Content

PRACTICE TEST 01
May 2004

Question 1-10

All mammals feed their young. Beluga whale mothers, for example, nurse their calves for some twenty months, until they are about to give birth again and their young are able to find their own food. The behavior of feeding of the young is built into the reproductive system. It is a nonelective part of parental care and the defining feature of a mammal, the most important thing that mammals-- whether marsupials, platypuses, spiny anteaters, or placental mammals -- have in common.

But not all animal parents, even those that tend their offspring to the point of hatching or birth, feed their young. Most egg-guarding fish do not, for the simple reason that their young are so much smaller than the parents and eat food that is also much smaller than the food eaten by adults. In reptiles, the crocodile mother protects her young after they have hatched and takes them down to the water, where they will find food, but she does not actually feed them. Few insects feed their young after hatching, but some make other arrangement, provisioning their cells and nests with caterpillars and spiders that they have paralyzed with their venom and stored in a state of suspended animation so that their larvae might have a supply of fresh food when they hatch.

For animals other than mammals, then, feeding is not intrinsic to parental care. Animals add it to their reproductive strategies to give them an edge in their lifelong quest for descendants. The most vulnerable moment in any animal's life is when it first finds itself completely on its own, when it must forage and fend for itself. Feeding postpones that moment until a young animal has grown to such a size that it is better able to cope. Young that are fed by their parents become nutritionally independent at a much greater fraction of their full adult size. And in the meantime those young are shielded against the vagaries of fluctuating of difficult-to-find supplies. Once a species does take the step of feeding its young, the young become totally dependent on the extra effort. If both parents are removed, the young generally do no survive.

1. What does the passage mainly discuss?

(A) The care that various animals give to their offspring.
(B) The difficulties young animals face in obtaining food.
(C) The methods that mammals use to nurse their young.
(D) The importance among young mammals of becoming independent.

2. The author lists various animals in line 5 to

(A) contrast the feeding habits of different types of mammals
(B) describe the process by which mammals came to be defined
(C) emphasize the point that every type of mammal feeds its own young
(D) explain why a particular feature of mammals is nonelective

3. The word "tend" in line 7 is closest in meaning to

(A) sit on (B) move (C) notice (D) care for

4. What can be inferred from the passage about the practice of animal parents feeding their young?

(A) It is unknown among fish. (B) It is unrelated to the size of the young.
(C) It is dangerous for the parents. (D) It is most common among mammals.

5. The word "provisioning" in line 13 is closest in meaning to

(A) supplying (B) preparing (C) building (D) expanding

6. According to the passage, how do some insects make sure their young have food?
(A) By storing food near their young.
(B) By locating their nests or cells near spiders and caterpillars.
(C) By searching for food some distance from their nest.
(D) By gathering food from a nearby water source.

7. The word "edge" in line 17 is closest in meaning to
(A) opportunity (B) advantage (C) purpose (D) rest

8. The word "it" in line 20 refers to
(A) feeding (B) moment (C) young animal (D) size

9. According to the passage, animal young are most defenseless when
(A) their parents are away searching for food
(B) their parents have many young to feed
(C) they are only a few days old
(D) they first become independent

10. The word "shielded" in line 22 is closest in meaning to
(A) raised (B) protected (C) hatched (D) valued

Question 11-21

Printmaking is the generic term for a number of processes, of which woodcut and engraving are two prime examples. Prints are made by pressing a sheet of paper (or other material) against an image-bearing surface to which ink has been applied. When the paper is removed, the image adheres to it, but in reverse.

Line

(5) The woodcut had been used in China from the fifth century A.D. for applying patterns to textiles. The process was not introduced into Europe until the fourteenth century, first for textile decoration and then for printing on paper. Woodcuts are created by a relief process; first, the artist takes a block of wood, which has been sawed parallel to the grain, covers it with a white ground, and then draws the image in ink. The background is carved away, *(10)* leaving the design area slightly raised. The woodblock is inked, and the ink adheres to the raised image. It is then transferred to damp paper either by hand or with a printing press.

Engraving, which grew out of the goldsmith's art, originated in Germany and northern Italy in the middle of the fifteenth century. It is an intaglio process (from Italian *intagliare*, "to carve"). The image is incised into a highly polished metal plate, usually copper, with a *(15)* cutting instrument, or burin. The artist inks the plate and wipes it clean so that some ink remains in the incised grooves. An impression is made on damp paper in a printing press, with sufficient pressure being applied so that the paper picks up the ink.

Both woodcut and engraving have distinctive characteristics. Engraving lends itself to subtle modeling and shading through the use of fine lines. Hatching and cross-hatching *(20)* determine the degree of light and shade in a print. Woodcuts tend to be more linear, with sharper contrasts between light and dark. Printmaking is well suited to the production of multiple images. A set of multiples is called an edition. Both methods can yield several hundred good-quality prints before the original block or plate begins to show signs of wear. Mass production of prints in the sixteenth century made images available, at a lower cost, *(25)* to a much broader public than before.

11. What does the passage mainly discuss?
(A) The origins of textile decoration
(B) The characteristics of good-quality prints
(C) Two types of printmaking
(D) Types of paper used in printmaking

12. The word "prime" in line 2 is closest in meaning to
(A) principal (B) complex (C) general (D) recent

13. The author's purposes in paragraph 2 is to describe
(A) the woodcuts found in China in the fifth century
(B) the use of woodcuts in the textile industry
(C) the process involved in creating a woodcut
(D) the introduction of woodcuts to Europe

14. The word "incised" in line 14 is closest in meaning to
(A) burned (B) cut (C) framed (D) baked

15. Which of the following terms is defined in the passage/
(A) "patterns" (line 5)
(B) "grain" (line 8)
(C) "burin" (line 15)
(D) "grooves" (line 16)

16. The word "distinctive" in line 18 is closest in meaning to
(A) unique (B) accurate (C) irregular (D) similar

17. According to the passage, all of the following are true about engraving EXCEPT that it
(A) developed from the art of the goldsmiths
(B) requires that the paper be cut with a burin
(C) originated in the fifteenth century
(D) involves carving into a metal plate

18. The word "yield" in line 22 is closest in meaning to
(A) imitate (B) produce (C) revise (D) contrast

19. According to the passage, what do woodcut and engraving have in common?
(A) Their designs are slightly raised.
(B) They achieve contrast through hatching and cross-hatching.
(C) They were first used in Europe.
(D) They allow multiple copies to be produced from one original.

20. According to the author, what made it possible for members of the general public to own prints in the sixteenth century?
(A) Prints could be made at low cost.
(B) The quality of paper and ink had improved.
(C) Many people became involved in the printmaking industry.
(D) Decreased demand for prints kept prices affordable.

21. According to the passage, all of the following are true about prints EXCEPT that they
(A) can be reproduced on materials other than paper
(B) are created from a reversed image
(C) show variations between light and dark shades
(D) require a printing press

Questions 22-31

The first peoples to inhabit what today is the southeastern United States sustained themselves as hunters and gathers. Sometimes early in the first millennium A.D., however, they began to cultivate corn and other crops. Gradually, as they became more skilled at
Line gardening, they settled into permanent villages and developed a rich culture, characterized
(5) by the great earthen mounds they erected as monuments to their gods and as tombs for their distinguished dead. Most of these early mound builders were part of the Adena-Hopewell culture, which had its beginnings near the Ohio River and takes its name from sites in Ohio. The culture spread southward into the present-day states of Louisiana, Alabama, Georgia, and Florida. Its peoples became great traders, bartering jewellery,
(10) pottery, animal pelts, tools, and other goods along extensive trading networks that stretched up and down eastern North America and as far west as the Rocky Mountains.

About A.D. 400, the Hopewell culture fell into decay. Over the next centuries, it was supplanted by another culture, the Mississippian, named after the river along which many of its earliest villages were located. This complex civilization dominated the Southeast from
(15) about A.D. 700 until shortly before the Europeans began arriving in the sixteenth century. At the peak of its strength, about the year 1200, it was the most advanced culture in North America. Like their Hopewell predecessors, the Mississippians became highly skilled at growing food, although on a grander scale. They developed an improved strain of corn, which could survive in wet soil and a relatively cool climate, and also learned to cultivate
(20) beans. Indeed, agriculture became so important to the Mississippians that it became closely associated with the Sun – the guarantor of good crops. Many tribes called themselves "children of the Sun" and believed their omnipotent priest-chiefs were descendants of the great sun god.

Although most Mississippians lived in small villages, many others inhabited large towns.
(25) Most of these towns boasted at least one major flat-topped mound on which stood a temple that contained a sacred flame. Only priests and those charged with guarding the flame could enter the temples. The mounds also served as ceremonial and trading sites, and at times they were used as burial grounds.

22. What does the passage mainly discuss?

(A) The development of agriculture
(B) The locations of towns and villages
(C) The early people and cultures of the United States
(D) The construction of burial mounds

23. Which of the following resulted from the rise of agriculture in the southeastern United States?

(A) The development of trade in North America
(B) The establishment of permanent settlements
(C) Conflicts with other Native American groups over land
(D) A migration of these peoples to the Rocky Mountains.

24. What does the term "Adena-Hopewell" (line 7) designate?

(A) The early locations of the Adena-Hopewell culture
(B) The two most important nations of the Adena-Hopewell culture
(C) Two former leaders who were honored with large burial mounds.
(D) Two important trade routes in eastern North America

25. The word "bartering" in line 9 is closest in meaning to

(A) producing (B) exchanging (C) transporting (D) loading

26. The word "supplanted" in line 13 is closest in meaning to
(A) conquered (B) preceded (C) replaced (D) imitated

27. According to the passage, when did the Mississippian culture reach its highest point of development?
(A) About A.D. 400
(B) Between A.D. 400 and A.D. 700
(C) About A.D. 1200
(D) In the sixteenth century

28. According to the passage, how did the agriculture of the Mississippians differ from that of their Hopewell predecessors?
(A) The Mississippians produced more durable and larger crops of food.
(B) The Mississippians sold their food to other groups.
(C) The Mississippians could only grow plants in warm, dry climates.
(D) The Mississippians produced special foods for their religious leaders.

29. Why does the author mention that many Mississippians tribes called themselves "children of the Sun" (line 22)?
(A) To explain why they were obedient to their priest-chiefs.
(B) To argue about the importance of religion in their culture.
(C) To illustrate the great importance they placed on agriculture.
(D) To provide an example of their religious rituals.

