous but utilitarian garb, the cowhand was dressed like any other laborer. He normally wore long johns—unless it was too hot. His shirt was typically collarless and made of cotton or flannel. His woolen pants were sometimes fortified with buckskin sewn over the seat and down the inner thighs to keep them from fraying where they rubbed against the saddle. He rarely used suspenders, since they chafed him, and just as rarely wore a belt unless, as in later days, he was a rodeo rider hankering to show off a fancy belt buckle won in the arena. As a practical measure his pants had to stay up by themselves and thus were bought to fit tightly around the waist. Because it was inconvenient to carry anything in pants pockets while riding, the cowboy usually had on a vest with deep pockets where he kept his tobacco and perhaps a tally book for keeping count of the cattle.

1. What does the passage mainly discuss?
  - (A) Cowboys and knights
  - (B) Cowboy clothes
  - (C) Rodeo customs
  - (D) Dangers on the range
2. The author compares the cowboy to the knight because they both had
  - (A) high ideals
  - (B) distinctive clothes
  - (C) difficult vocations
  - (D) historical importance
3. Which of the following is NOT mentioned in the passage as a use for the cowboy's bandanna?
  - (A) Disguising his face
  - (B) Keeping his head cool
  - (C) Making a tourniquet
  - (D) Shielding his nose from dust
4. A cowboy's pants were fortified with buckskin to
  - (A) hold the pants up
  - (B) make him stylish
  - (C) keep his legs clean
  - (D) make the pants last longer
5. The word "chafed" in line 12 is closest in meaning to which of the following?
  - (A) Wounded
  - (B) Embarrassed
  - (C) Cooled
  - (D) Irritated
6. According to the passage, why did cowboys often wear vests?
  - (A) To look fashionable
  - (B) To keep warm
  - (C) To carry useful items
  - (D) To cover their suspenders
7. Where in the passage does the author mention why a cowboy might wear a belt?
  - (A) lines 1-3
  - (B) line 8
  - (C) lines 11 – 12
  - (D) lines 15-17

# PRACTICE TEST 40

## August 1995

### Questions 1-9

The ocean bottom – a region nearly 2.5 times greater than the total land area of the Earth – is a vast frontier that even today is largely unexplored and uncharted. Until about a century ago, the deep-ocean floor was completely inaccessible, hidden beneath waters averaging over 3,600 meters deep. Totally without light and subjected to intense pressures hundreds of times greater than at the Earth's surface, the deep-ocean bottom is a hostile environment to humans, in some ways as forbidding and remote as the void of outer space.

Although researchers have taken samples of deep-ocean rocks and sediments for over a century, the first detailed global investigation of the ocean bottom did not actually start until 1968, with the beginning of the National Science Foundation's Deep Sea Drilling Project (DSDP). Using techniques first developed for the offshore oil and gas industry, the DSDP's drill ship, the Glomar Challenger, was able to maintain a steady position on the ocean's surface and drill in very deep waters, extracting samples of sediments and rock from the ocean floor.

The Glomar Challenger completed 96 voyages in a 15-year research program that ended in November 1983. During this time, the vessel logged 600,000 kilometers and took almost 20,000 core samples of seabed sediments and rocks at 624 drilling sites around the world. The Glomar Challenger's core samples have allowed geologists to reconstruct what the planet looked like hundred of millions of years ago and to calculate what it will probably look like millions of years in the future. Today, largely on the strength of evidence gathered during the Glomar Challenger's voyages, nearly all earth scientists agree on the theories of plate tectonics and continental drift that explain many of the geological processes that shape the Earth.

The cores of sediment drilled by the Glomar Challenger have also yielded information critical to understanding the world's past climates. Deep-ocean sediments provide a climatic record stretching back hundreds of millions of years, because they are largely isolated from the mechanical erosion and the intense chemical and biological activity that rapidly destroy much land-based evidence of past climates. This record has already provided insights into the patterns and causes of past climatic change – information that may be used to predict future climates.

1. The author refers to the ocean bottom as a "frontier" in line 2 because it
  - (A) is not a popular area for scientific research
  - (B) contains a wide variety of life forms
  - (C) attracts courageous explorers
  - (D) is an unknown territory
2. The word "inaccessible" in line 3 is closest in meaning to
  - (A) unrecognizable
  - (B) unreachable
  - (C) unusable
  - (D) unsafe
3. The author mentions outer space in line 7 because
  - (A) the Earth's climate millions of years ago was similar to conditions in outer space.
  - (B) it is similar to the ocean floor in being alien to the human environment
  - (C) rock formations in outer space are similar to those found on the ocean floor
  - (D) techniques used by scientists to explore outer space were similar to those used in ocean exploration

4. Which of the following is true of the Glomar Challenger?  
 (A) It is a type of submarine. (B) It is an ongoing project.  
 (C) It has gone on over 100 voyages (D) It made its first DSDP voyage in 1968
5. The word "extracting" in line 13 is closest in meaning to  
 (A) breaking (B) locating (C) removing (D) analyzing
6. The deep Sea Drilling Project was significant because it was  
 (A) an attempt to find new sources of oil and gas  
 (B) the first extensive exploration of the ocean bottom  
 (C) composed of geologists from all over the world  
 (D) funded entirely by the gas and oil industry
7. The word "strength" in line 21 is closest in meaning to  
 (A) basis (B) purpose (C) discovery (D) endurance
8. The word "they" in line 26 refers to  
 (A) years (B) climates (C) sediments (D) cores
9. Which of the following is NOT mentioned in the passage as being a result of the Deep Sea Drilling Project?  
 (A) Geologists were able to determine the Earth's appearance hundreds of millions of years ago.  
 (B) Two geological theories became more widely accepted  
 (C) Information was revealed about the Earth's past climatic changes.  
 (D) Geologists observed forms of marine life never before seen.

### Question 10-21

Basic to any understanding of Canada in the 20 years after the Second World War is the country's impressive population growth. For every three Canadians in 1945, there were over five in 1966. In September 1966 Canada's population passed the 20 million  
 Line mark. Most of this surging growth came from natural increase. The depression of the  
 (5) 1930's and the war had held back marriages, and the catching-up process began after 1945. The baby boom continued through the decade of the 1950's, producing a population increase of nearly fifteen percent in the five years from 1951 to 1956. This rate of increase had been exceeded only once before in Canada's history, in the decade before 1911. When the prairies were being settled. Undoubtedly, the good economic  
 (10) conditions of the 1950's supported a growth in the population, but the expansion also derived from a trend toward earlier marriages and an increase in the average size of families. In 1957 the Canadian birth rate stood at 28 per thousand, one of the highest in the world.

After the peak year of 1957, the birth rate in Canada began to decline. It continued  
 (15) falling until in 1966 it stood at the lowest level in 25 years. Partly this decline reflected the low level of births during the depression and the war, but it was also caused by changes in Canadian society. Young people were staying at school longer; more women were working; young married couples were buying automobiles or houses before starting families; rising living standards were cutting down the size of families.  
 (20) It appeared that Canada was once more falling in step with the trend toward smaller families that had occurred all through the Western world since the time of the Industrial Revolution.

Although the growth in Canada's population had slowed down by 1966 (the increase in the first half of the 1960's was only nine percent), another large population  
 (25) wave was coming over the horizon. It would be composed of the children

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who were born during the period of the high birth rate prior to 1957.

10. What does the passage mainly discuss?  
(A) Educational changes in Canadian society (B) Canada during the Second World War  
(C) Population trends in postwar Canada (D) Standards of living in Canada
11. According to the passage, when did Canada's baby boom begin?  
(A) In the decade after 1911 (B) After 1945  
(C) During the depression of the 1930's (D) In 1966
12. The word "five" in line 3 refers to  
(A) Canadians (B) years (C) decades (D) marriages
13. The word "surging" in line 4 is closest in meaning to  
(A) new (B) extra (C) accelerating (D) surprising
14. The author suggests that in Canada during the 1950's  
(A) the urban population decreased rapidly (B) fewer people married  
(C) economic conditions were poor (D) the birth rate was very high
15. The word "trend" in line 11 is closest in meaning to  
(A) tendency (B) aim (C) growth (D) directive
16. The word "peak" in line 14 is closest in meaning to  
(A) pointed (B) dismal (C) mountain (D) maximum
17. When was the birth rate in Canada at its lowest postwar level?  
(A) 1966 (B) 1957 (C) 1956 (D) 1951
18. The author mentions all of the following as causes of declines in population growth after 1957 EXCEPT  
(A) people being better educated (B) people getting married earlier  
(C) better standards of living (D) couples buying houses
19. It can be inferred from the passage that before the Industrial Revolution  
(A) families were larger (B) population statistics were unreliable  
(C) the population grew steadily (D) economic conditions were bad
20. The word "It" in line 25 refers to  
(A) horizon (B) population wave (C) nine percent (D) first half
21. The phrase "prior to" in line 26 is closest in meaning to  
(A) behind (B) since (C) during (D) preceding

**Questions 22-30**

Are organically grown foods the best food choices? The advantages claimed for such foods over conventionally grown and marketed food products are now being debated. Advocates of organic foods – a term whose meaning varies greatly – frequently proclaim that such products are safer and more nutritious than others.

- (5) The growing interest of consumers in the safety and nutritional quality of the typical North American diet is a welcome development. However, much of this interest has been sparked by sweeping claims that the food supply is unsafe or inadequate in meeting nutritional needs. Although most of these claims are not supported by scientific evidence, the preponderance of written material advancing such claims makes it difficult for the general public to separate fact from fiction.
- (10) As a result, claims that eating a diet consisting entirely of organically grown foods

prevents or cures disease or provides other benefits to health have become widely publicized and form the basis for folklore.

- (15) Almost daily the public is besieged by claims for "no-aging" diets, new vitamins, and other wonder foods. There are numerous unsubstantiated reports that natural vitamins are superior to synthetic ones, that fertilized eggs are nutritionally superior to unfertilized eggs, that untreated grains are better than fumigated grains, and the like.

- (20) One thing that most organically grown food products seem to have in common is that they cost more than conventionally grown foods. But in many cases consumers are misled if they believe organic foods can maintain health and provide better nutritional quality than conventionally grown foods. So there is real cause for concern if consumers, particularly those with limited incomes, distrust the regular food supply and buy only expensive organic foods instead.

22. The word "Advocates" in line 3 is closest in meaning to which of the following?  
 (A) Proponents (B) Merchants (C) Inspectors (D) Consumers
23. In line 4, the word "others" refers to  
 (A) advantages (B) advocates (C) organic foods (D) products
24. The "welcome development" mentioned in line 6 is an increase in  
 (A) interest in food safety and nutrition among North Americans  
 (B) the nutritional quality of the typical North American diet  
 (C) the amount of healthy food grown in North America  
 (D) the number of consumers in North America
25. According to the first paragraph, which of the following is true about the term "organic foods"?  
 (A) It is accepted by most nutritionists. (B) It has been used only in recent years.  
 (C) It has no fixed meaning. (D) It is seldom used by consumers.
26. The word "unsubstantiated" in line 15 is closest in meaning to  
 (A) unbelievable (B) uncontested (C) unpopular (D) unverified
27. The word "maintain" in line 20 is closest in meaning to  
 (A) improve (B) monitor (C) preserve (D) restore
28. The author implies that there is cause for concern if consumers with limited incomes buy organic foods instead of conventionally grown foods because  
 (A) organic foods can be more expensive but are often no better than conventionally grown foods  
 (B) many organic foods are actually less nutritious than similar conventionally grown foods  
 (C) conventionally grown foods are more readily available than organic foods  
 (D) too many farmers will stop using conventional methods to grow food crops
29. According to the last paragraph, consumers who believe that organic foods are better than conventionally grown foods are often  
 (A) careless (B) mistaken (C) thrifty (D) wealthy
30. What is the author's attitude toward the claims made by advocates of health foods?  
 (A) Very enthusiastic (B) Somewhat favorable  
 (C) Neutral (D) Skeptical

v

**Questions 31-40**

There are many theories about the beginning of drama in ancient Greece. The one most widely accepted today is based on the assumption that drama evolved from ritual. The argument for this view goes as follows. In the beginning, human beings viewed the natural forces of the world, even the seasonal changes, as unpredictable, and they sought, through various means, to control these unknown and feared powers. Those measures which appeared to bring the desired results were then retained and repeated until they hardened into fixed rituals. Eventually stories arose which explained or veiled the mysteries of the rites. As time passed some rituals were abandoned, but the stories, later called myths, persisted and provided material for art and drama.

- (5) Line
- (10) Those who believe that drama evolved out of ritual also argue that those rites contained the seed of theater because music, dance, masks, and costumes were almost always used. Furthermore, a suitable site had to be provided for performances, and when the entire community did not participate, a clear division was usually made between the "acting area" and the "auditorium". In addition, there were performers,
- (15) and, since considerable importance was attached to avoiding mistakes in the enactment of rites, religious leaders usually assumed that task. Wearing masks and costumes, they often impersonated other people, animals, or supernatural beings, and mimed the desired effect – success in hunt or battle, the coming rain, the revival of the Sun – as an actor might. Eventually such dramatic representations were separated from religious
- (20) activities.

Another theory traces the theater's origin from the human interest in storytelling. According to this view, tales (about the hunt, war, or other feats) are gradually elaborated, at first through the use of impersonation, action, and dialogue by a narrator and then through the assumption of each of the roles by a different person. A closely related theory traces theater to those dances that are primarily rhythmical and gymnastic or that are imitations of animal movements and sounds.

31. What does the passage mainly discuss?  
 (A) The origins of theater (B) The role of ritual in modern dance  
 (C) The importance of storytelling (D) The variety of early religious activities
32. The word "they" in line 4 refers to  
 (A) seasonal changes (B) natural forces  
 (C) theories (D) human beings
33. What aspect of drama does the author discuss in the first paragraph?  
 (A) The reason drama is often unpredictable  
 (B) The seasons in which dramas were performed  
 (C) The connection between myths and dramatic plots  
 (D) The importance of costumes in early drama
34. Which of the following is NOT mentioned as a common element of theater and ritual?  
 (A) Dance (B) Costumes (C) Music (D) Magic
35. The word "considerable" in line 15 is closest in meaning to  
 (A) thoughtful (B) substantial (C) relational (D) ceremonial

36. The word "enactment" in line 15 is closest in meaning to  
 (A) establishment (B) performance (C) authorization (D) season
37. The word "they" in line 16 refers to  
 (A) mistakes (B) costumes (C) animals (D) performers
38. According to the passage, what is the main difference between ritual and drama?  
 (A) Ritual uses music whereas drama does not.  
 (B) Ritual is shorter than drama.  
 (C) Ritual requires fewer performers than drama.  
 (D) Ritual has a religious purpose and drama does not.
39. The passage supports which of the following statements?  
 (A) No one really knows how the theater began. (B) Myths are no longer represented dramatically.  
 (C) Storytelling is an important part of dance. (D) Dramatic activities require the use of costumes.
40. Where in the passage does the author discuss the separation of the stage and the audience?  
 (A) Lines 8-9 (B) Lines 12-14 (C) Lines 19-20 (D) Lines 22-24

### Questions 41-50

Staggering tasks confronted the people of the United States, North and South, when the Civil War ended. About a million and a half soldiers from both sides had to be demobilized, readjusted to civilian life, and reabsorbed by the devastated economy.

Line Civil government also had to be put back on a peacetime basis and interference from  
 (5) the military had to be stopped.

The desperate plight of the South has eclipsed the fact that reconstruction had to be undertaken also in the North, though less spectacularly. Industries had to adjust to peacetime conditions: factories had to be retooled for civilian needs.

Financial problems loomed large in both the North and the South. The national debt  
 (10) had shot up from a modest \$65 million in 1861, the year the war started, to nearly \$3 billion in 1865, the year the war ended. This was a colossal sum for those days but one that a prudent government could pay. At the same time, war taxes had to be reduced to less burdensome levels.

Physical devastation caused by invading armies, chiefly in the South and border  
 (15) states, had to be repaired. This herculean task was ultimately completed, but with discouraging slowness.

Other important questions needed answering. What would be the future of the four million Black people who were freed from slavery? On what basis were the Southern states to be brought back into the Union?

(20) What of the Southern leaders, all of whom were liable to charges of treason? One of these leaders, Jefferson Davis, president of the Southern Confederacy, was the subject of an insulting popular Northern song, "Hang Jeff Davis from a Sour Apple Tree", and even children sang it. Davis was temporarily chained in his prison cell during the early days of his two-year imprisonment. But he and the other Southern  
 (25) leaders were finally released, partly because it was unlikely that a jury from Virginia, a Southern Confederate state, would convict them. All the leaders were finally pardoned by President Johnson in 1868 in an effort to help reconstruction efforts proceed with as little bitterness as possible.

41. What does the passage mainly discuss?  
(A) Wartime expenditures  
(B) Problems facing the United States after the war  
(C) Methods of repairing the damage caused by the war  
(D) The results of government efforts to revive the economy
42. The word "Staggering" in line 1 is closest in meaning to  
(A) specialized (B) confusing (C) various (D) overwhelming
43. The word "devastated" in line 3 is closest in meaning to  
(A) developing (B) ruined (C) complicated (D) fragile
44. According to the passage, which of the following statements about the damage in the South is correct?  
(A) It was worse than in the North. (B) The cost was less than expected.  
(C) It was centered in the border states. (D) It was remedied rather quickly.
45. The passage refers to all of the following as necessary steps following the Civil War EXCEPT  
(A) helping soldiers readjust (B) restructuring industry  
(C) returning government to normal (D) increasing taxes
46. The word "task" in line 15 refers to  
(A) raising the tax level (B) sensible financial choices  
(C) wise decisions about former slaves (D) reconstruction of damaged areas
47. Why does the author mention a popular song in lines 22-23?  
(A) To give an example of a Northern attitude towards the South  
(B) To illustrate the Northern love of music  
(C) To emphasize the cultural differences between the North and the South  
(D) To compare the Northern and Southern presidents
48. The word "them" in line 26 refers to  
(A) charges (B) leaders (C) days (D) irons
49. Which of the following can be inferred from the phrase "...it was unlikely that a jury from Virginia, a Southern Confederate state, would convict them" (lines 25-26)?  
(A) Virginians felt betrayed by Jefferson Davis.  
(B) A popular song insulted Virginia.  
(C) Virginians were loyal to their leaders.  
(D) All of the Virginia military leaders had been put in chains.
50. It can be inferred from the passage that President Johnson pardoned the Southern leaders in order to  
(A) raise money for the North  
(B) repair the physical damage in the South  
(C) prevent Northern leaders from punishing more Southerners  
(D) help the nation recover from the war

# PRACTICE TEST 41

## October 1995

### Questions 1-13

Atmospheric pressure can support a column of water up to 10 meters high. But plants can move water much higher, the sequoia tree can pump water to its very top, more than 100 meters above the ground. Until the end of the nineteenth century, the movement of water's in trees and other tall plants was a mystery. Some botanists (5) hypothesized that the living cells of plants acted as pumps, but many experiments demonstrated that the stems of plants in which all the cells are killed can still move water to appreciable heights. Other explanations for the movement of water in plants have been based on root pressure, a push on the water from the roots at the bottom of the plant. But root pressure is not nearly great enough to push water to the tops of tall (10) trees, Furthermore, the conifers, which are among the tallest trees have unusually low root pressures.

If water is not pumped to the top of a tall tree, and if it is not pushed, to the top of a tall tree, then we may ask. How does it get there? According to the currently accepted cohesion-tension theory, water is pulled there. The pull on a rising column of water in a (15) plant results from the evaporation of water at the top of the plant. As water is lost from the surface of the leaves, a negative pressure or tension is created. The evaporated water is replaced by water moving from inside the plant in unbroken columns that extend from the top of a plant to its roots. The same forces that create surface tension in any sample of water are responsible for the maintenance of these unbroken columns (20) of water. When water is confined in tubes of very small bore, the forces of cohesion (the attraction between water molecules) are so great that the strength of a column of water compares with the strength of a steel wire of the same diameter. This cohesive strength permits columns of water to be pulled to great heights without being broken.

1. How many theories does the author mention?  
(A) One                      (B) Two                      (C) Three                      (D) Four
2. The passage answers which of the following questions ?  
(A) What is the effect of atmospheric pressure on foliage?  
(B) When do dead cells harm plant growth?  
(C) How does water get to the tops of trees?  
(D) Why is root pressure weak?
3. The word "demonstrated" in line 6 is closest in meaning to  
(A) ignored                      (B) showed                      (C) disguised                      (D) distinguished
4. What do the experiments mentioned in lines 5-7 prove?  
(A) Plant stems die when deprived of water.  
(B) Cells in plant stems do not pump water.  
(C) Plants cannot move water to high altitudes.  
(D) Plant cells regulate pressure within stems.
5. How do botanists know that root pressure is not the only force that moves water in plants?  
(A) Some very tall trees have weak root pressure.  
(B) Root pressures decrease in winter.  
(C) Plants can live after their roots die.  
(D) Water in a plant's roots is not connected to water in its stem.

6. Which of the following statements does the passage support?  
(A) Water is pushed to the tops of trees.  
(B) Botanists have proven that living cells act as pumps.  
(C) Atmospheric pressure draws water to the tops of tall trees.  
(D) Botanists have changed their theories of how water moves in plants.
7. The word "it" in line 12 refers to  
(A) top (B) tree  
(C) water (D) cohesion-tension theory
8. The word "there" in line 14 refers to  
(A) treetops (B) roots (C) water columns (D) tubes
9. What causes the tension that draws water up a plant?  
(A) Humidity (B) Plant growth (C) Root pressure (D) Evaporation
10. The word "extend" in line 18 is closest in meaning to  
(A) stretch (B) branch (C) increase (D) rotate
11. According to the passage, why does water travel through plants in unbroken columns?  
(A) Root pressure moves the water very rapidly.  
(B) The attraction between water molecules is strong.  
(C) The living cell of plants push the water molecules together.  
(D) Atmospheric pressure supports the columns.
12. Why does the author mention steel wire in line 24?  
(A) To illustrate another means of pulling water  
(B) To demonstrate why wood is a good building material  
(C) To indicate the size of a column of water  
(D) To emphasize the strength of cohesive forces in water
13. Where in the passage does the author give an example of a plant with low root pressure?  
(A) Lines 3-5 (B) Lines 6-8 (C) Lines 11-12 (D) Lines 13-14

### Questions 14-22

Mass transportation revised the social and economic fabric of the American city in three fundamental ways. It catalyzed physical expansion, it sorted out people and land uses, and it accelerated the inherent instability of urban life. By opening vast areas of unoccupied land for residential expansion, the omnibuses, horse railways, commuter trains, and electric trolleys pulled settled regions outward two to four times more distant from city centers than they were in the premodern era. In 1850, for example, the borders of Boston lay scarcely two miles from the old business district by the turn of the century the radius extended ten miles. Now those who could afford it could live far removed from the old city center and still commute there for work, shopping, and entertainment. The new accessibility of land around the periphery of almost every major city sparked an explosion of real estate development and filled what we now know as urban sprawl. Between 1890 and 1920, for example, some 250,000 new residential lots were recorded within the borders of Chicago, most of them located in outlying areas. Over the same period, another 550,000 were plotted outside the city limits but within the metropolitan area. Anxious to take advantage of the possibilities of commuting, real estate developers added 800,000 potential building sites to the Chicago region in just thirty years lots that could have housed five to six million people.

- Of course, many were never occupied; there was always a huge surplus of subdivided, but vacant, land around Chicago and other cities. There excesses underscore a feature of residential expansion related to the growth of mass transportation urban sprawl was essentially unplanned. It was carried out by thousands of small investors who paid little heed to coordinated land use or to future land users. Those who purchased and prepared land for residential purposes, particularly and near or outside city borders where transit lines and middle-class inhabitants were anticipated, did so to create demand as much as to respond to it. Chicago is a prime example of this process. Real estate subdivision there proceeded much faster than population growth.

14. With which of the following subjects is the passage mainly concerned?  
 (A) Types of mass transportation  
 (B) Instability of urban life  
 (C) How supply and demand determine land use  
 (D) The effects of mass trans-city portation on urban expansion
15. The author mentions all of the following as effects of mass transportation on cities EXCEPT  
 (A) growth in city area  
 (B) separation of commercial and residential districts  
 (C) changes in life in the inner city  
 (D) increasing standards of living.
16. The word "vast" in line 3 is closest in meaning to  
 (A) large (B) basic (C) new (D) urban
17. The word "sparked" in line 11 is closest in meaning to  
 (A) brought about (B) surrounded (C) sent out (D) followed
18. Why does the author mention both Boston and Chicago?  
 (A) To demonstrate positive and negative effects of growth  
 (B) To show that mass transit changed many cities  
 (C) To exemplify cities with and without mass transportation  
 (D) To contrast their rates of growth
19. The word "potential" in line 16 is closest in meaning to  
 (A) certain (B) popular (C) improved (D) possible
20. The word "many" in line 19 refers to  
 (A) people (B) lots (C) years (D) developers
21. According to the passage, what was one disadvantage of residential expansion?  
 (A) It was expensive. (B) It happened too slowly.  
 (C) It was unplanned. (D) It created a demand for public transportation.
22. The author mentions Chicago in the second paragraph as an example of a city  
 (A) that is large  
 (B) that is used as a model for land development  
 (C) where land development exceeded population growth  
 (D) with an excellent mass transportation system

**Questions 23-33**

The preservation of embryos and juveniles is a rare occurrence in the fossil record. The tiny, delicate skeletons are usually scattered by scavengers or destroyed by weathering before they can be fossilized. Ichthyosaurs had a higher chance of being preserved than did terrestrial creatures because, as marine animals, they tended to live in environments less subject to erosion. Still, their fossilization required a suite of factors: a slow rate of decay of soft tissues, little scavenging by other animals, a lack of swift currents and waves to jumble and carry away small bones, and fairly rapid burial. Given these factors, some areas have become a treasury of well-preserved ichthyosaur fossils.