30. The phrase "charged with" in line 26 is closest in meaning to
(A) passed on
(B) experienced at
(C) interested in
(D) assigned to

31. According to the passage, the flat-topped mounds in Mississippian towns were used for all of the following purposes EXCEPT
(A) religious ceremonies
(B) meeting places for the entire community
(C) sites for commerce
(D) burial sites

Question 32-40

Overland transport in the United States was still extremely primitive in 1790. Roads were few and short, usually extending from inland communities to the nearest river town or seaport. Nearly all interstate commerce was carried out by sailing ships that served the
Line bays and harbors of the seaboard. Yet, in 1790 the nation was on the threshold of a new
(5) era of road development. Unable to finance road construction, states turned for help to private companies, organized by merchants and land speculators who had a personal interest in improved communications with the interior. The pioneer in this move was the state of Pennsylvania, which chartered a company in 1792 to construct a turnpike, a road for the use of which a toll, or payment, is collected, from Philadelphia to Lancaster. The
(10) legislature gave the company the authority to erect tollgates at points along the road where payment would be collected, though it carefully regulated the rates. (The states had unquestioned authority to regulate private business in this period.)

The company built a gravel road within two years, and the success of the Lancaster Pike encouraged imitation. Northern states generally relied on private companies to build their
(15) toll roads, but Virginia constructed a network at public expense. Such was the road building fever that by 1810 New York alone had some 1,500 miles of turnpikes extending from the Atlantic to Lake Erie.

Transportation on these early turnpikes consisted of freight carrier wagons and passenger stagecoaches. The most common road freight carrier was the Conestoga wagon, a vehicle
(20) developed in the mid-eighteenth century by German immigrants in the area around Lancaster, Pennsylvania. It featured large, broad wheels able to negotiate all but the

deepest ruts and holes, and its round bottom prevented the freight from shifting on a hill. Covered with canvas and drawn by four to six horses, the Conestoga wagon rivaled the log cabin as the primary symbol of the frontier. Passengers traveled in a variety of
(25) stagecoaches, the most common of which had four benches, each holding three persons. It was only a platform on wheels, with no springs; slender poles held up the top, and leather curtains kept out dust and rain.

32. Paragraph 1 discusses early road building in the United States mainly in terms of the
(A) popularity of turnpikes
(B) financing of new roads
(C) development of the interior
(D) laws governing road use

33. The word "primitive" in line 1 is closest in meaning to
(A) unsafe (B) unknown (C) inexpensive (D) undeveloped

34. In 1790 most roads connected towns in the interior of the country with
(A) other inland communities
(B) towns in other states
(C) river towns or seaports
(D) construction sites

35. The phrase "on the threshold of" in line 4 and 5 is closest in meaning to
(A) in need of
(B) in place of
(C) at the start of
(D) with the purpose of

36. According to the passage, why did states want private companies to help with road building?
(A) The states could not afford to build roads themselves.
(B) The states were not as well equipped as private companies.
(C) Private companies could complete roads faster than the states.
(D) Private companies had greater knowledge of the interior.

37. The word "it" in line 11 refers to
(A) legislature (B) company (C) authority (D) payment

38. The word "imitation" in line 14 is closest in meaning to
(A) investment (B) suggestion (C) increasing (D) copying

39. Virginia is mentioned as an example of a state that
(A) built roads without tollgates
(B) built roads with government money
(C) completed 1,500 miles of turnpikes in one year
(D) introduced new law restricting road use

40. The "large, broad wheels" of the Conestoga wagon are mentioned in line 21 as an example of a feature of wagons that was
(A) unusual in mid-eighteenth century vehicles
(B) first found in Germany
(C) effective on roads with uneven surfaces
(D) responsible for frequent damage to freight

Question 41- 50

In Death Valley, California, one of the hottest, most arid places in North America, there is much salt, and salt can damage rocks impressively. Inhabitants of areas elsewhere, where streets and highways are salted to control ice, are familiar with the resulting rust and
Line deterioration on cars. That attests to the chemically corrosive nature of salt, but it is not
(5) the way salt destroys rocks. Salt breaks rocks apart principally by a process called crystal prying and wedging. This happens not by soaking the rocks in salt water, but by moistening their bottoms with salt water. Such conditions exist in many areas along the eastern edge of central Death Valley. There, salty water rises from the groundwater table by capillary action through tiny spaces in sediment until it reaches the surface.

(10) Most stones have capillary passages that suck salt water from the wet ground. Death Valley provides an ultra-dry atmosphere and high daily temperatures, which promote evaporation and the formation of salt crystals along the cracks or other openings within stones. These crystals grow as long as salt water is available. Like tree roots breaking up a sidewalk, the growing crystals exert pressure on the rock and eventually pry the rock apart
(15) along planes of weakness, such as banding in metamorphic rocks, bedding in sedimentary rocks, or preexisting or incipient fractions, and along boundaries between individual mineral crystals or grains. Besides crystal growth, the expansion of halite crystals (the same as everyday table salt) by heating and of sulfates and similar salts by hydration can contribute additional stresses. A rock durable enough to have withstood natural conditions
(20) for a very long time in other areas could probably be shattered into small pieces by salt weathering within a few generations.

The dominant salt in Death Valley is halite, or sodium chloride, but other salts, mostly carbonates and sulfates, also cause prying and wedging, as does ordinary ice. Weathering by a variety of salts, though often subtle, is a worldwide phenomenon. Not restricted to
(25) arid regions, intense salt weathering occurs mostly in salt-rich places like the seashore, near the large saline lakes in the Dry Valleys of Antarctica, and in desert sections of Australia, New Zealand, and central Asia.

41. What is the passage mainly about?

(A) The destructive effects of salt on rocks.
(B) The impressive salt rocks in Death Valley.
(C) The amount of salt produced in Death Valley.
(D) The damaging effects of salt on roads and highways.

42. The word "it" in line 9 refers to

(A) salty water (B) groundwater table (C) capillary action (D) sediment

43. The word "exert" in line 14 is closest in meaning to

(A) put (B) reduce (C) replace (D) control

44. In lines 13-17, why does the author compare tree roots with growing salt crystals?

(A) They both force hard surfaces to crack.
(B) They both grow as long as water is available.
(C) They both react quickly to a rise in temperature.
(D) They both cause salty water to rise from the groundwater table.

45. In lines 17-18, the author mentions the "*expansion of halite crystals...by heating and of sulfates and similar salts by hydration*" in order to

(A) present an alternative theory about crystal growth
(B) explain how some rocks are not affected by salt
(C) simplify the explanation of crystal prying and wedging
(D) introduce additional means by which crystals destroy rocks

46. The word "durable" in line 19 is closest in meaning to
(A) large (B) strong (C) flexible (D) pressured

47. The word "shattered" in line 20 is closest in meaning to
(A) arranged (B) dissolved
(C) broken apart (D) gathered together

48. The word "dominant" in line 22 is closest in meaning to
(A) most recent (B) most common
(C) least available (D) least damaging

49. According to the passage, which of the following is true about the effects of salts on rocks?
(A) Only two types of salts cause prying and wedging.
(B) Salts usually cause damage only in combination with ice.
(C) A variety of salts in all kinds of environments can cause weathering.
(D) Salt damage at the seashore is more severe than salt damage in Death Valley.

50. Which of the following can be inferred from the passage about rocks that are found in areas where ice is common?
(A) They are protected from weathering.
(B) They do not allow capillary action of water.
(C) They show similar kinds of damage as rocks in Death Valley.
(D) They contain more carbonates than sulfates.

PRACTICE TEST 02
January 2003

Questions 1-10

By far the most important United States export product in the eighteenth and nineteenth centuries was cotton, favored by the European textile industry over flax or wool because it was easy to process and soft to tile touch. Mechanization of spinning and weaving allowed significant centralization and expansion in the textile industry during this period, and at the same time the demand for cotton increased dramatically. American producers were able to meet this demand largely because of tile invention of the cotton gin by Eli Whitney in 1793. Cotton could be grown throughout the South, but separating the fiber – or lint – from the seed was a laborious process. Sea island cotton was relatively easy to process by hand, because its fibers were long and seeds were concentrated at the base of the flower, but it demanded a long growing season, available only along the nation's eastern seacoast. Short-staple cotton required a much shorter growing season, but the shortness of the fibers and their mixture with seeds meant that a worker could hand-process only about one pound per day. Whitney's gin was a hand-powered machine with revolving drums and metal teeth to pull cotton fibers away from seeds. Using the gin, a worker could produce up to 50 pounds of lint a day. The later development of larger gins, powered by horses, water, or steam, multiplied productivity further.

The interaction of improved processing and high demand led to the rapid spread of the cultivation of cotton and to a surge in production. It became the main American export, dwarfing all others. In 1802, cotton composed 14 percent of total American exports by value. Cotton had a 36 percent share by 1810 and over a 50 percent share in 1830. In 1860, 61 percent of the value of American exports was represented by cotton. In contrast, wheat and wheat flour composed only 6 percent of the value of American exports in that year. Clearly, cotton was king in the trade of the young republic. The growing market for cotton and other American agricultural products led to an unprecedented expansion of agricultural settlement, mostly in the eastern half of the United States---west of the Appalachian Mountains and east of the Mississippi River.

1. The main point of the passage is that the eighteenth and nineteenth centuries were a time when
(A) the European textile industry increased its demand for American export products
(B) mechanization of spinning and weaving dramatically changed the textile industry
(C) cotton became a profitable crop but was still time-consuming to process
(D) cotton became the most important American export product

2. The word "favored" in line 2 is closest in meaning to
(A) preferred (B) recommended (C) imported (D) included

3. All of the following are mentioned in the passage as reasons for the increased demand for cotton EXCEPT
(A) cotton's softness
(B) cotton's ease of processing
(C) a shortage of flax and wool
(D) the growth that occurred in the textile industry.

4. The word "laborious" in line 8 is closest in meaning to
(A) unfamiliar (B) primitive (C) skilled (D) difficult

5. According to the passage, one advantage of sea island cotton was its
(A) abundance of seeds (B) long fibers
(C) long growing season (D) adaptability to different climates

6. Which of the following can be inferred from the passage about cotton production in the United States after the introduction of Whitney's cotton gin?

(A) More cotton came from sea island cotton plants than before.
(B) More cotton came from short-staple cotton plants than before.
(C) Most cotton produced was sold domestically.
(D) Most cotton produced was exported to England.

7. The word "surge" in line 18 is closest in meaning to

(A) sharp increase (B) sudden stop
(C) important change (D) excess amount

8. The author mentions "wheat and wheat flour" in line 22 in order to

(A) show that Americans exported more agricultural products than they imported.
(B) show the increase in the amount of wheat products exported.
(C) demonstrate the importance of cotton among American export products.
(D) demonstrate that wheat farming was becoming more profitable.