(10) The deposits at Holzmaden, Germany, present an interesting case for analysis. The ichthyosaur remains are found in black, bituminous marine shales deposited about 190 million years ago. Over the years, thousands of specimens of marine reptiles, fish, and invertebrates have been recovered from these rocks. The quality of preservation is outstanding, but what is even more impressive is the number of ichthyosaur fossils containing preserved embryos. Ichthyosaurs with embryos have been reported from 6 different levels of the shale in a small area around Holzmaden, suggesting that a specific site was used by large numbers of ichthyosaurs repeatedly over time. The embryos are quite advanced in their physical development; their paddles, for example, are already well formed. One specimen is even preserved in the birth canal. In addition, the shale contains the remains of many newborns that are between 20 and 30 inches long.

Why are there so many pregnant females and young at Holzmaden when they are so rare elsewhere? The quality of preservation is almost unmatched and quarry operations have been carried out carefully with an awareness of the value of the fossils. But these factors do not account for the interesting question of how there came to be such a concentration of pregnant ichthyosaurs in a particular place very close to their time of giving birth.

**23.** The passage supports which of the following conclusions?

- (A) Some species of ichthyosaurs decayed more rapidly than other species.
- (B) Ichthyosaur newborns are smaller than other new born marine reptiles.
- (C) Ichthyosaurs were more advanced than terrestrial creatures.
- (D) Ichthyosaurs may have gathered at Holzmaden to give birth.

**24.** The word "they" in line 3 refers to

- (A) skeletons
- (B) scavengers
- (C) creatures
- (D) environments

**25.** All of the following are mentioned as factors that encourage fossilization EXCEPT the

- (A) speed of burying
- (B) conditions of the water
- (C) rate at which soft tissues decay
- (D) cause of death of the animal

**26.** Which of the following is true of the fossil deposits discussed in the passage ?

- (A) They include examples of newly discovered species.
- (B) They contain large numbers of well-preserved specimens.
- (C) They are older than fossils found in other places.
- (D) They have been analyzed more carefully than other fossils.

**27.** The word "outstanding" in line 14 is closest in meaning to

- (A) extensive                      (B) surprising                      (C) vertical                      (D) excellent
28. The word "site" in line 17 is closest in meaning to  
 (A) example                      (B) location                      (C) development                      (D) characteristic
29. Why does the author mention the specimens preserved in the birth canal (line 21-22)?  
 (A) To illustrate that the embryo fossils are quite advanced in their development  
 (B) To explain why the fossils are well preserved  
 (C) To indicate how the ichthyosaurs died  
 (D) To prove that ichthyosaurs are marine animals
30. The word "they" in line 22 refers to  
 (A) pregnant females and young                      (B) quarry operations  
 (C) the value of the fossils                      (D) these factors
31. The phrase "account for" in line 25 is closest in meaning to  
 (A) record                      (B) describe                      (C) equal                      (D) explain
32. Which of the following best expresses the relationship between the first and second paragraphs?  
 (A) The first paragraph describes a place which the second paragraph describes a field of study.  
 (B) The first paragraph defines the terms that are used in the second paragraph  
 (C) The second paragraph describes a specific instance of the general topic discussed in the first paragraph  
 (D) The second paragraph presents information that contrasts with the information given in the first paragraph
33. Where in the passage does the author mention the variety of fossils found at Holzmaden?  
 (A) Line 1                      (B) Lines 3-5                      (C) Lines 12-13                      (D) Lines 19-21

### Questions 34-41

The Lewis and Clark expedition, sponsored by President Jefferson, was the most important official examination of the high plains and the Northwest before the War of 1812. The President's secretary, Captain Meriwether Lewis, had been instructed to

Line "explore the Missouri River, and such principal streams of it as, by its course and  
 (5) communication with the waters of the Pacific Ocean. . . may offer the most direct and practicable water communication across the continent, for the purposes of commerce." Captain William Clark, the younger brother of famed George Rogers Clark, was invited to share the command of the exploring party.

Amid rumors that there were prehistoric mammoths wandering around the unknown

(10) region and that somewhere in its wilds was a mountain of rock salt 80 by 45 miles in extent, the two captains set out. The date was May 14, 1801. Their point of departure was the mouth of the Wood River, just across the Mississippi from the entrance of the Missouri River. After toiling up the Missouri all summer, the group wintered near the Mandan villages in the center of what is now North Dakota. Resuming their journey in

(15) the spring of 1805. The men worked their way along the Missouri to its source and then crossed the mountains of western Montana and Idaho. Picking up a tributary of the Columbia River, they continued westward until they reached the Pacific Ocean, where they stayed until the following spring.

Lewis and Clark brought back much new information, including the knowledge that

(20) he continent was wider than originally supposed. More specifically, they learned a good deal about river drainages and mountain barriers. They ended speculation that an easy coast-to-coast route existed via the Missouri-Columbia River systems, and their

reports of the climate, the animals and birds, the trees and plants, and the Indians of the West – though not immediately published – were made available to scientists.

34. With what topic is the passage primarily concerned?  
(A) The river systems of portions of North America  
(B) Certain geological features of the North America  
(C) An exploratory trip sponsored by the United States government  
(D) The discovery of natural resources in the United States
35. According to the passage, the primary purpose of finding a water route across the continent was to  
(A) gain easy access to the gold and other riches of the Northwest  
(B) become acquainted with the inhabitants of the West  
(C) investigate the possibility of improved farmland in the West  
(D) facilitate the movement of commerce across the continent
36. The river Meriwether Lewis was instructed to explore was the  
(A) Wood (B) Missouri (C) Columbia (D) Mississippi
37. According to the passage, the explorers spent their first winter in what would become  
(A) North Dakota (B) Missouri (C) Montana (D) Idaho
38. The author states that Lewis and Clark studied all of the following characteristics of the explored territories EXCEPT  
(A) mineral deposits (B) the weather  
(C) animal life (D) native vegetation
39. The phrase "Picking up" in line 16 could best be replaced by which of the following?  
(A) Searching for (B) Following  
(C) Learning about (D) Lifting
40. It can be Inferred from the passage that prior to the Lewis and Clark expedition the size of the continent had been  
(A) of little interest (B) underestimated  
(C) known to native inhabitants of the West (D) unpublished but known to most scientists
41. Where in the passage does the author refer to the explorers' failure to find an easy passageway to the western part of the continent?  
(A) Lines 1-3 (B) Lines 7-8 (C) Lines 16-18 (D) Lines 21-24

### **Question 42-50**

For a century and a half the piano has been one of the most popular solo instruments for Western music. Unlike string and wind instruments, the piano is completely self-sufficient, as it is able to play both the melody and its accompanying harmony at the same time. For this reason, it became the favorite household instrument of the nineteenth century.

The ancestry of the piano can be traced to the early keyboard instruments of the fifteenth and sixteenth centuries—the spinet, the dulcimer, and the virginal. In the seventeenth century the organ, the clavichord, and the harpsichord became the chief instruments of the keyboard group, a supremacy they maintained until the piano supplanted them at the end of the eighteenth century. The clavichord's tone was

- metallic and never powerful, nevertheless, because of the variety of tone possible to it, many composers found the clavichord a sympathetic instrument for intimate chamber music. The harpsichord with its bright, vigorous tone was the favorite instrument for supporting the bass of the small orchestra of the period and for concert use but the character of the tone could not be varied save by mechanical or structural devices .
- (15)

- The piano was perfected in the early eighteenth century by a harpsichord maker in Italy (though musicologists point out several previous instances of the instrument). This instrument was called a piano e forte (soft Mid loud), to indicate its dynamic versatility; its strings were struck by a recoiling hammer with a felt-padded head. The wires were much heavier in the earlier instruments. A series of mechanical improvements continuing well into the nineteenth century, including the introduction of pedals to sustain tone or to soften it, the perfection of a metal frame, and steel wire of the finest quality, finally produced an instrument capable of myriad tonal effects from the most delicate harmonies to an almost orchestral fullness of sound, from a liquid, singing tone to sharp, percussive brilliance.
- (20)

42. What does the passage mainly discuss ?  
 (A) The historical development of the piano  
 (B) The quality of tone produced by various keyboard instrument  
 (C) The uses of keyboard instruments in various types of compositions  
 (D) The popularity of the piano with composers
43. Which of the following instruments was widely used before the seventeenth century?  
 (A) The harpsichord (B) The spinet  
 (C) The clavichord (D) The organ
44. The words "a supremacy" in line 9 are closest in meaning to  
 (A) a suggestion (B) an improvement  
 (C) a dominance (D) a development
45. The word "supplanted" in line 10 is closest in meaning to  
 (A) supported (B) promoted (C) replaced (D) dominated
46. The word "it" in line 11 refers to the  
 (A) variety (B) music (C) harpsichord (D) clavichord
47. According to the passage, what deficiency did the harpsichord have?  
 (A) It was fragile. (B) It lacked variety in tone.  
 (C) It sounded metallic. (D) It could not produce a strong sound.
48. Where in the passage does the author provide a translation?  
 (A) Lines 4-5 (B) Lines 13-15 (C) Lines 18-19 (D) Lines 20-25
49. According to the information in the third paragraph , which of the following improvements made it possible to lengthen the tone produced by the piano?  
 (A) The introduction of pedals (B) The use of heavy wires  
 (C) The use of felt-padded hammerhead's (D) The metal frame construction
50. The word "myriad" in line 23 is closest in meaning to  
 (A) noticeable (B) many (C) loud (D) unusual

# PRACTICE TEST 42

## December 1995

### Questions 1-10

Another early Native American tribe in what is now the southwestern part of the United States was the Anasazi. By A. D. 800 the Anasazi Indians were constructing multistory pueblos-massive, stone apartment compounds. Each one was virtually a stone town, which is why the Spanish would later call them pueblos, the Spanish word for towns. These pueblos represent one of the Anasazis' supreme achievements. At least a dozen large stone houses took shape below the bluffs of Chaco Canyon in northwest New Mexico. They were built with masonry walls more than a meter thick and adjoining apartments to accommodate dozens, even hundreds, of families. The largest, later named Pueblo Bonito (Pretty Town) by the Spanish, rose in five terraced stories, contained more than 800 rooms, and could have housed a population of 1,000 or more.

Besides living quarters, each pueblo included one or more kivas-circular underground chambers faced with stone. They functioned as sanctuaries where the elders met to plan festivals, perform ritual dances, settle pueblo affairs, and impart tribal lore to the younger generation. Some kivas were enormous. Of the 30 or so at pueblo Bonito, two measured 20 meters across. They contained niches for ceremonial objects, a central fire pit, and holes in the floor for communicating with the spirits of tribal ancestors.

Each pueblo represented an astonishing amount of well-organized labor. Using only stone and wood tools, and without benefit of wheels or draft animals, the builders quarried ton upon ton of sandstone from the canyon walls, cut it into small blocks, hauled the blocks to the construction site, and fitted them together with mud mortar. Roof beams of pine or fir had to be carried from logging areas in the mountain forests many kilometers away. Then, to connect the pueblos and to give access to the surrounding tableland, the architects laid out a system of public roads with stone staircases for ascending cliff faces. In time, the roads reached out to more than 80 satellite villages within a 60-kilometer radius.

1. The paragraph preceding the passage most  
(A) how pueblos were built  
(B) another Native American tribe  
(C) Anasazi crafts and weapons  
(D) Pueblo village in New Mexico
2. What is the main topic of the passage?  
(A) The Anasazi pueblos  
(B) Anasazi festivals of New Mexico  
(C) The organization of the Anasazi tribe  
(D) The use of Anasazi sanctuaries
3. The word "supreme" in line 5 is closest in meaning to  
(A) most common  
(B) most outstanding  
(C) most expensive  
(D) most convenient
4. The word "They" in line 7 refers to  
(A) houses  
(B) bluffs  
(C) walls  
(D) families
5. The author mentions that Pueblos bonito had more than 800 rooms as an example of which of the following?  
(A) How overcrowded the pueblos could be  
(B) How many ceremonial areas it contained  
(C) How much sandstone was needed to build it  
(D) How big a pueblo could be

6. The word "settle" in line 14 is closest in meaning to  
 (A) sink (B) decide (C) clarify (D) locate
7. It can be inferred from the passage that building a pueblo probably  
 (A) required many workers (B) cost a lot of money  
 (C) involved the use of farm animals (D) relied on sophisticated technology
8. The word "ascending" in line 26 is closest in meaning to  
 (A) arriving at (B) carving (C) connecting (D) climbing
9. It can be inferred from the passage that in addition to pueblos the Anasazis were skilled at building which of following?  
 (A) Roads (B) Barns (C) Monuments (D) Water systems
10. The pueblos are considered one of the Anasazis' supreme achievements for all of the following reasons EXCEPT that they were  
 (A) very large (B) located in forests  
 (C) built with simple tools (D) connected in a systematic way

### Questions 11-21

Accustomed though we are to speaking of the films made before 1927 as "silent", the film has never been, in the full sense of the word, silent. From the very beginning, music was regarded as an indispensable accompaniment; when the Lumiere films were shown at the first public film exhibition in the United States in February 1896, they  
 Line (5) were accompanied by piano improvisations on popular tunes. At first, the music played bore no special relationship to the films; an accompaniment of any kind was sufficient. Within a very short time, however, the incongruity of playing lively music to a solemn film became apparent, and film pianists began to take some care in matching their pieces to the mood of the film.

(10) As movie theaters grew in number and importance, a violinist, and perhaps a cellist, would be added to the pianist in certain cases, and in the larger movie theaters small orchestras were formed. For a number of years the selection of music for each film program rested entirely in the hands of the conductor or leader of the orchestra, and very often the principal qualification for holding such a position was not skill or taste

(15) so much as the ownership of a large personal library of musical pieces. Since the conductor seldom saw the films until the night before they were to be shown (if, indeed, the conductor was lucky enough to see them then), the musical arrangement was normally improvised in the greatest hurry.

To help meet this difficulty, film distributing companies started the practice of  
 (20) publishing suggestions for musical accompaniments. In 1909, for example, the Edison Company began issuing with their films such indications of mood as "pleasant", "sad", "lively". The suggestions became more explicit, and so emerged the musical cue sheet containing indications of mood, the titles of suitable pieces of music, and precise directions to show where one piece led into the next.

(25) Certain films had music especially composed for them. The most famous of these early special scores was that composed and arranged for D. W. Griffith's film *Birth of a Nation*, which was released in 1915.

11. The passage mainly discusses music that was  
(A) performed before the showing of a film  
(B) played during silent films  
(C) specifically composed for certain movie theaters  
(D) recorded during film exhibitions
12. What can be inferred that the passage about the majority of films made after 1927?  
(A) They were truly "silent".  
(B) They were accompanied by symphonic orchestras.  
(C) They incorporated the sound of the actors' voices.  
(D) They corresponded to specific musical compositions.
13. The word "solemn" in line 7 is closest in meaning to  
(A) simple                      (B) serious                      (C) short                      (D) silent
14. It can be inferred that orchestra conductors who worked in movie theaters needed to  
(A) be able to play many instruments                      (B) have pleasant voices  
(C) be familiar with a wide variety of music                      (D) be able to compose original music
15. The word "them" in line 17 refers to  
(A) years                      (B) hands                      (C) pieces                      (D) films
16. According to the passage, what kind of business was the Edison Company?  
(A) It produced electricity.                      (B) It distributed films.  
(C) It published musical arrangements.                      (D) It made musical instruments.
17. It may be inferred from the passage that the first musical cue sheets appeared around  
(A) 1896                      (B) 1909                      (C) 1915                      (D) 1927
18. Which of the following notations is most likely to have been included on a musical cue sheet of the early 1900's?  
(A) "Calm, peaceful"                      (B) "Piano, violin"  
(C) "Key of C major"                      (D) "Directed by D. W. Griffith"
19. The word "composed" in line 26 is closest in meaning to  
(A) selected                      (B) combined                      (C) played                      (D) created
20. The word "scores" in line 26 is closest in meaning to  
(A) totals                      (B) successes  
(C) musical compositions                      (D) groups of musicians
21. The passage probably continues with a discussion of  
(A) famous composers of the early twentieth century  
(B) other films directed by D. W. Griffith  
(C) silent films by other directors  
(D) the music in Birth of a Nation

## Questions 22-31

The Earth comprises three principal layers: the dense, iron-rich core, the mantle made of silicate rocks that are semimolten at depth, and the thin, solid-surface crust. There are two kinds of crust, a lower and denser oceanic crust and an upper, lighter continental crust found over only about 40 percent of the Earth's surface. The rocks of the crust are of very different ages. Some continental rocks are over 3,000 million years old, while those of the ocean flow are less than 200 million years old. The crusts and the top, solid part of the mantle, totaling about 70 to 100 kilometers in thickness, at present appear to consist of about 15 rigid plates, 7 of which are very large. These plates move over the semimolten lower mantle to produce all of the major topographical features of the Earth. Active zones where intense deformation occurs are confined to the narrow, interconnecting boundaries of contact of the plates.

There are three main types of zones of contact: spreading contacts where plates move apart, converging contacts where plates move towards each other, and transform contacts where plates slide past each other. New oceanic crust is formed along one or more margins of each plate by material issuing from deeper layers of the Earth's crust, for example, by volcanic eruptions of lava at midocean ridges. If at such a spreading contact the two plates support continents, a rift is formed that will gradually widen and become flooded by the sea. The Atlantic Ocean formed like this as the American and Afro-European plates move in opposite directions. At the same time at margins of converging plates, the oceanic crust is being reabsorbed by being subducted into the mantle and remelted beneath the ocean trenches. When two plates carrying continents collide, the continental blocks, too light to be drawn down, continue to float and therefore buckle to form a mountain chain along the length of the margin of the plates.

22. The word "comprises" in line 1 is closest in meaning to  
 (A) adapts to                      (B) benefits from                      (C) consists of                      (D) focuses on
23. According to the passage, on approximately what percent of the Earth's surface is the continental crust found?  
 (A) 15                                  (B) 40                                  (C) 70                                  (D) 100
24. The word "which" in line 8 refers to  
 (A) crusts                              (B) kilometers                              (C) plates                              (D) continents
25. The word "intense" in line 10 is closest in meaning to  
 (A) surface                              (B) sudden                              (C) rare                              (D) extreme
26. What does the second paragraph of the passage mainly discuss?  
 (A) The major mountain chains of the Earth  
 (B) Processes that create the Earth's surface features  
 (C) The composition of the ocean floors  
 (D) The rates at which continents move
27. ???
28. The word "margins" in line 15 is closest in meaning to  
 (A) edges                              (B) peaks                              (C) interiors                              (D) distances
29. The word "support" in line 17 is closest in meaning to  
 (A) separate                              (B) create                              (C) reduce                              (D) hold

30. According to the passage, mountain range are formed when  
(A) the crust is remelted (B) two plates separate  
(C) a rift is flooded (D) continental plates collide
31. Where in the passage does the author describe how oceans are formed?  
(A) Lines 3-4 (B) Lines 6-8 (C) Lines 16-18 (D) Lines 19-21

### Questions 32-40

Coincident with concerns about the accelerating loss of species and habitats has been a growing appreciation of the importance of biological diversity, the number of species in a particular ecosystem, to the health of the Earth and human well-being.

- Line Much has been written about the diversity of terrestrial organisms, particularly the  
(5) exceptionally rich life associated with tropical rain-forest habitats. Relatively little has been said, however, about diversity of life in the sea even though coral reef systems are comparable to rain forests in terms of richness of life.

- An alien exploring Earth would probably give priority to the planet's dominants, most-distinctive feature-the ocean. Humans have a bias toward land that sometimes  
(10) gets in the way of truly examining global issues. Seen from far away, it is easy to realize that landmasses occupy only one-third of the Earth's surface. Given that two-thirds of the Earth's surface is water and that marine life lives at all levels of the ocean, the total three-dimensional living space of the ocean is perhaps 100 times greater than that of land and contains more than 90 percent of all life on Earth even though the  
(15) ocean has fewer distinct species.

- The fact that half of the known species are thought to inhabit the world's rain forests does not seem surprising, considering the huge numbers of insects that comprise the bulk of the species. One scientist found many different species of ants in just one tree from a rain forest. While every species is different from every other species, their  
(20) genetic makeup constrains them to be insects and to share similar characteristics with 750,000 species of insects. If basic, broad categories such as phyla and classes are given more emphasis than differentiating between species, then the greatest diversity of life is unquestionably the sea. Nearly every major type of plant and animal has some representation there.

- (25) To appreciated fully the diversity and abundance of life in the sea, it helps to think small. Every spoonful of ocean water contains life, on the order of 100 to 100,000 bacterial cells plus assorted microscopic plants and animals, including larvae of organisms ranging from sponges and corals to starfish and clams and much more.

32. What is the main point of the passage?  
(A) Humans are destroying thousands of species.  
(B) There are thousands of insect species.  
(C) The sea is even richer in life than the rain forests.  
(D) Coral reefs are similar to rain forests.
33. The word "appreciation" in line 2 is closest in meaning to  
(A) ignorance (B) recognition (C) tolerance (D) forgiveness
34. Why does the author compare rain forests and coral reefs (lines 4-7)?  
(A) They are approximately the same size.  
(B) They share many similar species.  
(C) Most of the their inhabitants require water.

- (D) Both have many different forms of life.
35. The word "bias" in line 9 is closest in meaning to  
 (A) concern (B) disadvantage (C) attitude (D) prejudice
36. The passage suggests that most rain forest species are  
 (A) insects (B) bacteria (C) mammals (D) birds
37. The word "there" in line 24 refers to  
 (A) the sea (B) the rain forests (C) a tree (D) the Earth's surface
38. The author argues that there is more diversity of life in the sea than in the rain forests because  
 (A) more phyla and classes of life are represented in the sea  
 (B) there are too many insects to make meaningful distinctions  
 (C) many insect species are too small to divide into categories  
 (D) marine life-forms reproduce at a faster rate
39. Which of the following is NOT mentioned as an example of microscopic sea life?  
 (A) Sponges (B) Coral (C) Starfish (D) Shrimp
40. Which of the following conclusions is supported by the passage?  
 (A) Ocean life is highly adaptive.  
 (B) More attentions needs to be paid to preserving ocean species and habitats.  
 (C) Ocean life is primarily composed of plants.  
 (D) The sea is highly resistant to the damage done by pollutants.

### Questions 41-50

What geologists call the Basin and Range Province in the United States roughly coincides in its northern portions with the geographic province known as the Great Basin. The Great Basin is hemmed in on the west by the Sierra Nevada and on the east  
 Line by the Rocky Mountains; it has no outlet to the sea. The prevailing winds in the Great  
 (5) Basin are from the west. Warm, moist air from the Pacific Ocean is forced upward as it crosses the Sierra Nevada. At the higher altitudes it cools and the moisture it carries is precipitated as rain or snow on the western slopes of the mountains. That which reaches the Basin is air wrung dry of moisture. What little water falls there as rain or snow, mostly in the winter months, evaporates on the broad, flat desert floors. It is,  
 (10) therefore, an environment in which organisms battle for survival. Along the rare watercourses, cottonwoods and willows eke out a sparse existence. In the upland ranges, pinon pines and junipers struggle to hold their own.

But the Great Basin has not always been so arid. Many of its dry, closed depressions were once filled with water. Owens Valley, Panamint Valley, and Death Valley were  
 (15) once a string of interconnected lakes. The two largest of the ancient lakes of the Great Basin were Lake Lahontan and Lake Bonneville. The Great Salt Lake is all that remains of the latter, and Pyramid Lake is one of the last briny remnants of the former. There seem to have been several periods within the last tens of thousands of years when water accumulated in these basins. The rise and fall of the lakes were  
 (20) undoubtedly linked to the advances and retreats of the great ice sheets that covered much of the northern part of the North American continent during those times. Climatic changes during the Ice ages sometimes brought cooler, wetter weather to midlatitude deserts worldwide, including those of the Great Basin. The broken valleys of the Great Basin provided ready receptacles for this moisture.