9. The word "unprecedented" in line 25 is closest in meaning to

(A) slow (B) profitable (C) not seen before (D) never explained

10. According to the passage, the Mississippi River was

(A) one of the boundaries of a region where new agricultural settlement took place
(B) a major source of water for agricultural crops
(C) the primary route by which agricultural crops were transported
(D) a main source of power for most agricultural machinery

Questions 11-19

The origins of nest-building remain obscure, but current observation of nest-building activities provide evidence of their evolution. Clues to this evolutionary process can be found in the activities of play and in the behavior and movements of birds during mating, such as incessant pulling at strips of vegetation or scraping of the soil. During the early days of the reproductive cycle, the birds seem only to play with the building materials. In preparation for mating, they engage in activities that resemble nest-building, and continue these activities throughout and even after the mating cycle. Effective attempts at construction occur only after mating.

Although nest-building is an instinctive ability, there is considerable adaptability in both site selection and use of materials, especially with those species which build quite elaborate constructions. Furthermore, some element of learning is often evident since younger birds do not build as well as their practiced elders. Young ravens, for example, first attempt to build with sticks of quite unsuitable size, while a jackdaw's first nest includes virtually any movable object. The novelist John Steinbeck recorded the contents of a young osprey nest built in his garden, which included three shirts, a bath towel, and one arrow.

Birds also display remarkable behavior in collecting building materials. Crows have been seen to tear off stout green twigs, and sparrowhawks will dive purposefully onto a branch until it snaps and then hang upside down to break it off. Golden eagles, over generations of work, construct enormous nests. One of these, examined after it had been dislodged by high winds, weighed almost two tons and included foundation branches almost two meters long. The carrying capacity of the eagles, however, is only relative to their size ant1 most birds are able to carry an extra load of just over twenty percent of their body weight.

11. The word "obscure" in line 1 is closest in meaning to
(A) interesting (B) unclear (C) imperfect (D) complex

12. According to the passage, which of the following activities is characteristic of the early part of the reproductive cycle of birds?
(A) Selecting a mate
(B) Collecting nest-building materials
(C) Playing with nest-building materials
(D) Building a nest

13. The word "display" in line 17 is closest in meaning to
(A) communicate (B) imitate (C) initiate (D) exhibit

14. The novelist John Steinbeck is mentioned in line 14 because he
(A) conducted a scientific study on the behavior of ospreys
(B) was the first to describe where ospreys built their nests
(C) described the materials ospreys can use to build their nests
(D) compared the size of osprey nests with the nests of other species

15. Which of the following birds are mentioned as those that build nests that include unusual objects?
(A) Ravens (B) Ospreys (C) Crows (D) Sparrowhawks

16. According to the passage, when gathering materials to build their nests, sparrowhawks do which of the following?
(A) Hang upside down
(B) Select only green twigs
(C) Use objects blowing in the wind
(D) Collect more branches than necessary

17. The word "these" in line 20 refers to
(A) golden eagles (B) generations (C) winds (D) nests

18. The word "load" in line 23 is closest in meaning to
(A) weight (B) number (C) section (D) level

19. The author mentions twenty percent in line 23 to indicate that
(A) eagles are twenty percent bigger than most birds
(B) twenty percent of all nests include foundation branches
(C) the nests of eagles are twenty percent of larger than those of other birds
(D) birds can carry twenty percent of their own weight

Questions 20-30

A survey is a study, generally in the form of an interview or a questionnaire, that provides information concerning how people think and act. In the United States, the best-known surveys are the Gallup poll and the Harris poll. As anyone who watches the news during
Line campaigns presidential knows, these polls have become an important part of political life in
(5) the United States.

North Americans are familiar with the many "person on the street? interviews on local television news shows. While such interviews can be highly entertaining, they are not necessarily an accurate indication of public opinion. First, they reflect the opinions of only those people who appear at a certain location. Thus, such samples can be biased in favor
(10) of commuters, middle-class shoppers, or factory workers, depending on which area the newspeople select. Second, television interviews tend to attract outgoing people who are willing to appear on the air, while they frighten away others who may feel intimidated by a camera. A survey must be based on a precise, representative sampling if it is to genuinely reflect a broad range of the population.

(15) In preparing to conduct a survey, sociologists must exercise great care in the wording of questions. An effective survey question must be simple and clear enough for people to understand it. It must also be specific enough so that there are no problems in interpreting the results. Even questions that are less structured must be carefully phrased in order to elicit the type of information desired. Surveys can be indispensable sources of information, but *(20)* only if the sampling is done properly and the questions are worded accurately.

There are two main forms of surveys: the interview and the questionnaire. Each of these forms of survey research has its advantages. An interviewer can obtain a high response rate because people find it more difficult to turn down a personal request for an interview than to throw away a written questionnaire. In addition, an interviewer can go beyond written *(25)* questions and probe for a subject's underlying feelings and reasons. However, questionnaires have the advantage of being cheaper and more consistent.

20. What does the passage mainly discuss?
(A) The history of surveys in North America
(B) The principles of conducting surveys
(C) Problems associated with interpreting surveys
(D) The importance of polls in American political life

21. The word "they" in line 8 refers to
(A) North Americans (B) news shows (C) interviews (D) opinions

22. According to the passage, the main disadvantage of person-on-the-street interviews is that they
(A) are not based on a representative sampling
(B) are used only on television
(C) are not carefully worded
(D) reflect political opinions

23. The word "precise" in line 13 is closest in meaning to
(A) planned (B) rational (C) required (D) accurate

24. According to paragraph 3, which of the following is most important for an effective survey?
(A) A high number of respondents
(B) Carefully worded questions
(C) An interviewer's ability to measure respondents' feelings
(D) A sociologist who is able to interpret the results

25. The word "exercise" in line 15 is closest in meaning to
(A) utilize (B) consider (C) design (D) defend

26. The word "elicit" in line 18 is closest in meaning to
(A) compose (B) rule out (C) predict (D) bring out

27. It can be inferred from the passage that one reason that sociologists may become frustrated with questionnaires is that
(A) respondents often do not complete and return questionnaires
(B) questionnaires are often difficult to read
(C) questionnaires are expensive and difficult to distribute
(D) respondents are too eager to supplement questions with their own opinions

28. According to the passage, one advantage of live interviews over questionnaires is that live interviews
(A) cost less (B) can produce more information
(C) are easier to interpret (D) minimize the influence of the researcher

29. The word "probe" in line 25 is closest in meaning to
(A) explore (B) influence (C) analyze (D) apply

30. Which of the following terms is defined in the passage?
(A) Survey (line 1) (B) Public opinion (line 8)
(C) Representative sampling (line 13) (D) Response rate (line 22)

Questions 31-39

Perhaps one of the most dramatic and important changes that took place in the Mesozoic era occurred late in that era, among the small organisms that populate the uppermost, sunlit portion of the oceans--the plankton. The term "plankton" is a broad one, designating all of the small plants and animals that float about or weakly propel themselves through the sea. In the late stages of the Mesozoic era. during the Cretaceous period, there was a great expansion of plankton that precipitated skeletons or shells composed of two types of mineral: silica and calcium carbonate. This development radically changed the types of sediments that accumulated on the seafloor, because, while the organic parts of the plankton decayed after the organisms died, their mineralized skeletons often survived and sank to the bottom. For the first time in the Earth's long history, very large quantities of silica skeletons, which would eventually harden into rock, began to pile up in parts of the deep sea. Thick deposits of calcareous ooze made up of the tiny remains of the calcium carbonate-secreting plankton also accumulated as never before. The famous white chalk cliffs of Dover, in the southeast of England, are just one example of the huge quantities of such material that amassed during the Cretaceous period; there are many more. Just why the calcareous plankton were so prolific during the latter part of the Cretaceous period is not fully understood. Such massive amounts of chalky sediments have never since been deposited over a comparable period of time. The high biological productivity of the Cretaceous oceans also led to ideal conditions for oil accumulation. Oil is formed when organic material trapped in sediments is slowly buried and subjected to increased temperatures and pressures, transforming it into petroleum. Sediments rich in organic material accumulated along the margins of the Tethys Seaway, the tropical east-west ocean that formed when Earth's single landmass (known as Pangaea) split apart during the Mesozoic era. Many of today's important oil fields are found in those sediments--in Russia, the Middle East, the Gulf of Mexico, and in the states of Texas and Louisiana in the United States.

Line
(5)
(10)
(15)
(20)
(25)

31. What does the passage mainly discuss?
(A) How sediments were built up in oceans during the Cretaceous period
(B) How petroleum was formed in the Mesozoic era
(C) The impact of changes in oceanic animal and plant life in the Mesozoic era
(D) The differences between plankton found in the present era and Cretaceous plankton

32. The passage indicates that the Cretaceous period occurred
(A) in the early part of the Mesozoic era (B) in the middle part of the Mesozoic era
(C) in the later part of the Mesozoic era (D) after the Mesozoic era

33. The passage mentions all of the following aspects of plankton EXCEPT
(A) the length of their lives (B) the level of the ocean at which they are found
(C) their movement (D) their size

34. The word "accumulated" in line 8 is closest in meaning to
(A) depended (B) matured (C) dissolved (D) collected

35. According to the passage, the most dramatic change to the oceans caused by plankton during the Cretaceous period concerned
(A) the depth of the water
(B) the makeup of the sediment on the ocean floor
(C) the decrease in petroleum-producing sediment
(D) a decline in the quantity of calcareous ooze on the seafloor

36. The "white chalk cliffs of Dover" are mentioned in line 14 of the passage to
(A) show where the plankton sediment first began to build up
(B) provide an example of a plankton buildup that scientists cannot explain
(C) provide an example of the buildup of plankton sediment
(D) indicate the largest single plankton buildup on Earth

37. The word "prolific" in line 16 is closest in meaning to
(A) fruitful (B) distinct (C) determined (D) energetic

38. The word "ideal" in line 19 is closest in meaning to
(A) common (B) clear (C) perfect (D) immediate

39. The word "it" in line 21 refers to
(A) biological productivity (B) oil
(C) organic material (D) petroleum

Questions 40-50

Of all modern instruments, the violin is apparently one of the simplest. It consists in essence of a hollow, varnished wooden sound box, or resonator, and a long neck, covered with a fingerboard, along which four strings are stretched at high tension. The beauty of
Line design, shape, and decoration is no accident: the proportions of the instrument are
(5) determined almost entirely by acoustical considerations. Its simplicity of appearance is deceptive. About 70 parts are involved in the construction of a violin, Its tone and its outstanding range of expressiveness make it an ideal solo instrument. No less important. however, is its role as an orchestral and chamber instrument. In combination with the larger and deeper-sounding members of the same family, the violins form the nucleus
(10) of the modern symphony orchestra.

The violin has been in existence since about 1550. Its importance as an instrument in its own right dates from the early 1600's, when it first became standard in Italian opera orchestras. Its stature as an orchestral instrument was raised further when in 1626 Louis XIII of France established at his court the orchestra known as Les vinq-quatre
(15) violons du Roy (The King's 24 Violins), which was to become widely famous later in the century.