41. What is the geographical relationship between the Basin and Range Province and the Great Basin?  
(A) The Great Basin is west of the Basin and Range Province.  
(B) The Great Basin is larger than the Basin and Range Province.  
(C) The Great Basin is in the northern part of the Basin and Range Province.  
(D) The Great Basin is mountainous; the Basin and Range Province is flat desert.
42. According to the passage, what does the great Basin lack?  
(A) Snow  
(B) Dry air  
(C) Winds from the west  
(D) Access to the ocean
43. The word "prevailing" in line 4 is closest in meaning to  
(A) most frequent  
(B) occasional  
(C) gentle  
(D) most dangerous
44. It can be inferred that the climate in the Great Basin is dry because  
(A) the weather patterns are so turbulent  
(B) the altitude prevents precipitation  
(C) the winds are not strong enough to carry moisture  
(D) precipitation falls in the nearby mountains
45. The word "it" in line 5 refers to  
(A) Pacific Ocean  
(B) air  
(C) west  
(D) the Great Basin
46. Why does the author mention cottonwoods and willows in line 11?  
(A) To demonstrate that certain trees require a lot of water  
(B) To give examples of trees that are able to survive in a difficult environment  
(C) To show the beauty of the landscape of the Great Basin  
(D) To assert that there are more living organisms in the Great Basin than there used to be
47. Why does the author mention Owens Valley, Panamint Valley, and Death Valley in the second paragraph?  
(A) To explain their geographical formation  
(B) To give examples of depressions that once contained water  
(C) To compare the characteristics of the valleys with the characteristics of the lakes  
(D) To explain what the Great Basin is like today
48. The words "the former" in line 17 refer to  
(A) Lake Bonneville  
(B) Lake Lahontan  
(C) The Great Salt Lake  
(D) Pyramid Lake
49. The word "accumulated" in line 19 is closest in meaning to  
(A) dried  
(B) flooded  
(C) collected  
(D) evaporated
50. According to the passage, the Ice Ages often brought about  
(A) desert formation  
(B) warmer climates  
(C) broken valleys  
(D) wetter weather

# PRACTICE TEST 43

## January 1994

### Passage 1

Taking natural objects such as rocks, bones, clouds and flowers for subject matter, Georgia O'Keeffe reduced them to their simplest form, often by employing a close-up view or some other unusual vantage point. With such techniques, including the use of thin paint and clear colors to emphasize a feeling of mystical silence and space, she achieved an abstract simplicity in her paintings. O'Keeffe spent a summer in New Mexico in 1929 and the bleak landscape and broad skies of the desert so appealed to her that she later settled there permanently. Cows skulls and other bare bones found in the desert were frequent motifs in her paintings. Other common subjects included flowers, the sky, and the horizon lines of the desert. After O'Keeffe's three-month trip around the world by plane in 1959, the sky "paved with clouds" as seen from an airplane also became one of her favorite motifs and the subject of her largest work, a 24-foot mural that she began in 1966.

1. In the first sentence of the passage, the author explains O'Keeffe's
  - (A) popularity with art critics despite her unusual choice of subject matter
  - (B) reasons for painting one kind of object rather than another
  - (C) skillful use of photography in selecting her subject matter
  - (D) efforts to portray the objects she painted in their simplest form
2. With what subject is the passage mainly concerned?
  - (A) Georgia O'Keeffe's trip around the world
  - (B) The private life of Georgia O'Keeffe
  - (C) The paintings of Georgia O'Keeffe
  - (D) Georgia O'Keeffe's greatest work of art
3. Which of the following is an example of something often painted by O'Keeffe?
  - (A) An airport
  - (B) A deserted street
  - (C) An astronaut in outer space
  - (D) A cloud formation
4. With which of the following statements concerning Georgia O'Keeffe's paintings would the author of the passage be most likely to agree.
  - (A) They generally create a sense of stillness and open space
  - (B) They are so realistic that they often resemble ordinary photographic images
  - (C) Most of them are portraits of the painter's friends and relatives
  - (D) They represent humans in an eternal struggle with the forces of nature
5. Which of the following aspects of the desert landscape is NOT mentioned by the author as one that attracted O'Keeffe's attention?
  - (A) Bones
  - (B) Sand
  - (C) The sky
  - (D) Flowers

## Passage 2

Researchers have found that migrating animals use a variety of inner compasses to help them navigate. Some steer by the position of the Sun. Others navigate by the stars. Some use the Sun as their guide during the day, and then switch to star navigation by night. One study shows that the homing pigeon uses the Earth's magnetic fields as a guide in finding its way home, and there are indications that various other animals, from insects to mollusks, can also make use of magnetic compasses. It is of course very useful for a migrating bird to be able to switch to a magnetic compass when clouds cover the Sun otherwise it would just have to land and wait for the Sun to come out again.

Even with the Sun or stars to steer by the problems of navigation are more complicated than they might seem at first. For example a worker honeybee that has found a rich source of nectar and pollen flies rapidly home to the hive to report. A naturalist has discovered that the bee scout delivers her report through a complicated dance in the hive, in which she tells the other workers not only how far away the food is, but also what direction to fly in relation to the Sun. But the Sun does not stay in one place all day. As the workers start out to gather the food the Sun may already have changed its position in the sky somewhat. In later trips during the day the Sun will seem to move farther and farther toward the west. Yet the worker bees seem to have no trouble at all in finding the food source. Their inner clocks tell them just where the Sun will be, and they change their course correspondingly.

- What is the main idea of the passage?
  - Bees communicate with each other by dancing
  - Animals have internal steering devices
  - The Sun is necessary for animal navigation
  - The Earth's magnetic fields guide pigeons home
- The author mentions all of the following natural phenomena that help animals navigate EXCEPT
  - the Sun
  - the stars
  - magnetic fields
  - wind direction
- What makes it necessary for a bird to rely on a magnetic compass when navigating?
  - The possibility of bad weather
  - The constant motion of the Sun
  - Its patterns of migration
  - Its need to constantly change homes
- In line 10, the word "rich" means
  - wealthy
  - abundant
  - comical
  - meaningful
- According to the passage what information does the dance of the scout bee communicate to the other worker bees?
  - The time of day
  - What the weather is like
  - How far away the food is
  - Which flowers the scout has found
- What enables the bees to steer by the Sun even though the Sun's position is not fixed?
  - They are equipped with biological time clocks
  - The fly in formation behind the scout bee
  - They have excellent eyesight
  - They have long memories
- Which of the following is an example of an animal using an inner compass as described in the passage?
  - Mother chimpanzees caring for and grooming their young
  - Turtles traveling miles through the sea to lay eggs on an island
  - Wolves fighting each other for territorial rights
  - Lions stalking their prey without having seen it

### Passage 3

Thomas Alva Edison, the symbolic proprietor of the burgeoning electrical industry, stressed a preference for plain figuring over scientific formulas. "Oh, these mathematicians make me tired!" he once gibed. "When you ask them to work out a sum they take a piece of paper, cover it with rows of A's, B's, and X's, Y's, . . . scatter a mess of flyspecks over them, and give you an answer that's all wrong." Nonetheless, while Edison's approach to invention was often cut-and-try, it was highly systematic. His laboratory at Menlo Park, New Jersey, was equipped with a rich variety of scientific instruments, and its library shelves included the latest scientific books as well as periodicals. Edison also employed some scientists, including the mathematical physicist Francis R. Upton. But Americans of the day, with no small encouragement from the inventor himself, typically thought of Edison as the practical, unschooled inventor who needed no science. And it was true that neither mathematical nor scientific training necessarily made ordinary mortals a match for Edison's kind of genius.

- What is the main idea of the passage?
  - Mathematicians and scientists use different formulas
  - Inventors need well - equipped laboratories
  - Francis Upton was critical to Edison's success
  - Thomas Edison was an unconventional genius
- In line 3, the word "them" refers to which of the following?
 

(A) Mathematicians	(B) Flyspecks
(C) Formulas	(D) Rows
- It can be inferred from the description of his workplace that Edison
  - used only expensive scientific instruments
  - wrote articles regularly for magazines
  - spent much time cataloging his books
  - kept abreast of recent scientific developments
- Which of the following is closest in meaning to the phrase "Americans of the day" as it is used in line 9?
  - Americans who were respected inventors of Edison's time
  - Americans who lived during Edison's time
  - Americans who worked with Edison on a daily basis
  - Americans who didn't use Edison's electrical inventions
- According to the passage, Edison liked people to think that he was a
 

(A) person who did experiments on flies	(B) laboratory designer
(C) self-taught inventor	(D) scientist with an excellent education
- The author describes other scientists and mathematicians as "ordinary mortals"(line12)to indicate that
  - their abilities were inferior to Edison's
  - Edison desired to be more like them
  - competition among scientists was common
  - Edison was deeply interested in mythology
- Where in the passage does the author mention Edison's working style?)
 

(A) Lines 3-5	(B) Lines 5-6
(C) Lines 8-9	(D) Lines 11-12

**Passage 4**

Just how salt became so crucial to our metabolism is a mystery; one appealing theory traces our dependence on it to the chemistry of the late Cambrian seas. It was there, a half-billion years ago, that tiny metazoan organisms first evolved systems for sequestering and circulating fluids. The water of the early oceans might thus have become the chemical prototype for the fluids of all animal life—the medium in which cellular operations could continue no matter how the external environment changed. This speculation is based on the fact that, even today, the blood serums of radically divergent species are remarkably similar. Lizards, platypuses, sheep, and humans could hardly be more different in anatomy or eating habits, yet the salt content in the fluid surrounding their blood cells is virtually identical.

As early marine species made their way to freshwater and eventually to dry land, sodium remained a key ingredient of their interior, if not their exterior, milieu. The most successful mammalian species would have been those that developed efficient hormonal systems for maintaining the needed sodium concentrations. The human body, for example, uses the hormones rennin, angiotensin, and aldosterone to retain or release tissue fluids and blood plasma. The result, under favorable conditions, is a dynamic equilibrium in which neither fluid volume nor sodium concentration fluctuates too dramatically. But if the body is deprived of salt, the effects soon become dangerous, despite compensatory mechanisms.

1. Which of the following best describes the main subject of the passage.
 

(A) The effects of salt deprivation	(B) Evolutionary changes involving salt
(C) The salt needs of lizards and platypuses	(D) Hormonal systems for adjusting salt levels
  
2. What did the paragraph preceding the passage most probably discuss?
 

(A) Methods of mining salt
(B) Ancient beliefs about the powers of salt
(C) How humans used salt during the Cambrian period
(D) The importance of salt to our metabolism
  
3. According to the passage, which of the following species was probably the first to utilize salt in some way?
 

(A) Sheep	(B) Lizards
(C) Early human beings	(D) Early marine organisms
  
4. What evidence does the author give to support the theory that the salt water of the prehistoric oceans became the fluid for all animal life?
 

(A) Unrelated species now have identical salt levels in their blood.
(B) All species today require salt.
(C) The oceans today are less salty than in the Cambrian period.
(D) Most mammals get sick if they drink large quantities of salty water
  
5. The author implies that those species that did not evolve ways of maintaining their salt levels probably
 

(A) ceased to require salt	(B) returned to the sea
(C) had difficulty surviving	(D) lived in fresh water
  
6. Which of the following is NOT mentioned in the passage as a hormone involved in human sodium regulation?
 

(A) Rennin	(B) Adrenaline	(C) Angiotensin	(D) Aldosterone
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7. In line 16, the word "dramatically" could best be replaced by
 

(A) greatly	(B) loudly	(C) lyrically	(D) theatrically
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## Passage 5

One of the more discernible trends in the financial - service industry in recent times has been the adoption of programs designed to encourage more personalized relationships between an institution's employees and its clients, particularly those clients who are major depositors. The expression most commonly used to describe this type of program is "relationship banking". A good definition is provided in the 1985 book *Marketing Financial Services*:

In relationship banking the emphasis is on establishing a long-term multiple - service relationship; on satisfying the totality of the client's financial service needs; on minimizing the need or desire of clients to splinter their financial business among various institutions.

Implicit within any definition of relationship banking is recognition that the financial - service requirements of one individual or relatively homogeneous group will likely be substantially different from those of another individual or group. A successful relationship banking program is therefore dependent in a large part on the development of a series of financial - service "packages" each designed to meet the needs of identifiable homogeneous groups.

Another dimension of relationship banking is the development of highly personalized relationships between employee and client. In most financial institutions today the client is serviced by any employee who happens to be free at the time regardless of the nature of the transaction. Personalized relationships are therefore difficult to establish. In a full relationship banking program, however, the client knows there is one individual within the institution who has intimate knowledge of the client's requirements and preferences regarding complex transactions. Over time, the client develops a high level of confidence in this employee. In short, a personalized relationship evolves between client and employee.

1. With what subject is the passage mainly concerned?
  - (A) The decline of the financial-service industry
  - (B) Variety within financial services
  - (C) A way of making banking more personal
  - (D) Increasing everyday banking transactions
  
2. Which of the following can be inferred from the passage about relationship banking programs?
  - (A) They have recently been discontinued
  - (B) They are already being used
  - (C) They will shortly be used
  - (D) They will be used in the distant future
  
3. According to the definition of relationship banking quoted in the passage, one of the main aims of this type of banking is to encourage clients to
  - (A) consult with each other concerning their finances
  - (B) keep all their business with a single bank
  - (C) recognize their own banking needs
  - (D) keep their financial requirements to a minimum
  
4. According to the passage, what is a necessary first step in instituting relationship banking?
  - (A) Redesigning bank buildings
  - (B) Hiring congenial staff who make client's welcome

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- (C) Recognizing the particular financial needs of groups and individuals
- (D) Teaching bank employees to be more confident.

# PRACTICE TEST 44

## May 1994

### Passage 1

Canals are watercourses constructed to improve and extend natural waterways. They are generally built to facilitate transportation, but from the beginning they have been used for many additional purposes including draining swamps, irrigating land for cultivation and promoting economic development.

Canals are often classified by the size of vessel they can accommodate. Some small local canals, which are able to float only 100 - to 300 - ton boats or small rafts of timber, may be only 3 feet deep. Major barge canals generally range from 6 to 9 feet in depth, and some are as much as 10 or 12 feet deep. These canals can carry 1,350 - to 2,000 - ton crafts. Ship canals are 25 feet or more deep and are capable of accommodating large vessels in the seagoing class.

Canals may also be classified as either water - level or lock canals. Water - level canals do not vary in height along their courses. The best known of these is the Suez Canal, which is at sea level. Lock canals, which include most modern waterways, contain locks, or special devices for raising and lowering boats along their courses by changing the depth of the water. Each lock is a stretch of water enclosed by gates at each end. After a boat enters the lock, water is let in or drained out until it reaches approximately the same level as the water ahead.

1. What does the passage mainly discuss?  
(A) How canals are constructed  
(B) Common types of canal boats and barges  
(C) The world's largest canals  
(D) How canals are used and classified
2. The canals mentioned in the second paragraph are grouped according to their  
(A) depth  
(B) length  
(C) attitude  
(D) location
3. The word "accommodating" in line 9 could best be replaced by  
(A) weighing  
(B) loading  
(C) handling  
(D) storing
4. What is the purpose of a canal lock?  
(A) To keep out boats that are too large for the canal  
(B) To measure the tonnage of canal boat  
(C) To load and unload the cargo  
(D) To change the depth of the water
5. The Suez Canal is mentioned as an example of a  
(A) modern canal  
(B) water - level canal  
(C) lock canal  
(D) irrigation canal

## Passage 2

Some of the most beautiful caves are formed in glaciers. Streams of melting ice and snow tunnel through the glaciers the same way that water from a faucet melts its way through an ice cube. Water from the surface drips down through cracks, hollowing out the tunnels and decorating the caves with crystal icicles. The smooth walls and floors are so glasslike that pebbles frozen six feet deep can easily be seen. Crystal - clear icicles draping from the ceilings flash blue - green, as though they were carved from precious jewels instead of ice.

Although most of the cave ice in the United States is found in lava caves, there are a number of limestone ice caves as well. Some people believe that this ice was formed thousands of years ago, when temperatures were much colder than they are today. Others think that the cave ice broke off from the ancient glaciers as they spread over the country.

Today many cave scientists have another idea. They believe that cold water sinks down through cracks into these caves until the temperature is chilly enough to freeze the water that seeps in. The ice that forms keeps the cave cool, and that helps build up still more ice. Many caves become covered with so much ice that no one knows just how thick it is. In some, such as Crystal Falls Cave in Idaho, there are frozen rivers and even frozen water -falls. Native Americans and early settlers used to store food in these underground refrigerators and chip out blocks of ice to melt for drinking water.

- What does the passage mainly discuss?
 

(A) Characteristics of glaciers	(B) Uses for ice caves
(C) The origin of cave ice	(D) Where glaciers can be found
- The word "its" in line 2 refers to
 

(A) faucet	(B) water	(C) glacier	(D) tunnel
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- The word "draping" in line 5 is closest in meaning to which of the following?
 

(A) Shining	(B) Hanging	(C) Dripping	(D) Forming
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- The author compares icicles to precious jewels based on which of the following?
 

(A) Appearance	(B) Cost
(C) Method of formation	(D) Availability
- Where is most of the cave ice in the United States found?
 

(A) In lava caves	(B) In ancient glaciers
(C) On cave ceilings	(D) In cave cracks
- According to many of today's cave scientists, what causes ice to build up in caves?
 

(A) Rivers and waterfalls supply water	(B) Icicles accumulate on the ceilings
(C) Cave ice breaks off glaciers	(D) Cold water seeps in and freezes
- It can be inferred from the passage that the early settlers in the United States appreciated the ice caves for their
 

(A) practicality	(B) beautiful interiors
(C) historical value	(D) precious gems

### Passage 3

Cells cannot remain alive outside certain limits of temperature, and much narrower limits mark the boundaries of effective functioning. Enzyme systems of mammals and birds are most efficient only within a narrow range around 37°C; a departure of a few degrees from this value seriously impairs their functioning. Even though cells can survive wider fluctuations, the integrated actions of bodily systems are impaired. Other animals have a wider tolerance for changes of bodily temperature.

For centuries it has been recognized that mammals and birds differ from other animals in the way they regulate body temperature. Ways of characterizing the difference have become more accurate and meaningful over time, but popular terminology still reflects the old division into "warm - blooded" and "cold - blooded" species; warm - blooded included mammals and birds, whereas all other creatures were considered cold - blooded. As more species were studied, it became evident that this classification was inadequate. A fence lizard or a desert iguana—each cold - blooded—usually has a body temperature only a degree or two below that of humans and so is not cold. Therefore the next distinction was made between animals that maintain a constant body temperature, called homeotherms, and those whose body temperature varies with their environment, called poikilotherms. But this classification also proved inadequate. Because among mammals there are many that vary their body temperatures during hibernation. Furthermore, many invertebrates that live in the depths of the ocean never experience a change in the chill of the deep water, and their body temperatures remain constant.

The current distinction is between animals whose body temperature is regulated chiefly "by internal metabolic processes" and those whose temperature is regulated by, and who get most of their heat from, the environment. The former are called endotherms, and the latter are called ectotherms. Most ectotherms do regulate their body temperature, and they do so mainly by locomoting to favorable sites or by changing their exposure to-external sources of heat. Endotherms (mainly mammals, and birds) also regulate their temperature by choosing favorable environments, but primarily they regulate their temperature by making a variety of internal adjustments.

- What does the passage mainly discuss?
  - Body temperatures of various animals
  - The newest research on measuring temperature
  - Methods of temperature reduction
  - The classification of animals by temperature regulation
- Which of the following terms refers primarily to mammals and birds?
 

(A) Warm-blooded	(B) Ectothermic	(C) Cold-blooded	(D) Poikilothermic
------------------	-----------------	------------------	--------------------
- In general, the temperature of endotherms is regulated
 

(A) consciously	(B) internally	(C) inadequately	(D) environmentally
-----------------	----------------	------------------	---------------------
- According to the passage, the chief way in which ectotherms regulate their temperature is by
 

(A) seeking out appropriate locations	(B) hibernating part of the year
(C) staying in deep water	(D) triggering certain metabolic processes
- The word "sites" in line 25 is closest in meaning to which of the following?
 

(A) Temperatures	(B) Conditions	(C) Opportunities	(D) Places
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- Where in the passage does the author explain why some mammals are not homeotherms?
 

(A) Lines 7-8	(B) Lines 11-14	(C) Lines 16-18	(D) Lines 26-28
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### Passage 4

A onetime illustrator, Winslow Homer painted in a careful, clear, accurately detailed, and convincing manner. Homer worked on "Breezing Up" at intervals over a period of three years. It was the result of intense study, and it grew out of two earlier studies of the scene, a watercolor and a small oil painting.

Sun-bronzed boys in their weather beaten clothes were a common sight in New England in Homer's time, as were fishermen like the one in the red jacket, shown crouching as he holds the mainsheet. In the rising wind, the boys have positioned themselves to counter balance the tilt of the boat as it speeds along in a choppy sea. The lad stretched full length by the mast seems oblivious to the spray of the bow waves; the boy beside him, silhouetted against the sky, holds onto the coaming. The light that highlights the figures of the sailors also illuminates the scales of the fish in the bottom of the boat. The picture gives us a sense of the pleasure and independence of sailing.

- According to the passage, Winslow Homer's style of painting can best be described as  
 (A) precise                      (B) complicated                      (C) abstract                      (D) amusing
- According to the passage, the painting "Breezing Up" was the result of  
 (A) a short burst of inspiration                      (B) periods of work over several years  
 (C) three years of continuous work                      (D) a lifetime of studying the sea
- For a person viewing the painting in Homer's time, the subjects of the painting would probably seem  
 (A) silly                      (B) ambitious                      (C) bold                      (D) ordinary
- The boys in the painting have assumed their positions to  
 (A) hold onto the fishing nets                      (B) enjoy the spray of the waves  
 (C) prevent the boat from overturning                      (D) keep the mast in the correct place
- It can be inferred from the passage that the title of the painting refers to the  
 (A) boat's appearance                      (B) rising wind  
 (C) boat's angle                      (D) light's source
- Where in the passage is Winslow Homer's previous occupation mentioned?  
 (A) Line 1                      (B) Line 3                      (C) Line 6                      (D) Line 10

### Passage 5

Chemistry did not emerge as a science until after the scientific revolution in the seventeenth century and then only rather slowly and laboriously. But chemical knowledge is as old as history, being almost entirely concerned with the practical arts of living. Cooking is essentially a chemical process, so is the melting of metals and the administration of drugs and potions. This basic chemical knowledge, which was applied in most cases as a rule of thumb, was nevertheless dependent on previous experiment. It also served to stimulate a fundamental curiosity about the processes themselves. New information was always being gained as artisans improved techniques to gain better results.

The development of a scientific approach to chemistry was, however, hampered by several factors. The most serious problem was the vast range of material available and the consequent difficulty of organizing it into some system. In addition, there were social and intellectual difficulties, chemistry is nothing if not practical; those who practice it must use their

hands, they must have a certain practical flair. Yet in many ancient civilizations, practical tasks were primarily the province of a slave population. The thinker or philosopher stood apart from this mundane world, where the practical arts appeared to lack any intellectual content or interest.

The final problem for early chemical science was the element of secrecy. Experts in specific trades had developed their own techniques and guarded their knowledge to prevent others from stealing their livelihood. Another factor that contributed to secrecy was the esoteric nature of the knowledge of alchemists, who were trying to transform base metals into gold or were concerned with the hunt for the elixir that would bestow the blessing of eternal life. In one sense, the second of these was the more serious impediment because the records of the chemical processes that early alchemists had discovered were often written down in symbolic language intelligible to very few or in symbols that were purposely obscure.

1. What is the passage mainly about
  - (A) The scientific revolution in the seventeenth century
  - (B) Reasons that chemistry developed slowly as a science
  - (C) The practical aspects of chemistry
  - (D) Difficulties of organizing knowledge systematically
2. According to the passage, how did knowledge about chemical processes increase before the seventeenth century?
  - (A) Philosophers devised theories about chemical properties.
  - (B) A special symbolic language was developed.
  - (C) Experience led workers to revise their techniques.
  - (D) Experts shared their discoveries with the public.
3. The word "hampered" in line 9 is closest in meaning to
  - (A) recognized
  - (B) determined
  - (C) solved
  - (D) hindered
4. The word "it" in line 11 refers to which of the following?
  - (A) problem
  - (B) material
  - (C) difficulty .
  - (D) system
5. The word "mundane" in line 15 is closest in meaning to which of the following
  - (A) Rational
  - (B) Scientific
  - (C) Comfortable
  - (D) Ordinary
6. Which of the following statements best explains why "the second of these was the more serious impediment"(line 21)?
  - (A) Chemical knowledge was limited to a small number of people.
  - (B) The symbolic language used was very imprecise.
  - (C) Very few new discoveries were made by alchemists.
  - (D) The records of the chemical process were not based on experiments.

# PRACTICE TEST 45

## August 1994

### Passage 1

In many ways college students of the last two decades of the nineteenth century were inextricably involved in the processes of change. The North American institutions they attended were undergoing profound transformation. It was not just that more students were being admitted. These were different students-some were women. In Ontario, Canada, Queen's University was the first to admit women into degree programs, and the University of Toronto followed suit eight years later in 1884. Moreover, as colleges ceased to cater more narrowly to candidates for the religious ministry and the professions and came to be seen as a logical continuation of secondary school, younger students began to predominate. Many of those who now enrolled were experiencing transition not only from a small town or rural area to an urban environment, but also from adolescence to young adulthood. Universities had to adjust to the needs of students who were less mature and less settled in their interests.

As the student body changed, so did the curriculum. Scientific, professional, and graduate training became much more sophisticated, but the traditional arts program was altered as well. Rigid courses of study full of Greek and Latin prerequisites were being replaced at many schools by elective systems that featured new subjects, such as English literature, political science, economics, sociology and psychology. Old subjects, like biology and philosophy, were rocked by new ideas so that they too seemed very different.