In its early history, the violin had a dull and rather quiet tone resulting from the fact that the strings were thick and were attached to the body of the instrument very loosely. During the eighteenth and nineteenth century, exciting technical changes were inspired
(20) by such composer-violinists as Vivaldi and Tartini. Their instrumental compositions demanded a fuller, clearer, and more brilliant tone that was produced by using thinner strings and a far higher string tension. Small changes had to be made to the violin's internal structure and to the fingerboard so that they could withstand the extra strain. Accordingly, ,a higher standard of performance was achieved, in terms of both facility
(25) and interpretation. Left-hand technique was considerably elaborated, and new fingering patterns on the fingerboard were developed for very high notes.

40. The word "standard" in line 12 is closest in meaning to
(A) practical (B) customary (C) possible (D) unusual

41. "The King's 24 Violins" is mentioned in line 15 to illustrate
(A) how the violin became a renowned instrument
(B) the competition in the 1600's between French and Italian orchestras
(C) the superiority of French violins
(D) why the violin was considered the only instrument suitable to be played by royalty

42. What is the main idea presented in paragraph 3?
(A) The violin has been modified to fit its evolving musical functions.
(B) The violin is probably the best known and most widely distributed musical instrument in the world.
(C) The violin had reached the height of its popularity by the middle of the eighteenth century.
(D) The technique of playing the violin has remained essentially the same since the 1600's.

43. The author mentions Vivaldi and Tartini in line 20 as examples of composers whose music
(A) inspired more people to play the violin (B) had to be adapted to the violin
(C) demanded more sophisticated violins (D) could be played only by their students

44. The word "they" in line 23 refers to
(A) Civaldi and Tartini (B) thinner strings and a higher string tension
(C) small changes (D) internal structure and fingerboard

45. The word "strain" in line 23 is closest in meaning to
(A) struggle (B) strength (C) strategy (D) stress

46. The word "Accordingly" in line 24 is closest in meaning to
(A) However (B) Consequently (C) Nevertheless (D) Ultimately

47. According to the passage, early violins were different from modern violins in that early violins
(A) were heavier (B) broke down more easily
(C) produced softer tones (D) were easier to play

48. According to the passage, which of the following contributes to a dull sound being produced by a violin?
(A) A long fingerboard (B) A small body
(C) High string tension (D) Thick strings

49. Which of the following terms is defined in the passage?
(A) resonator (line 2) (B) solo (line 7)
(C) left-hand technique (line 25) (D) fingering patterns (lines 25-26)

50. All of the following are mentioned in the passage as contributing to the ability to play modern violin music EXCEPT
(A) more complicated techniques for the left hand
(B) different ways to use the fingers to play very high notes
(C) use of rare wood for the fingerboard and neck
(D) minor alterations to the structure of the instrument

PRACTICE TEST 03
August 2003

Question 1-11

If food is allowed to stand for some time, it putrefies .When the putrefied material is examined microscopically ,it is found to be teeming with bacteria. Where do these bacteria come from , since they are not seen in fresh food? Even until the mid-nineteenth
Line century, many people believed that such microorganisms originated by spontaneous
(5) generation ,a hypothetical process by which living organisms develop from nonliving matter.

The most powerful opponent of the theory of spontaneous generation was the French chemist and microbiologist Louis Pasteur(1822-1895).Pasteur showed that structures present in air closely resemble the microorganisms seen in putrefying materials .He did
(10) this by passing air through guncotton filters, the fibers of which stop solid particles. After the guncotton was dissolved in a mixture of alcohol and ether, the particles that it had trapped fell to the bottom of the liquid and were examined on a microscope slide .Pasteur found that in ordinary air these exists a variety of solid structures ranging in size from 0.01 mm to more than 1. 0mm .Many of these bodies resembled the reproductive
(15) structures of common molds, single-celled animals, and various other microbial cells. As many as 20 to 30 of them were found in fifteen liters of ordinary air ,and they could not be distinguished from the organisms found in much larger numbers in putrefying materials .Pasteur concluded that the organisms found in putrefying materials originated from the organized bodies present in the air .He postulated that these bodies are constantly
(20) being deposited on all objects.

Pasteur showed that if a nutrient solution was sealed in a glass flask and heated to boiling to destroy all the living organisms contaminating it, it never putrefied .The proponents of spontaneous generation declared that fresh air was necessary for spontaneous generation and that the air inside the sealed flask was affected in some way
(25) by heating so that it would no longer support spontaneous generation. Pasteur constructed a swan-necked flask in which putrefying materials could he heated to boiling, but air could reenter. The bends in the neck prevented microorganisms from getting in the flask. Material sterilized in such a flask did not putrefy.

1. What does the passage mainly discuss?

(A) Pasteur's influence on the development of the microscope.
(B) The origin of the theory of spontaneous generation .
(C) The effects of pasteurization on food.
(D) Pasteur's argument against the theory of spontaneous generation .

2. The phrase "teeming with "in line 2 is closest in meaning to

(A) full of (B) developing into (C) resistant to (D) hurt by

3. Which of the following questions did the theory of spontaneous generation attempt to answer?

(A) What is the origin of the living organisms are seen on some food?
(B) How many types of organisms can be found on food?
(C) What is the most effective way to prepare living organisms for microscopic examination?
(D) How long can food stand before it putrefies?

4. The word "resemble" in line 9 is closest in meaning to

(A) benefit from (B) appear similar to
(C) join together with (D) grow from

5. The purpose of the “guncotton” mentioned in paragraph 2 was to
(A) trap particles for analysis
(B) slow the process of putrefaction
(C) increase the airflow to the microscopic slide
(D) aid the mixing of alcohol and ether

6. The author mention “1.0mm”in line 14 in describing the
(A) thickness of a layer of organisms that was deposited on an object
(B) diameter of the fibers that were in the guncotton filters
(C) thickness of the microscope slides that were used
(D) size of the particles that that were collected

7. The word “postulated” in line 19 is closest in meaning to
(A) analyzed (B) doubted (C) persuaded (D) suggested

8. The objects that Pasteur removed from the air in his experiment were remarkable because they were
(A) primarily single-celled organisms
(B) no different from objects found in putrefying materials
(C) fairly rare
(D) able to live in a mixture of alcohol and ether

9. The word “it” in line 22 refers to
(A) a nutrient solution (B) a glass flask
(C) boiling (D) spontaneous generation

10. According to paragraph 3,proponents of spontaneous generation believed that which of the following was important for the process to succeed ?
(A) A sealed container (B) Fresh air
(C) Heat (D) The presence of nutrients

11. It can be inferred from paragraph 3 that Pasteur employed a swam-necked flask to
(A) store sterilized liquids for use in future experiments
(B) prevent heat from building up in a solution
(C) disprove a criticism of his conclusions
(D) estimate the number of organisms in a liter of air

Questions 12-20

In the early decades of the United States ,the agrarian movement promoted the farmer as society’s hero. In the minds of agrarian thinkers and writers ,the farmer was a person on whose well-being the health of the new country depended .The period between the Revolution, which ended in 1783,and the Civil War ,which ended in 1865 ,was the age of the farmer in the United States .Agrarian philosophers ,represented most eloquently by Thomas Jefferson, celebrated farmers extravagantly for their supposed centrality in a good society, their political virtue ,and their Superior morality .And virtually all policy makers, whether they subscribed to the tenets of the philosophy held by Jefferson or not, recognized agriculture as the key component of the American economy .Consequently ,government at all levels worked to encourage farmers as a social group and agriculture as economic enterprise.

Both the national and state governments developed transportation infrastructure, building canals, roads, bridges, and railroads ,deepening harbors ,and removing obstructions from navigable streams .The national government imported plant and animal varieties and launched exploring expeditions into prospective farmlands in the West .In addition, government trade policies facilitated the exporting of agricultural products.

For their part ,farmers seemed to meet the social expectations agrarian philosophers had for them ,as their broader horizons and greater self-respect, both products of the Revolution ,were reflected to some degree in their behavior .Farmers seemed to become
(20) more scientific ,joining agricultural societies and reading the farm newspapers that sprang up throughout the country .They began using improved implements, tried new crops and pure animal breeds , and became more receptive to modern theories of soil improvement .

They also responded to inducements by national and state governments .Farmers streamed to the West ,filling frontier lands with stunning rapidity .But farmers responded
(25) less to the expectations of agrarians and government inducements than to growing market opportunities .European demand for food from the United States seemed insatiable . War, industrialization , and urbanization all kept demand high in Europe . United States cities and industries grew as well; even industries not directly related to farming thrived because of the market, money ,and labor that agriculture provided

12. What does the passage mainly discuss?
(A) The agrarian philosophy of Thomas Jefferson
(B) The role of the national government in the development of agriculture
(C) Improvements in farming techniques
(D) The impact of the increased importance of the farmer

13. The word “depended” in line 3 is closest in meaning to
(A) improved (B) relied (C) demanded (D) explained

14. The author mentions Thomas Jefferson in paragraph 1 as an example of
(A) a leader during the Revolution
(B) an inventor of new farming techniques
(C) a philosopher who believed farmers were essential to the creation of a good society
(D) a farmer who guided the agrarian movement toward an emphasis on economic development

15. The phrase “subscribed to” in line 8 is closest in meaning to
(A) contributed to (B) agreed with
(C) thought about (D) expanded on

16. Which of the following statements is supported by the information in paragraph 1?
(A) All government policy makers accepted Jefferson’s views of agriculture and farmers.
(B) Agricultural production declined between 1783 and 1861.
(C) The majority of farmers worked for the government.
(D) Agriculture was a vital part of the nation’s economy.

17. According to the passage , the national and state governments did all of the following EXCEPT
(A) build roads
(B) import new plant varieties
(C) give farmers money for their crops
(D) develop policies that helped farmers export their products

18. All of the following are mentioned as examples of farmers’ meeting the expectations of agrarian philosophers EXCEPT
(A) obtaining information from farm newspapers
(B) accumulating personal wealth
(C) planting new crops
(D) becoming more scientific

19. The word “stunning” in line 24 is closest in meaning to
(A) predictable (B) impressive (C) famous (D) gradual

20. Which of the following statements is best supported by paragraph 4?

(A) Agricultural development contributed to development in other parts of the economy.
(B) European agricultural products were of a higher quality than those produced in the United States.
(C) The growing settlement of the West led to a decrease in agricultural production.
(D) Farmers were influenced more by government policies than by market opportunities.