1. What does the passage mainly discuss?  
(A) The founding and growth of Queen's University  
(B) A transition in university education  
(C) Major differences between rural and urban colleges  
(D) The beginning of public education in Ontario
2. When were women first allowed to enroll in degree programs at Queen's University?  
(A) In 1876                      (B) In 1884                      (C) In 1892                      (D) In 1900
3. Which of the following does the author suggest was a problem related to the admission of new types of students?  
(A) Their secondary school education                      (B) Their parents' profession  
(C) Their religion                      (D) Their age
4. Which of the following courses is most likely to have been offered as part of a traditional college degree program in the early 1800's?  
(A) Political science                      (B) Engineering  
(C) Nursing                      (D) Religion
5. It can be inferred from the passage that after the 1880's students gained more freedom to  
(A) return to their hometowns                      (B) choose their own courses  
(C) monitor their own progress                      (D) question their professors
6. The author uses the expression "rocked by" in lines 16 - 17 to suggest that the effect of new ideas on old subjects was  
(A) calming                      (B) musical                      (C) powerful                      (D) religious

## Passage 2

A painter hangs his or her finished picture on a wall, and everyone can see it. A composer writes a work, but no one can hear it until it is performed. Professional singers and players have great responsibilities; for the composer, is utterly dependent on them. A student of music needs as long and as arduous a training to become a performer as a medical student needs to become a doctor. Most training is concerned with technique, for musicians have to have the muscular proficiency of an athlete or a ballet dancer. Singers practice breathing every day, as their vocal chords would be inadequate without controlled muscular support. String players practice moving the fingers of the left hand up and down, while drawing the bow to and for with the right arm -two entirely different movements.

Singers and instrumentalists have to be able to get every note perfectly in tune. Pianists are spared this particular anxiety, for the notes are already there, waiting for them, and it is the piano tuner's responsibility to tune the instrument for them. But they have their own difficulties: the hammers that hit the strings have to be coaxed not to sound like percussion, and each overlapping tone has to sound clear.

This problem of getting clear texture is one that confronts student conductors: they have to learn to know every note of the music and how it should sound, and they have to aim at controlling these sounds with fanatical but selfless authority.

Technique is of no use unless it is combined with musical knowledge and understanding. Great artists are those who are so thoroughly at home in the language of music that they can enjoy performing works written in any century.

1. Which of the following best states the main idea of the passage?
  - (A) It is easier to study medicine than music.
  - (B) Painters and composers use totally different methods to reach the public.
  - (C) All musicians must know how to tune their own instruments.
  - (D) Musicians must acquire technique and understanding to perform well.
  
2. According to the passage, performers could best meet their obligation to composers by doing which of the following?
  - (A) Taking courses in art appreciation
  - (B) Knowing how the music was intended to be performed
  - (C) Studying works written at different periods in history
  - (D) Rearranging musical scores for their particular instrument
  
3. Why does the author mention athletes and ballet dancers?
  - (A) To contrast the requirements of each field of study
  - (B) To discourage music students from continuing their studies
  - (C) To motivate students to work harder to achieve their goals
  - (D) To show that music students must develop great physical coordination
  
4. According to the passage, the advantage that pianists have over other instrumentalists is that they do NOT have to
 

(A) tune their own instruments	(B) practice as often
(C) use their muscles	(D) aim for clarity of sound

### Passage 3

Nitinol is one of the most extraordinary metals to be discovered this century. A simple alloy of nickel and titanium, nitinol has some perplexing properties. A metal with a memory, it can be made to remember any shape into which it is fashioned, returning to that shape whenever it is heated.

For example, a piece of nitinol wire bent to form a circle that is then heated and quenched will remember this shape. It may then be bent or crumpled, but on reheating, will violently untwist, reforming its original shape. This remarkable ability is called Shape Memory Effect (SME) other alloys, such as brasses, are known to possess it to a limited extent. No one fully understands SME, and nitinol remains particularly perplexing, for, whenever it performs this peculiar feat, it appears to be breaking the laws of thermodynamics by springing back into shape with greater force than was used to deform it in the first place.

But not only is nitinol capable of remembering, it also has the ability to learn. If the heating - cooling - crumpling - reheating process is carried out sufficiently often, and the metal is always crumpled in exactly the same way, the nitinol will not only remember its original shape, but gradually it learns to remember its crumpled form as well, and will begin to return to the same crumpled shape every time it is cooled. Eventually, the metal will crumple and uncrumple, totally unaided, in response to changes in temperature and without any sign of metal fatigue.

Engineers have produced prototype engines that are driven by the force of nitinol springing from one shape to another as it alternately encounters hot and cold water. The energy from these remarkable engines is, however, not entirely free: heat energy is required to produce the temperature differences needed to run the engine. But the optimum temperatures at which the metal reacts can be controlled by altering the proportions of nickel to titanium; some alloys will even perform at room temperature. The necessary temperature range between the warm and the cold can be as little as twelve degrees centigrade.

1. The word "quenched" as used in line 5, is closest in meaning to  
 (A) cooled                      (B) reheated                      (C) bent                      (D) reformed
2. ???
3. Why does the author mention brass in line 8?  
 (A) It is one of the ingredients of nitinol                      (B) It is another metal with Shape Memory Effect  
 (C) It may be replaced by nitinol                      (D) It was the first alloy discovered
4. ???
5. The word "free" in line 20 is closest in meaning to  
 (A) at liberty                      (B) without cost                      (C) separate                      (D) clear
6. The machines mentioned in the last paragraph of the passage are of interest because they  
 (A) use solar energy to heat nitinol  
 (B) harness the force of nitinol shape changes  
 (C) can function at temperatures below the melting point of nitinol  
 (D) produce nitinol at very low cost

## Passage 4

With a literary history that goes back as far as the seventeenth century, Florida has long been a major haunt for writers from all over the United States. Jonathan Dickinson, whose group of Quakers was cast up on the coast near what is now Palm Beach after they were wrecked en route from Jamaica to Pennsylvania, recorded the tragedy in *God's Protecting Providence* in 1699. Not only was this book one of America's first best-sellers, but it was also the first account of the American Indians of the southeastern coast. Other early writers who followed Dickinson celebrated the rich and various plant and animal life of the region, striking sympathetic chords in the imaginations of Ralph Waldo Emerson and the English poets William Wordsworth and Samuel Taylor Coleridge.

Florida has been visited by many writers who sometimes were so taken by what they saw that they adopted it as their home. Harriet Beecher Stowe, the author of *Uncle Tom's Cabin*, spent several winters on an orange farm that she and her husband bought in 1867. The Stowes' original intent in buying a home, which is at Mandarin on the Saint Johns River, was to create a model for the employment of former slaves. The original intent had to give way to other considerations. So many spectators flocked to the farm to catch a glimpse of Mrs. Stowe that a charge of 25 cents per person for admission was established.

On his way to report on the Cuban Revolution in 1896, Stephen Crane spent some time in Jacksonville. It was there that Crane met his wife, who at that time ran a popular tavern in the town. On his way to Cuba, Crane's boat sank off the coast of Florida, an incident that provided Crane with the material on which his masterpiece "The Open Boat" is based.

James Weldon Johnson, a prominent Black author, was a native of Florida. He was born in Jacksonville in 1871 and was a songwriter, poet, novelist, teacher, and the first Black man to become a lawyer in Florida since the Reconstruction. Johnson also fought successfully to upgrade the quality of education for Black people in Florida.

- What is the main topic of the passage
 

(A) Early books about Florida	(B) Florida's literary history
(C) The first settlers of Palm Beach	(D) Black American literature
- The word "It" in line 5 refers to
 

(A) tragedy	(B) book	(C) life	(D) coast
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- The popular book *God's Protecting Providence* primarily dealt with
 

(A) Ralph Waldo Emerson	(B) the beach
(C) animal life	(D) a shipwreck
- The word "rich" in line 7 is closest in meaning to
 

(A) expensive	(B) healthy	(C) abundant	(D) heavy
---------------	-------------	--------------	-----------
- It can be inferred from the passage that Harriet Beecher Stowe was
 

(A) a celebrity	(B) a travel writer
(C) an associate of Stephen Crane	(D) a native of Florida
- When Stephen Crane met his wife, he was a
 

(A) soldier	(B) sailor	(C) journalist	(D) tavernkeeper
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- What can be inferred about the story "The Open Boat"?
 

(A) It is mainly about a shipwreck	(B) It is mainly about Cuba
------------------------------------	-----------------------------

(C) It takes place in a tavern

(D) Its main character is from Florida

8. The passage refers to all of the following as occupations of James Weldon Johnson EXCEPT

(A) playwright

(B) poet

(C) educator

(D) lawyer

### Passage 5

The concept of obtaining fresh water from icebergs that are towed to populated areas and arid regions of the world was once treated as a joke more appropriate to cartoons than real life. But now it is being considered quite seriously by many nations especially since scientists have warned that the human race will outgrow its fresh water supply faster than it runs out of food.

Glaciers are a possible source of fresh water that have been overlooked until recently. Three - quarters of the Earth's fresh water supply is still tied up in glacial ice, a reservoir of untapped fresh water so immense that it could sustain all the rivers of the world for 1,000 years. Floating on the oceans every year are 7, 659 trillion metric tons of ice encased in 10,000 icebergs that break away from the polar ice caps more than ninety percent of them from Antarctica.

Huge glaciers that stretch over the shallow continental shelf give birth to icebergs throughout the year. Icebergs are not like sea ice, which is formed when the sea itself freezes rather they are formed entirely on land, breaking off when glaciers spread over the sea. As they drift away from the polar region, icebergs sometimes move mysteriously in a direction opposite to the wind, pulled by subsurface currents. Because they melt more slowly than smaller pieces of ice, icebergs have been known to drift as far north as 35 degrees south of the equator in the Atlantic Ocean. To corral them and steer them to parts of the world where they are needed would not be too difficult.

The difficulty arises in other technical matters, such as the prevention of rapid melting in warmer climates and the funneling of fresh water to shore in great volume. But even if the icebergs lost half of their volume in towing, the water they could provide would be far cheaper than that produced by desalination, or removing salt from water.

1. What is the main topic of the passage?

(A) The movement of glaciers

(B) Icebergs as a source of fresh water

(C) Future water shortages

(D) The future of the world's rivers

2. The word "it" in line 3 refers to

(A) an iceberg that is towed

(B) obtaining fresh water from icebergs

(C) the population of arid areas

(D) real life

3. According to the author, most of the world's fresh water is to be found in

(A) oceans

(B) rivers

(C) glaciers

(D) reservoirs

4. How are icebergs formed?

(A) They break off from glaciers

(B) Seawater freezes

(C) Rivers freeze

(D) Small pieces of floating ice converge

5. With which of the following ideas would the author be likely to agree?

(A) Towing icebergs to dry areas is economically possible

(B) Desalination of water is the best way to obtain drinking water

(C) Using water from icebergs is a very short -term solution to water shortages

(D) Icebergs could not be towed very far before they would melt

6. It can be inferred from the passage that most icebergs

- (A) become part of glaciers
- (B) drift toward the polar region
- (C) move in whichever direction the wind is blowing
- (D) melt in the oceans

# PRACTICE TEST 46

## October 1994

### Passage 1

Since there is such an abundance of food in the sea, it is understandable that some the efficient, highly adaptable, warm - blooded mammals that evolved on land should have returned to the sea. Those that did have flourished Within about 50 million years - no time at all, geologically speaking - one of the four kinds of mammals that has returned to a marine environment has developed into the largest of all animal forms, the whale. A second kind, the seal, has produced what is probably the greatest population of large carnivorous mammals on Earth. This suggests that these "top dogs" of the ocean are prospering and multiplying. However, such has not been the case, at least not for the last 150 years. Trouble has closed in or these mammals in the form of equally warm-blooded and even more efficient and adaptable predators, humans. At sea, as on land, humans have now positioned themselves on to -of the whole great pyramid of life, and they have caused serious problems for the mammals of the sea.

There is a simple reason for this. Marine mammals have the misfortune to be swimming aggregates of commodities that humans want: fur, oil, and meat. Even so, they might not be so vulnerable to human depredation if they did not, like humans, reproduce so slowly. Every year humans take more than 50 million tons of fish from the oceans without critically depleting the population of any species. But the slow-breeding mammals of the sea have been all but wiped out by humans seeking to satisfy their wants and whims.