Question 21-29

The wide variety of climates in North America has helped spawn a complex pattern of soil regions. In general, the realm's soils also reflect the broad environmental partitioning into "humid America" and "arid America." Where annual precipitation exceeds 20 inches
Line (50 centimeters),soils in humid areas tend to be acidic in chemical content, Since crops
(5) do best in soils that are neither acidic(higher in acid content) nor alkaline(higher in salt content).fertilization is necessary to achieve the desired level of neutrality between the two. Arid America's soils are typically alkaline and must be fertilized back toward neutrality by adding acidic compounds. Although many of these dryland soils, particularly in the Great Plains, are quite fertile, European settlers learned over a century ago that
(10) water is the main missing ingredient in achieving their agricultural potential. In the 1970's, certain irrigation methods were perfected and finally provided a real opportunity to expand more intensive farming west from the Central Lowland into the drier portions of the Great Plains. Glaciation also enhanced the rich legacy of fertile soils in the central United States,both from the deposition of mineral-rich glacial debris left by meltwater
(15) and from thick layers of fine wind-blown glacial material, called loess, in and around the middle Mississippi Valley.

Natural vegetation patterns could be displayed on a map of North America, but the enormous human modification of the North American environment in modern times has all but reduced this regionalization scheme to the level of the hypothetical. Nonetheless,
(20) the humid America-arid America dichotomy is still a valid generalization: the natural vegetation of areas receiving more than 20 inches of water yearly is forest, whereas the drier climates give rise to a grassland cover. The forests of North America tent to make a broad transition by latitude. In the Canadian North, needle-leaf forests dominate, but these coniferous trees become mixed with broadleaf deciduous trees as one crosses the
(25) border into the Northeast United States. As one proceeds toward the Southeast, broadleaf vegetation becomes dominant. Arid America mostly consists of short-grass prairies or stepper. The only areas of true desert are in the Southwest.

21. What aspect of North America does the passage mainly discuss?
(A) The wide variety of climates
(B) Soil types and vegetation patterns
(C) Improved irrigation methods and the expansion of agriculture
(D) The change in precipitation patterns

22. The word “spawn ” in line 1 is closest in meaning to
(A) distinguish (B) eliminate (C) protect (D) create

23. The word “partitioning” in line 2 is closest in meaning to
(A) division (B) modification (C) opening (D) circulating

24. According to the passage, acidic soils tent to be associated with
(A) a high salt content (B) an increase in farming
(C) large amounts of rain (D) glacial meltwater

25. The word “enhanced” in line 13 is closest in meaning to
(A) implied (B) increased (C) indicated (D) informed

26. How did glacial meltdown affect the soil in North America?
(A) It redistributed the soil types (B) It added salt to the soil
(C) It made the soil more neutral in content (D) It added minerals to the soil

27. The phrase “this regionalization scheme” in line 19 refers to the
(A) movements of glacial deposits
(B) patterns of natural vegetation
(C) human modification of the North American environment
(D) distinction between humid America and arid America

28. The word “transition” in line 23 is closest in meaning to
(A) elevation (B) change (C) advantage (D) condition

29. The passage supports which of the following statements?
(A) Arid America is not necessarily characterized by the presence of deserts
(B) Most of Canada and the northeastern United States consists of short-grass prairies wherever natural vegetation has not been modified by humans
(C) The accumulation of loess is primarily the result of irrigation
(D) Glaciation removed the fertile layer of soil from much of the Mississippi Valley

Questions 30-40

Most sources of illumination generate light over an appreciable period, and indeed if an object is lit for a very brief time(less that 1/25 second), the human eye will not react in time to see the object. A photographic emulsion---that is, a light-sensitive coating on photographic film, paper, or glass---will, however, record much shorter bursts of light. A photographic flash can therefore be used to capture high-speed movement on film as well as to correct deficiencies of the normal surrounding lighting. Photoflash is now generated electronically, but the earliest form, first used in 1864, was a paper bag containing magnesium wire and some oxygen-rich substance, such as potassium chlorate. When the bag was ignited, the metal burned with an intense flash. A contemporary observer reported that “this quite unsafe device seems to have done nothing worse that engulf the room in dense smoke and lead to pictures of dubious quality and odd poses.”

The evolution of the photoflash was slow, flashbulbs, containing fine wire made of a metal, such as magnesium or aluminum, capable of being ignited in an atmosphere of pure

oxygen at low pressure, were introduced only in the 1920's. In the earliest type, the metal
(15) was separated from the oxygen by a thin glass bulb. The flash was fired by piercing the bulb and allowing the oxygen to come into contact with the metal, which ignited spontaneously. Later bulbs were fired by an electric battery, which heated the wire by passing a small current through it. Other combinations, such as the pairing of oxygen difluoride with zirconium, have also been used. In each case enough energy is given out to
(20) heat the oxidizable metal momentarily to a white-hot emission of visible light. The smoke particles are so small that they cool rapidly; but since they are white, they contribute to the brilliance by reflecting the light from their still-glowing neighbors. A slightly bigger form of the metal will burn for a longer time.

30. What does the passage mainly discuss?
(A) The history of the photoflash
(B) Theories about how the eye reacts to light
(C) The technology of modern photography
(D) The dangers of using the early photoflash

31. According to the passage,1/25 second is the minimum amount of time required for the
(A) recording of an image on film
(B) generation of artificial light
(C) creation of a photographic emulsion
(D) human eye to react to light

32. According to the passage, an advantage of using a photoflash is that it
(A) can produce repeated bursts of light
(B) intensities colors in photographs
(C) is short enough not to bother human eyes
(D) supplements existing lighting

33. The word "ignited" in line 9 is closest in meaning to
(A) set on fire (B) cut into (C) opened (D) shaken

34. Which of the following phrases is defined in paragraph 1?
(A) "appreciable period" (line 1)
(B) "photographic emulsion" (line 3)
(C) "high-speed movement" (line 5)
(D) "odd poses" (line 11)

35. The word "evolution" in line 12 is closest in meaning to
(A) publicity (B) adoption (C) development (D) manufacture

36. The function of the glass in the first flashbulbs was to
(A) produce the spark that initiated the flash
(B) magnify the light produced by the flash
(C) protect the photographer from the heat of the flash
(D) keep the metal and oxygen apart before the flash

37. The word "it" in line 18 refers to
(A) oxygen (B) battery (C) wire (D) current

38. The word "momentarily" in line 20 is closest in meaning to
(A) effortlessly (B) briefly (C) electronically (D) gradually

39. According to the passage, the white color of the smoke particles generated by a flashbulb contributes to
(A) rapid cooling
(B) bright illumination
(C) electrical conductivity
(D) intense heat

40. According to the passage, a flashbulb can be made to burn longer by using
(A) thicker wire
(B) more oxygen
(C) thinner glass
(D) continuous electricity

Questions 41-50

The stylistic innovation in paining known as Impressionism began in the 1870's. The Impressionists wanted to depict what they saw in nature, but they were inspired to portray fragmentary moments by the increasingly fast pace of modern life. They concentrated on the play of light over objects, people, and nature, breaking up seemingly solid surfaces, stressing vivid contrast between colors in sunlight and shade, and depiction reflected light in all of its possibilities. Unlike earlier artists, they did not want to observe the world from indoors. They abandoned the studio, painting in the open air and recording spontaneous Impressions of their subjects instead of making outside sketches and then moving indoors to complete the work form memory.

Some of the Impressionists' painting methods were affected by technological advances. For example, the shift from the studio to the open air was made possible in part by the advent of cheap rail travel, which permitted easy and quick access to the countryside or seashore, as well as by newly developed chemical dyes and oils that led to collapsible paint tubes, which enabled artists to finish their paintings on the spot.

Impressionism acquired its name not from supporters but from angry art lovers who felt threatened by the new painting. The term "Impressionism" was born in 1874,when a group of artists who had been working together organized an exhibition of their paintings in order to draw public attention to their work. Reaction from the public and press was immediate, and derisive. Among the 165 paintings exhibited was one called *Impression: Sunrise*, by Claude Monet(1840-1926), Viewed through hostile eyes, Monet's painting of a rising sun over a misty, watery scene seemed messy, slapdash, and an affront to good taste. Borrowing Monet's title, art critics extended the term "Impressionism" to the entire exhibit. In response, Monet and his 29 fellow artists in the exhibit adopted the same name as a badge of their unity, despite individual differences. From then until 1886 Impressionism had all the zeal of a "church", as the painter Renoir put it. Monet was faithful to the Impressionist creed until his death, although many of the others moved on to new styles.

41. What aspect of painting in the nineteenth century does the passage mainly discuss?

(A) The impact of some artists' resistance to the fast pace of life
(B) The differences between two major styles of art
(C) A technological advance in the materials used by artists
(D) A group of artists with a new technique and approach to art

42. The word "depict" in line 2 is closest in meaning to

(A) reorganize (B) deform (C) represent (D) justify

43. According to the passage, which of the following was one of the distinguishing characteristics of Impressionist painting?

(A) The emphasis on people rather than nature scenes
(B) The way the subjects were presented from multiple angles
(C) The focus on small solid objects
(D) The depiction of the effects of light and color

44. Which of the following is a significant way in which Impressionists were different from the artists that preceded them?

(A) They began by making sketches of their subjects
(B) They painted their subjects out-of-doors
(C) They preferred to paint from memory
(D) They used subjects drawn from modern life

45. The word “advent” in line 12 is closest in meaning to
(A) achievement (B) acceptance (C) arrival (D) advantage

46. The exhibition of paintings organized in 1874 resulted in all of the following EXCEPT
(A) attracting attention from the public
(B) a negative reaction from the press
(C) an immediate demand for the paintings exhibited
(D) creating a name for a new style of painting

47. The word “affront” in line 22 is closest in meaning to
(A) insult (B) encouragement (C) return (D) credit

48. The rejection of the Impressionist exhibition by critics was caused by which of the following?
(A) The small number of paintings on display
(B) Lack of interest in exhibitions by young artists
(C) The similarity between all the paintings exhibited
(D) Anger about seemingly poorly painted art

49. The author mentions Renoir in line 25 to give an example of an artist who
(A) became as famous as Monet
(B) was consistently praised by art critics
(C) described the enthusiasm of the Impressionists for their work
(D) was in favor of a traditional style of painting

50. The word “others” in line 27 refers to
(A) art critics (B) fellow artists
(C) individual differences (D) new styles

PRACTICE TEST 04
October 2003

Questions 1-9

Europa is the smallest of planet Jupiter's four largest moons and the second moon out from Jupiter. Until 1979, it was just another astronomy textbook statistic. Then came the close-up images obtained by the exploratory spacecraft Voyager 2, and within
Line days, Europa was transformed-in our perception, at least-into one of the solar system's
(5) most intriguing worlds. The biggest initial surprise was the almost total lack of detail, especially from far away. Even at close range, the only visible features are thin, kinked brown lines resembling cracks in an eggshell. And this analogy is not far off the mark.

The surface of Europa is almost pure water ice, but a nearly complete absence of craters indicates that Europa's surface ice resembles Earth's Antarctic ice cap. The
(10) eggshell analogy may be quite accurate since the ice could be as little as a few kilometers thick –a true shell around what is likely a subsurface liquid ocean that , in turn, encases a rocky core. The interior of Europa has been kept warm over the eons by tidal forces generated by the varying gravitational tugs of the other big moons as they wheel around Jupiter. The tides on Europa pull and relax in an endless cycle. The resulting internal heat
(15) keeps what would otherwise be ice melted almost to the surface. The cracklike marks on Europa's icy face appear to be fractures where water or slush oozes from below.

Soon after Voyager 2's encounter with Jupiter in 1979, when the best images of Europa were obtained, researchers advanced the startling idea that Europa's subsurface ocean might harbor life. Life processes could have begun when Jupiter was releasing a
(20) vast store of internal heat. Jupiter's early heat was produced by the compression of the material forming the giant planet. Just as the Sun is far less radiant today than the primal Sun, so the internal heat generated by Jupiter is minor compared to its former intensity. During this warm phase, some 4.6 billion years ago, Europa's ocean may have been liquid right to the surface, making it a crucible for life.

1. What does the passage mainly discuss?
(A) The effect of the tides on Europa's interior
(B) Temperature variations on Jupiter's moons
(C) Discoveries leading to a theory about one of Jupiter's moons
(D) Techniques used by Voyager 2 to obtain close-up images.

2. The word "intriguing" in line 5 is closest in meaning to
(A) changing (B) perfect (C) visible (D) fascinating

3. In line 7, the another mentions "cracks in an eggshell" in order to help readers
(A) visualize Europa as scientists saw it in the Voyager 2 images
(B) appreciate the extensive and detailed information available by viewing Europa from far away
(C) understand the relationship of Europa to the solar system
(D) recognize the similarity of Europa to Jupiter's other moons

4. It can be inferred from the passage that astronomy textbooks prior to 1979
(A) provided many contradictory statistics about Europa
(B) considered Europa the most important of Jupiter's moons
(C) did not emphasize Europa because little information of interest was available
(D) did nor mention Europa because it had not yet been discovered

5. What does the author mean by stating in line 7 that “this analogy is not far off the mark”?

(A) The definition is not precise. (B) The discussion lacks necessary information.
(C) The differences are probably significant. (D) The comparison is quite appropriate.

6. IT can be inferred from the passage that Europa and Antarctica have in common which of the following?

(A) Both appear to have a surface with many craters.
(B) Both may have water beneath a thin, hard surface.
(C) Both have an ice can that is melting rapidly.
(D) Both have areas encased by a rocky exterior.

7. The word “endless” in line 14 is closest in meaning to

(A) new (B) final (C) temporary (D) continuous

8. According to the passage, what is the effect of Jupiter’s other large moons on Europa?

(A) They prevent Europa’s subsurface waters from freezing.
(B) They prevent tides that could damage Europa’s surface.
(C) They produce the very hard layer of ice that characterizes Europa.
(D) They assure that the gravitational pull on Europa is maintained at a steady level.

9. According to the passage, what is believed to cause the thin lines seen on Europa’s surface?

(A) A long period of extremely high tides
(B) Water breaking through from beneath the surface ice
(C) The continuous pressure of slush on top of the ice
(D) Heat generated by the hot rocky core

Question 10-19

Both in what is now the eastern and the southwestern United States, the peoples of the Archaic era (8,000-1,000 B.C) were, in a way, already adapted to beginnings of cultivation through their intensive gathering and processing of wild plant foods. In both areas, there was a well-established ground stone tool technology, a method of pounding and grinding nuts and other plant foods, that could be adapted to newly cultivated foods. By the end of the Archaic era, people in eastern North America had domesticated certain native plants, including sunflowers; weeds called goosefoot, sumpweed, or marsh elder; and squash or gourds of some kind. These provided seeds that were important sources of carbohydrates and fat in the diet.

The earliest cultivation seems to have taken place along the river valleys of the Midwest and the Southeast, with experimentation beginning as early as 7,000 years ago and domestication beginning 4,000 to 2,000 years ago. Although the term “Neolithic” is not used in North American prehistory, these were the first steps toward the same major subsistence changes that took place during the Neolithic (8,000-2,000 B.C.) period elsewhere in the world.

Archaeologists debate the reasons for beginning cultivation in the eastern part of the continent. Although population and sedentary living were increasing at the time, there is little evidence that people lacked adequate wild food resources; the newly domesticated foods supplemented a continuing mixed subsistence of hunting, fishing, and gathering wild plants, Increasing predictability of food supplies may have been a motive. It has been suggested that some early cultivation was for medicinal and ceremonial plants rather than for food. One archaeologist has pointed out that the early domesticated plants were all weedy species that do well in open, disturbed habitats, the kind that would form around human settlements where people cut down trees, trample the ground, deposit trash, and dig holes. It has been suggested that sunflower, sumpweed, and other plants almost

domesticated themselves, that is , they thrived in human –disturbed habitats, so humans intensively collected them and began to control their distribution. Women in the Archaic communities were probably the main experimenters with cultivation, because ethnoarchaeological evidence tells us that women were the main collectors of plant food and had detailed knowledge of plants.

10. The passage mainly discusses which of the following aspects of the life of Archaic peoples?
(A) The principal sources of food that made up their diet
(B) Their development of ground stone tool technology
(C) Their development of agriculture
(D) Their distribution of work between men and women

11. The word “these” in line 13 refers to
(A) seeds
(B) river valleys
(C) the Midwest and the Southeast
(D) experimentation and domestication

12. According to the passage, when did the domestication of plants begin in North America?
(A) 7,000 years ago
(B) 4,000 to 2,000 years ago
(C) Long after the Neolithic period
(D) Before the Archaic period

13. The word “adequate” in line 18 is closest in meaning to
(A) sufficient
(B) healthful
(C) varied
(D) dependable

14. According to the passage, which of the following was a possible motive for the cultivation of plants in eastern North America?
(A) Lack of enough wild food sources
(B) The need to keep trees from growing close to settlements
(C) Provision of work for an increasing population
(D) Desire for the consistent availability of food

15. The phrase “rather than” in line 21 is closest in meaning to
(A) in addition to
(B) instead of
(C) as a replacement
(D) such as

16. The plant “sumpweed” is mentioned in line 25 in order to
(A) contrast a plant with high nutritional value with one with little nutritional value
(B) explain the medicinal use of a plant
(C) clarify which plants grew better in places where trees were not cut down
(D) provide an example of a plant that was easy to domesticate

17. The word “thrived” in line 26 is closest in meaning to
(A) stayed
(B) originated
(C) grew well
(D) died out

18. According to the passage, which of the following is true about all early domesticated plants?
(A) They were varieties of weeds.
(B) They were moved from disturbed areas.
(C) They succeeded in areas with many trees.
(D) They failed to grow in trampled or damaged areas.

19. According to the passage, it is thought that most of the people who began cultivating plants were
(A) medical workers
(B) leaders of ceremonies
(C) women
(D) hunters

Questions 20-29

Many ants forage across the countryside in large numbers and undertake mass migrations; these activities proceed because one ant lays a trail on the ground for the others to follow. As a worker ant returns home after finding a source of food, it marks the route by intermittently touching its stinger to the ground and depositing a tiny amount of trail pheromone – a mixture of chemicals that delivers diverse messages as the context changes. These trails incorporate no directional information and may be followed by other ants in either direction.

Unlike some other messages, such as the one arising from a dead ant, a food trail has to be kept secret from members of other species. It is not surprising then that ant species use a wide variety of compounds as trail pheromones. Ants can be extremely sensitive to these signals. Investigators working with the trail pheromone of the leafcutter ant *Atta texana* calculated that one milligram of this substance would suffice to lead a column of ants three times around Earth.

The vapor of the evaporating pheromone over the trail guides an ant along the way, and the ant detects this signal with receptors in its antennae. A trail pheromone will evaporate to furnish the highest concentration of vapor right over the trail, in what is called a vapor space. In following the trail, the ant moves to the right and left, oscillating from side to side across the line of the trail itself, bringing first one and then the other antenna into the vapor space. As the ant moves to the right, its left antenna arrives in the vapor space. The signal it receives causes it to swing to the left, and the ant then pursues this new course until its right antenna reaches the vapor space. It then swings back to the right, and so weaves back and forth down the trail.

20. What does the passage mainly discuss?

(A) The mass migration of ants
(B) How ants mark and follow a chemical trail
(C) Different species of ants around the world
(D) The information contained in pheromones

21. The word “forage” in line 1 is closest in meaning to

(A) look up
(B) walk toward
(C) revolve around
(D) search for food

22. The word “intermittently” in live 4 is closest in meaning to

(A) periodically
(B) incorrectly
(C) rapidly
(D) roughly

23. The phrase “the one” in line 8 refers to a single

(A) message
(B) dead ant
(C) food trail
(D) species

24. According to the passage, why do ants use different compounds as trail pheromones?

(A) To reduce their sensitivity to some chemicals
(B) To attract different types of ants
(C) To protect their trail from other species
(D) To indicate how far away the food is

25. The author mentions the trail pheromone of the leafcutter ant in line 11 to point out

(A) how little pheromone is needed to mark a trail
(B) the different types of pheromones ants can produce
(C) a type of ant that is common in many parts of the world
(D) that certain ants can produce up to one milligram of pheromone

26. According to the passage, how are ants guided by trail pheromones?
(A) They concentrate on the smell of food.
(B) They follow an ant who is familiar with the trail
(C) They avoid the vapor spaces by moving in a straight line.
(D) They sense the vapor through their antennae.

27. The word “furnish” in line 16 is closest in meaning to
(A) include (B) provide (C) cover (D) select

28. The word “oscillating“ in line 17 is closest in meaning to
(A) falling (B) depositing (C) swinging (D) starting

29. According to the passage, the highest amount of pheromone vapor is found
(A) in the receptors of the ants (B) just above the trail
(C) in the source of food (D) under the soil along the trail

Questions 30-39

Native Americans probably arrived from Asia in successive waves over several millennia, crossing a plain hundreds of miles wide that now lies inundated by 160 feet of water released by melting glaciers. For several periods of time, the first beginning around 60,000 B.C. and the last ending around 7,000 B.C., this land bridge was open. The
(5) first people traveled in the dusty trails of the animals they hunted. They brought with them not only their families, weapons, and tools but also a broad metaphysical understanding, sprung from dreams and visions and articulated in myth and song, which complemented their scientific and historical knowledge of the lives of animals and of people. All this they shaped in a variety of languages, bringing into being oral literatures of power and beauty.