1. Which of the following statements about marine mammals best expresses the main idea of the passage  
(A) They have their origins on land.  
(B) They have evolved successfully but are now threatened by humans.  
(C) They compete with one another for the ocean's food supply.  
(D) They have many of the biological traits of humans.
2. What advantage did some land mammals gain by returning to the sea?  
(A) Fewer predators exist in the sea.                      (B) More space is available in the sea.  
(C) There is a greater supply of food in the sea.        (D) The climate is more hospitable in the sea.
3. It can be inferred from the passage that during the last 150 years humans have  
(A) constructed submarines  
(B) learned how to swim  
(C) threatened the existence of some marine mammals  
(D) begun to harvest certain plants from the ocean as food
4. In line 14 the word "they" refers to  
(A) marine mammals        (B) commodities            (C) humans                      (D) fur, oil, and meat
5. Which of the following statements is supported by the passage?  
(A) The whale's ancestors were driven into the sea by humans.  
(B) The food supply of seals is being depleted by humans  
(C) The whale evolved from a species of land - dwelling mammal.  
(D) Whales are a more efficient and adapt-able species than humans.
6. It can be inferred from the passage that marine mammals are like humans in which of the following ways".  
(A) They survive despite changes in their metabolic rates.  
(B) They reproduce slowly.  
(C) They are prospering and multiplying.  
(D) They are depleting the vegetation of the seas.

## Passage 2

Of all the folk artists in the United States the most well known of the twentieth century is certainly Grandma Moses-Anna Mary Robertson Moses (1860 - 1961). She was also the most successful within her lifetime and her work was reproduced on greeting cards and calendars and in prints. As with many folk artists, her career as a painter started late in life, at the age of 67, but she continued painting until her death at the age of 101, so her active painting life still spanned over 34 years.

Her subjects are based on the New England countryside and evoke a strong mood of nostalgia. Many of her early paintings are copies of, or use sections from, prints by Currier and Ives that she then recomposed in her own way. In her versions the figures became more stylized and the landscapes less naturalistic. Her painting was preceded by the production of landscapes in needlework, and it was only the onset of arthritis that forced the change of medium. The images, however, continued the same, and she reexecuted some of her needlework landscapes in paint at a later date.

From these early sources she then began to compose original paintings such as Housick Falls. New York in Winter (1944) that relied on her surroundings and her memories of country life and activities: these paintings display an ~ technical ability By the 1940's her work had become a marketable commodity and collectors created a demand for her paintings.

Like many painters of the nineteenth and twentieth centuries. Grandma Moses made use of photographs for information, for figures, for fragments of landscape, and for buildings, but her work, especially that of her later years, was not a slavish copying of these but compositions using them as source material. Her output was prodigious, and consequently her work is of varying quality. Although much of her public appeal is based on the emotive image of the "Grandma" figure producing naive pictures of country life, her paintings place her among the top folk painters of the nineteenth and twentieth centuries.

- What is the main topic of the passage?
  - The painting materials used by Grandma Moses
  - The major artistic influences on Grandma Moses
  - The folk art of Grandma Moses
  - The life of Grandma Moses
- According to the passage, Grandma Moses started her painting career
  - without much success
  - in her sixties
  - after much study
  - by producing greeting cards
- Why does the author mention Currier and Ives in lines 8-9?
  - They are folk artists
  - They collected many of Grandma Moses' paintings
  - They made calendars from Grandma Moses' landscapes
  - Grandma Moses based some paintings on their work
- According to the passage, Grandma Moses switched from needlework to painting because of
  - her desire to create landscapes
  - the public's interest in painting
  - her need to make money
  - a physic condition that affected her
- The word "naive" in line 23 is closest in meaning to which of the following?
  - Unsophisticated
  - Ignorant
  - Unspoiled
  - Trusting
- According to the passage, Grandma Moses based her painting on all of the following EXCEPT
  - photographs
  - her needlework
  - her family
  - prints

7. Where in the passage does the author mention when Grandma Moses became popularly accepted?  
(A) Lines 4 – 6                      (B) Lines 10 – 12                      (C) Lines 16 – 17                      (D) Lines 21 – 24

**Passage 3**

In general, as soon as the newborn child's muscles, sense organs, and nerves are fully formed, the child begins to use them. But much of the human nervous system is not fully developed until the child is a year or two old, and some parts, such as the corpus callosum, continue to mature for at least the next 20 years.

The general pattern of bodily development is from head to foot. Simple skills, such as head movements, appear first because the structures that control these skills are among the first to mature. More complex behavior patterns, such as crawling, standing, and walking, come much later in the developmental sequence than head movements do.

The motor centers in the brain are connected by long nerve fibers(usually through one or more synapses) to the muscles in various parts of the body. Since the head muscles are closer to the brain than are the foot muscles, according to one theory, the head comes under the control of the motor centers long before the feet do. The appearance of a new motor skill (such as crawling and grasping) always suggests that a new part of the child's body has just matured—that is, that the brain centers have just begun to control the muscles involved in the new motor skill.

1. What is the author's main purpose in this passage?  
(A) To describe how children crawl, stand, and walk  
(B) To explain why some children are slow to develop  
(C) To describe early physical development in children  
(D) To explain the function of the corpus callosum
2. According to the passage, the corpus callosum is part of the human  
(A) muscular system                      (B) digestive system  
(C) circulatory system                      (D) nervous system
3. According to the passage, which of the following motor skills does an infant first develop?  
(A) Moving the head                      (B) Crawling  
(C) Controlling the arms                      (D) Kicking
4. According to the passage, we can tell that the child's brain centers have begun to control new muscles when  
(A) the child's brain matures                      (B) the child moves its body in new ways  
(C) long nerve fibers disappear                      (D) the child performs an acquired skill more rapidly

## Passage 4

By long-standing convention, all meteorites are assigned to three broad divisions on the basis of two kinds of material that they contain: metallic nickel - iron(metal) and silicates, which are compounds of other chemical elements with silicon and oxygen. As their name suggests, the iron meteorites consist almost entirely of metal. At the opposite extreme, the stony meteorites consist chiefly of silicates and contain little or no metal. A third category, stony-irons, includes those meteorites that contain similar amounts of metal and silicates. Since meteoritic metal weighs more than twice as much as the same volume of meteoritic silicates, these three kinds of meteorites can usually be distinguished by density, without more elaborate tests.

The stony meteorites can also be subdivided into two categories by using nothing more complicated than a magnifying glass. The great majority of such meteorites are chondrites, which take their name from tiny, rounded objects - chondrules - that occur in most of them and are among their most puzzling features. The rest of the stony meteorites lack chondritic texture and are therefore called achondrites. Achondrites vary widely in texture, composition, and history.

Irons, stony-irons, chondrites, and achondrites are by no means equally abundant among observed meteorites: chondrites are much more common than all other kinds of meteorites put together. The irons, which are usually prominent in museum displays, are really quite uncommon. Curators like to highlight iron meteorites because many of them are large and their internal structure is spectacular in polished, etched slices. A stony meteorite has a beauty of its own, but it only appears under the microscope: to the unaided eye, stony meteorites appear to be - indeed they are - rather homely black or gray rocks.

To go further with meteorite classification, it is necessary to be more specific about the minerals that make up a meteorite: which silicates are present, and what kind of metal? To answer these questions, one needs to see more detail than is visible to the unaided human eye.

- What is the passage mainly about?
 

(A) The formation of meteorites	(B) Some recent meteorites
(C) The classification of meteorites	(D) How meteorites are displayed
- The word "elaborate" in line 9 is closest in meaning to which of the following.
 

(A) Natural	(B) Detailed	(C) Basic	(D) Proven
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- According to the passage, small, rounded objects can be found in what kind of meteorites?
 

(A) Irons	(B) Chondrites	(C) Stony-irons	(D) Achondrites
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- According to the passage, the spectacular meteorites usually found in museums are
 

(A) gray or black	(B) generally small
(C) unimportant to science	(D) fairly uncommon
- The word "it" in line 21 refers to
 

(A) beauty	(B) meteorite	(C) microscope	(D) eye
------------	---------------	----------------	---------
- ???
- Where in the passage does the author suggest a means by which meteorites can be differentiated?
 

(A) Lines 3-4	(B) Lines 7-9	(C) Lines 18 – 19	(D) Lines 20-22
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## Passage 5

National parties in the United States have generally been weak in structure and wary of ideology. Many writers have said that American parties are the least centralized in the world. However, the argument that parties have not represented significant differences in policy can be pushed too far. For example, in this century, at least, the Republicans have been more committed than the Democrats to a market - oriented economy, while the Democrats have been more prepared to use government to address economic problems. Within both parties there has been wide variance on issues but in general the Republicans have been the more conservative and the Democrats the more liberal.

Both parties, however, have resisted reducing these tendencies in their social, economic, and moral belief systems to a rigid ideology. And neither, until recently, vested much authority in its national party structure.

At state and local levels, on the other hand, party organizations often achieved impressive levels of solidarity and internal discipline. Both Democrats and Republicans maintained potent local political organizations in many cities and states.

Whatever their merits or demerits, the traditional organizations went into steep decline during the 1950's and 1960's. The Old organizations lost the ability to maintain internal discipline. The share of voters regarding themselves as political independents, that is, people not affiliated with either of the major parties, rose.

There were several reasons for the loss of effectiveness of the major party organizations. Development of a welfare state administered by the federal government established some of the services that had formerly been dispensed by the organizations as political favors. As recent immigrants became more educated they were less dependent on party workers. The inclusion of more state employees under civil service protection dried up some of the old wells of patronage. Growing unionization of public employees after 1960 struck an even more serious blow at the patronage system. Television brought candidates into voters' living rooms, thereby antiquating some of the communication and education functions of party workers. Most of all, perhaps, the old tribal differences associated with the parties began to seem irrelevant to members of generations that sought fresh identities.

1. What does the passage mainly discuss?
  - (A) American political parties in the twentieth century
  - (B) The role of ideology in American politics
  - (C) The future direction of United States politics
  - (D) Differences between Republicans and Democrats
2. According to the passage, what is true of the major political parties in the United States?
  - (A) They are both generally conservative
  - (B) Party organizations have been stronger at the state level than at the national level
  - (C) Party organizations have increased their influence in recent years
  - (D) Democrats have been stronger than Republicans at the national level
3. The word "steep" in line 15 is closest in meaning to which of the following?
  - (A) characteristic

- (B) unexpected
- (C) sharp
- (D) predictable

4. The passage mentions all of the following as causes of the decline of political organization in the United States EXCEPT
- (A) increased numbers of immigrants
  - (B) development of the welfare state
  - (C) improved conditions for state workers
  - (D) the influence of television
5. The passage supports which of the following conclusions?
- (A) Democrats are more committed than Republicans to a market - oriented economy
  - (B) Republicans are more liberal than Democrats
  - (C) Republicans and Democrats tend to be flexible on ideological questions
  - (D) Only Democrats have traditional political organizations
6. The word "irrelevant" in line 28 is closest in meaning to
- |                   |                   |
|-------------------|-------------------|
| (A) unquestioning | (B) uninteresting |
| (C) irreversible  | (D) unimportant   |

## ANSWER KEY

### PRACTICE TEST 30

CDCBC DACBC DDDCC ABBAC DBCAD ABACD BABBC CAABB BBABC AACCD

### PRACTICE TEST 31

BDADC DACBC CBACD ACDBA DBCAD DBACB CCDDDB BDACA BACDA BACCD

### PRACTICE TEST 32

ABBDC BCCDB BACCD BCDAB BABDD CBACA CBDAA DABCD BCAAB DCADD

### PRACTICE TEST 33

DBCCD CABAB DCCAC ABBCA BCADC DADCC BDBAA AADDB BBADB CBDDA

### PRACTICE TEST 34

CBADD CAAAD CBCBC ACABD BADAB ACBCD BDACD CADBA CBDCEB CCADA

### PRACTICE TEST 35

ACBAB CCDDDB DBBBC ACDAB CCABD DCABC ADBBA BABCA CBACD AACDC

### PRACTICE TEST 36

CCACC BCDCC AACDC BDABB DACAD DBBCA AADDC CDBAB AACBB AABDC

### PRACTICE TEST 37

BDCAD ADCBA DBBDD BBACC DADBC DACBD BCCCD BAABA CCBAC DDDAD

### PRACTICE TEST 38

CADCAB BDCAC CBACD BCCDAD CACBBCBC

### PRACTICE TEST 39

ADBACB ABBCAC DAABAD BDDDBD BBADDCC

### PRACTICE TEST 40

DBBDC BACDC BACDA DABAB DADAC DCABD ADCDB BDDAB BDBAD DABCD

### PRACTICE TEST 41

CCBBA DCADA BDCDD AABDB CCDAD BDBAA DCCCD BAABB DABCC DBCAB

### PRACTICE TEST 42

BABAD BADAB BCBCD BBADC DCBCD BDADD CCBDD AAADB CDADB BBBCD

### PRACTICE TEST 43

DCDAB BDABCAB DADBCAB BDDACBA CBBC

### PRACTICE TEST 44

DABDB CBBAADA DABADC ABDCBA BCDBDA

### PRACTICE TEST 45

BADDBC DBDA AABDBB BBDCACAA BBCAAD

### PRACTICE TEST 46

**ANSWER KEY**

**TOEFL Reading Comprehension**

BCCACB CBDDACC CDAB CBBDADB ABCACD