(10) Contemporary readers, forgetting the origins of western epic, lyric, and dramatic forms, are easily disposed to think of “literature” only as something written. But on reflection it becomes clear that the more critically useful as well as the more frequently employed sense of the term concerns the artfulness of the verbal creation, not its mode of presentation. Ultimately, literature is aesthetically valued, regardless of language, culture,
(15) or mode of presentation, because some significant verbal achievement results from the struggle in words between tradition and talent. Verbal art has the ability to shape out a compelling inner vision in some skillfully crafted public verbal form.

Of course, the differences between the written and oral modes of expression are not without consequences for an understanding of Native American literature. The essential
(20) difference is that a speech event is an evolving communication, an “emergent form,” the shape, functions, and aesthetic values of which become more clearly realized over the course of the performance. In performing verbal art , the performer assumes responsibility for the manner as well as the content of the performance, while the audience assumes the responsibility for evaluating the performer’s competence in both areas. It is this intense
(25) mutual engagement that elicits the display of skill and shapes the emerging performance. Where written literature provides us with a tradition of texts, oral literature offers a tradition of performances.

30. According to the passage, why did the first people who came to North America leave their homeland?
(A) They were hoping to find a better climate.
(B) They were seeking freedom.
(C) They were following instructions given in a dream.
(D) They were looking for food.

31. The phrase “are easily disposed” in line 11 is closet in meaning to
(A) demonstrate reluctance (B) readily encourage others
(C) have a tendency (D) often fail

32. The word “Ultimately” in line 14 is closest in meaning to
(A) frequently (B) normally
(C) whenever possible (D) in the end

33. The word “compelling” in line 17 is closest in meaning to
(A) joyous (B) intricate (C) competing (D) forceful

34. What is the main point of the second paragraph?
(A) Public performance is essential to verbal art.
(B) Oral narratives are a valid form of literature.
(C) Native Americans have a strong oral tradition in art.
(D) The production of literature provides employment for many artists.

35. What can be inferred about the nature of the Native American literature discussed in the passage?
(A) It reflects historical and contemporary life in Asia.
(B) Its main focus is on daily activities.
(C) It is based primarily on scientific knowledge.
(D) It is reshaped each time it is experienced.

36. According to the passage, what responsibility does the audience of a verbal art performance have ?
(A) They provide financial support for performances.
(B) They judge the quality of the content and presentation.
(C) They participate in the performance by chanting responses.
(D) They determine the length of the performance by requesting a continuation.

37. Which of the following is NOT true of the Native American literature discussed in the passage?
(A) It involves acting. (B) It has ancient origins.
(C) It has a set form. (D) It expresses an inner vision.

38. What can be inferred from the passage about the difference between written and oral literature?
(A) Written literature reflects social values better than oral literature does.
(B) Written literature involves less interaction between audience and creator during the creative progress than oral literature does.
(C) Written literature usually is not based on historical events, whereas oral literature is.
(D) Written literature is not as highly respected as oral literature is.

39. What is the author’s attitude toward Native American literature?
(A) Admiring of its form (B) Critical of the cost of its production
(C) Amused by its content (D) Skeptical about its origins

Questions 40-50

The cities in the United States have been the most visible sponsors and beneficiaries of projects that place art in public places. They have shown exceptional imagination in applying the diverse forms of contemporary art to a wide variety of purposes. The activities observed in a number of "pioneer" cities sponsoring art in public places – a broadening exploration of public sites, an increasing awareness among both sponsors and the public of the varieties of contemporary artistic practice, and a growing public enthusiasm – are increasingly characteristic of cities across the country. With many cities now undergoing renewed development, opportunities are continuously emerging for the inclusion or art in new or renewed public environments, including buildings, plazas, parks, and transportation facilities. The result of these activities is a group of artworks that reflect the diversity of contemporary art and the varying character and goals of the sponsoring communities.

In sculpture, the projects range from a cartoonlike *Mermaid* in Miami Beach by Roy Lichtenstein to a small forest planted in New York City by Alan Sonfist. The use of murals followed quickly upon the use of sculpture and has brought to public sites the work of artists as different as the realist Thomas Hart Benton and the Pop artist Robert Rauschenberg. The specialized requirements of particular urban situations have further expanded the use of art in public places: in Memphis, sculptor Richard Hunt has created a monument to Martin Luther King, Jr., who was slain there; in New York, Dan Flavin and Bill Brand have contributed neon and animation works to the enhancement of mass transit facilities. And in numerous cities, art is being raised as a symbol of the commitment to revitalize urban areas.

By continuing to sponsor projects involving a growing body of art in public places, cities will certainly enlarge the situations in which the public encounters and grows familiar with the various forms of contemporary art. Indeed, cities are providing artists with an opportunity to communicate with a new and broader audience. Artists are recognizing the distinction between public and private spaces, and taking that into account when executing their public commissions. They are working in new, often more durable media, and on an unaccustomed scale.

40. What is the passage mainly about?

(A) The influence of art on urban architecture in United States cities
(B) The growth of public art in United States cities.
(C) The increase in public appreciation of art in the United States
(D) The differences between public art in Europe and the United States.

41. The word "exceptional" in line 2 is closest in meaning to

(A) remarkable (B) fearless (C) expert (D) visible

42. All of the following are mentioned in paragraph 1 as results of the trend toward installing contemporary art in public places in the United States EXCEPT

(A) the transfer of artwork from private to public sites
(B) artworks that represent a city's special character
(C) greater interest in art by the American public
(D) a broader understanding of the varieties of contemporary art

43. According to the passage, new settings for public art are appearing as a result of
(A) communities that are building more art museums
(B) artists who are moving to urban areas
(C) urban development and renewal
(D) an increase in the number of artists in the United States.

44. The author mentions Roy Lichtenstein and Alan Sonfist in line 14 in order to
(A) show that certain artist are famous mostly for their public art
(B) introduce the subject of unusual works of art
(C) demonstrate the diversity of artworks displayed in public
(D) contrast the cities of Miami Beach and New York

45. It can be inferred from the passage that the city of Memphis sponsored a work by Richard Hunt because the city authorities believed that
(A) the sculpture would symbolize the urban renewal of Memphis
(B) Memphis was an appropriate place for a memorial to Martin Luther Ling, Jr.
(C) the artwork would promote Memphis as a center for the arts
(D) the sculpture would provide a positive example to other artists.

46. The word “enhancement” in line 20 is closest in meaning to
(A) replacement (B) design (C) improvement (D) decoration

47. The word “revitalize” in line 22 is closest in meaning to
(A) show the importance of (B) promise to enlarge
(C) bring new life to (D) provide artworks for

48. The word “that” in line 27 refers to
(A) contemporary art (B) opportunity
(C) audience (D) distinction

49. The word “executing” in line 28 is closest in meaning to
(A) judging (B) selling (C) explaining (D) producing

50. According to paragraph 3, artists who work on public art projects are doing all of the following EXCEPT
(A) creating artworks that are unusual in size
(B) raising funds to sponsor various public projects
(C) exposing a large number of people to works of art
(D) using new materials that are long-lasting.

PRACTICE TEST 05
January 2002

Questions 1-9

In 1903 the members of the governing board of the University of Washington. in Seattle. engaged a firm of landscape architects, specialists in the design of outdoor environments--Olmsted Brothers of Brookline, Massachusetts-to advise them on an
Line appropriate layout for the university grounds. The plan impressed the university officials,
(5) and in time many of its recommendations were implemented. City officials in Seattle, the largest city in the northwestern United States, were also impressed, for they employed the same organization to study Seattle's public park needs. John Olmsted did the investigation and subsequent report on Seattle's parks. He and his brothers believed that parks should be adapted to the local topography, utilize the area's trees and shrubs, and be available to
(10) the entire community. They especially emphasized the need for natural, serene settings where hurried urban dwellers could periodically escape from the city. The essence of the Olmsted park plan was to develop a continuous driveway, twenty miles long, that would tie together a whole series of parks, playgrounds, and parkways. There would be local parks and squares, too, but all of this was meant to supplement the major driveway,
(15) which was to remain the unifying factor for the entire system.

In November of 1903 the city council of Seattle adopted the Olmsted Report, and it automatically became the master plan for the city's park system. Prior to this report, Seattle's park development was very limited and funding meager. All this changed after the report. Between 1907 and 1913, city voters approved special funding measures
(20) amounting to $4,000,000. With such unparalleled sums at their disposal, with the Olmsted guidelines to follow, and with the added incentive of wanting to have the city at its best for the Alaska-Yukon-Pacific Exposition of 1909, the Parks Board bought aggressively. By 1913 Seattle had 25 parks amounting to 1,400 acres, as well as 400 acres in playgrounds, pathways, boulevards, and triangles. More lands would be added in the
(25) future, but for all practical purposes it was the great land surge of 1907-1913 that established Seattle's park system.

1. What does the passage mainly discuss?
(A) The planned development of Seattle's public park system
(B) The organization of the Seattle city government
(C) The history of the Olmsted Brothers architectural firm
(D) The design and building of the University of Washington campus

2. The word "engaged" in line 2 is closest in meaning to
(A) trained (B) hired (C) described (D) evaluated

3. The word "subsequent" in line 8 is closest in meaning to
(A) complicated (B) alternate (C) later (D) detailed

4. Which of the following statements about parks does NOT reflect the views of the Olmsted Brothers firm?
(A) They should be planted with trees that grow locally.
(B) They should provide a quiet, restful environment.
(C) They should be protected by limiting the number of visitors from the community.
(D) They should be designed to conform to the topography of the area.

5. Why does the author mention "local parks and squares" in lines 13-14 when talking about the Olmsted plan?
(A) To emphasize the difficulties facing adoption of the plan
(B) To illustrate the comprehensive nature of the plan
(C) To demonstrate an omission in the plan
(D) To describe Seattle's landscape prior to implementation of the plan

6. Which of the following can be inferred from the passage about how citizens of Seattle received the Olmsted Report?
(A) They were hostile to the report's conclusions.
(B) They ignored the Olmsteds' findings.
(C) They supported the Olmsteds' plans.
(D) They favored the city council's seeking advice from another firm.

7. According to the passage, when was the Olmsted Report officially accepted as the master plan for the Seattle public park system?
(A) 1903 (B) 1907 (C) 1909 (D) 1913

8. The word "sums" in line 20 is closest in meaning to
(A) problems (B) amounts (C) services (D) debts

9. According to the passage, which of the following was most directly influenced by the Alaska-Yukon- Pacific Exposition?
(A) The University of Washington (B) Brookline, Massachusetts
(C) The mayor of Seattle (D) The Seattle Parks Board

Questions 10-19

No two comets ever look identical, but they have basic features in common, one of the most obvious of which is a coma. A coma looks like a misty, patch of light with one or more tails often streaming from it in the direction away from the Sun.

Line At the heart of a comet's coma lies a nucleus of solid material, typically no more than
(5) 10 kilometers across. The visible coma is a huge cloud of gas and dust that has escaped from the nucleus, which it then surrounds like an extended atmosphere. The coma can extend as far as a million kilometers outward from the nucleus. Around the coma there is often an even larger invisible envelope of hydrogen gas.

The most graphic proof that the grand spectacle of a comet develops from a relatively
(10) small and inconspicuous chunk of ice and dust was the close-up image obtained in 1986 by the European Giotto probe of the nucleus of Halley's Comet. It turned out to be a bit like a very dark asteroid, measuring 16 by 8 kilometers. Ices have evaporated from its outer layers to leave a crust of nearly black dust all over the surface. Bright jets of gas from evaporating ice burst out on the side facing the Sun, where the surface gets heated up, carrying dust
(15) with them. This is how the coma and the tails are created.

Comets grow tails only when they get warm enough for ice and dust to boil off. As a comet's orbit brings it closer to the Sun, first the coma grows, then two distinct tails usually form. One, the less common kind, contains electrically charged (i.e., ionized) atoms of gas, which are blown off directly in the direction away from the Sun by the magnetic field of
(20) the solar wind. The other tail is made of neutral dust particles, which get gently pushed back by the pressure of the sunlight itself. Unlike the ion tail, which is straight, the dust tail becomes curved as the particles follow their own orbits around the Sun.

10. The passage focuses on comets primarily in terms of their

(A) orbital patterns (B) coma and tails (C) brightness (D) size

11. The word "identical" in line I is closest in meaning to
(A) equally fast (B) exactly alike (C) near each other (D) invisible

12. The word "heart" in line 4 is closest in meaning to
(A) center (B) edge (C) tail (D) beginning

13. Why does the author mention the Giotto probe in paragraph 3?
(A) It had a relatively small and inconspicuous nucleus.
(B) It was very similar to an asteroid.
(C) It was covered with an unusual black dust.
(D) It provided visual evidence of the makeup of a comet's nucleus.

14. It can be inferred from the passage that the nucleus of a comet is made up of
(A) dust and gas (B) ice and dust
(C) hydrogen gas (D) electrically charged atoms

15. The word "graphic" in line 9 is closest in meaning to
(A) mathematical (B) popular (C) unusual (D) vivid

16. Which of the following occurred as the ices from Halley's Comet evaporated?
(A) Black dust was left on the comet's surface.
(B) The nucleus of the comet expanded.
(C) The tail of the comet straightened out.
(D) Jets of gas caused the comet to increase its speed.

17. All of the following statements about the tails of comets are true EXCEPT:
(A) They can contain electrically charged or neutral particles.
(B) They can be formed only when there is sufficient heat.
(C) They are formed before the coma expands.
(D) They always point in the direction away from the Sun.

18. The word "distinct" in line 17 is closest in meaning to
(A) visible (B) gaseous (C) separate (D) new

19. Compared to the tail of electrically charged atoms, the tail of neutral dust particles is relatively
(A) long (B) curved (C) unpredictable (D) bright

Questions 20-29

Many prehistoric people subsisted as hunters and gatherers. Undoubtedly, game animals, including some very large species, provided major components of human diets. An important controversy centering on the question of human effects on prehistoric wildlife concerns the sudden disappearance of so many species of large animals at or near the end of the Pleistocene epoch. Most paleontologists suspect that abrupt changes in climate led to the mass extinctions. Others, however, have concluded that prehistoric people drove many of those species to extinction through overhunting. In their "Pleistocene overkill hypothesis," they cite what seems to be a remarkable coincidence between the arrival of prehistoric peoples in North and South America and the time during which mammoths, giant ground sloths, the giant bison, and numerous other large mammals became extinct. Perhaps the human species was driving others to extinction long before the dawn of history. Hunter-gatherers may have contributed to Pleistocene extinctions in more indirect ways. Besides overhunting, at least three other kinds of effects have been suggested: direct competition, imbalances between competing species of game animals, and early agricultural practices. Direct competition may have brought about the demise of large carnivores such as the saber-toothed cats. These animals simply may have been unable to compete with the increasingly sophisticated hunting skills of Pleistocene people. Human hunters could have caused imbalances among game animals, leading to the extinctions of species less able to compete. When other predators such as the gray wolf prey upon large mammals, they generally take high proportions of each year s crop of young. Some human hunters, in contrast, tend to take the various age-groups of large animals in proportion to their actual occurrence. If such hunters first competed with the larger predators and then replaced them. they may have allowed more young to survive each year, gradually increasing the populations of favored species As these populations expanded, they in turn may have competed with other game species for the same environmental niche, forcing the less hunted species into extinction. This theory, suggests that human hunters played an indirect role in Pleistocene extinctions by hunting one species more than another.

Line
(5)
(10)
(15)
(20)
(25)

20. What does the passage mainly discuss?

(A) The effects of human activities on prehistoric wildlife
(B) The origins of the hunter-gatherer way of life
(C) The diets of large animals of the Pleistocene epoch
(D) The change in climate at the end of the Pleistocene epoch

21. The word "Undoubtedly" in line I is closest in meaning to

(A) occasionally (B) unexpectedly (C) previously (D) certainly

22. The word "components" in line 2 is closest in meaning to

(A) parts (B) problems (C) changes (D) varieties

23. Which of the following is mentioned as supporting the Pleistocene overkill hypothesis?

(A) Many of the animals that became extinct were quite large.
(B) Humans migrated into certain regions around the time that major extinctions occurred.
(C) There is evidence that new species were arriving in areas inhabited by humans.
(D) Humans began to keep and care for certain animals.

24. The word "Besides" in line 13 is closest in meaning to

(A) caused by (B) whereas (C) in addition to (D) in favor of

25. The author mentions saber-toothed cats in line 16 as an example of a carnivore that

(A) became extinct before the Pleistocene epoch
(B) was unusually large for its time
(C) was not able to compete with humans
(D) caused the extinction of several species

26. The word "they" in line 20 refers to
(A) human hunters (B) game animals
(C) other predators (D) large mammals

27. According to the passage, what is one difference between the hunting done by some humans and the hunting done by gray wolves?
(A) Some humans hunt more frequently than gray wolves.
(B) Gray wolves hunt in larger groups than some humans.
(C) Some humans can hunt larger animals than gray wolves can hunt.
(D) Some humans prey on animals of all ages, but gray wolves concentrate their efforts on young animals.

28. The word "favored" in line 24 is closest in meaning to
(A) large (B) escaping (C) preferred (D) local

29. According to the passage, the imbalances discussed in paragraph 3 may have resulted from
(A) the effect of climate changes on large game animals
(B) large animals moving into a new environment
(C) humans hunting some species more than others
(D) older animals not being able to compete with younger animals

Questions 30-39

Tulips are Old World, rather than New World, plants, with the origins of the species lying in Central Asia. They became an integral part of the gardens of the Ottoman Empire from the sixteenth century onward, and, soon after, part of European life as well. Holland,
Line in particular, became famous for its cultivation of the flower.

(5) A tenuous line marked the advance of the tulip to the New World, where it was unknown in the wild. The first Dutch colonies in North America had been established in New Netherlands by the Dutch West India Company in 1624, and one individual who settled in New Amsterdam (today's Manhattan section of New York City) in 1642 described the flowers that bravely colonized the settlers' gardens. They were the same
(10) flowers seen in Dutch still-life paintings of the time: crown imperials, roses, carnations, and of course tulips. They flourished in Pennsylvania too, where in 1698 William Penn received a report of John Tateham's "Great and Stately Palace," its garden full of tulips. By 1760, Boston newspapers were advertising 50 different kinds of mixed tulip "roots." But the length of the journey between Europe and North America created many
(15) difficulties. Thomas Hancock, an English settler, wrote thanking his plant supplier for a gift of some tulip bulbs from England, but his letter the following year grumbled that they were all dead.

Tulips arrived in Holland, Michigan, with a later wave of early nineteenth-century Dutch immigrants who quickly colonized the plains of Michigan. Together with many
(20) other Dutch settlements, such as the one at Pella. Iowa, they established a regular demand for European plants. The demand was bravely met by a new kind of tulip entrepreneur, the traveling salesperson. One Dutchman, Hendrick van de Schoot, spent six months in 1849 traveling through the United States taking orders for tulip bulbs. While tulip bulbs were traveling from Europe to the United States to satisfy the nostalgic longings of homesick
(25) English and Dutch settlers, North American plants were traveling in the opposite

direction. In England, the enthusiasm for American plants was one reason why tulips dropped out of fashion in the gardens of the rich and famous.

30. Which of the following questions does the passage mainly answer?
(A) What is the difference between an Old World and a New World plant?
(B) Why are tulips grown in many different parts of the world?
(C) How did tulips become popular in North America?
(D) Where were the first Dutch colonies in North America located?

31. The word "integral" in line 2 is closest in meaning to
(A) interesting (B) fundamental (C) ornamental (D) overlooked

32. The passage mentions that tulips were first found in which of the following regions?
(A) Central Asia (B) Western Europe
(C) India (D) North America

33. The word "flourished" in line 11 is closest in meaning to
(A) were discovered (B) were marketed
(C) combined (D) thrived

34. The author mentions tulip growing in New Netherlands, Pennsylvania, and Michigan in order to illustrate how
(A) imported tulips were considered more valuable than locally grown tulips
(B) tulips were commonly passed as gifts from one family to another
(C) tulips grew progressively more popular in North America
(D) attitudes toward tulips varied from one location to another

35. The word "grumbled" in line 16 is closest in meaning to
(A) denied (B) warned (C) complained (D) explained

36. The passage mentions that one reason English and Dutch settlers planted tulips in their gardens was that tulips
(A) were easy to grow (B) had become readily available
(C) made them appear fashionable (D) reminded them of home

37. The word "they" in line 20 refers to
(A) tulips (B) plains (C) immigrants (D) plants

38. According to the passage, which of the following changes occurred in English gardens during the European settlement of North America?
(A) They grew in size in order to provide enough plants to export to the New World.
(B) They contained a wider variety of tulips than ever before.
(C) They contained many new types of North American plants.
(D) They decreased in size on the estates of wealthy people.

39. The passage mentions which of the following as a problem associated with the importation of tulips into North America?
(A) They were no longer fashionable by the time they arrived.
(B) They often failed to survive the journey.
(C) Orders often took six months or longer to fill.
(D) Settlers knew little about how to cultivate them.

Questions 40-50

Pheromones are substances that serve as chemical signals between members of the same species. They are secreted to the outside of the body and cause other individuals of the species to have specific reactions. Pheromones, which are sometimes called

Line "social hormones," affect a group of individuals somewhat like hormones do an individual
(5) animal. Pheromones are the predominant medium of communication among insects (but rarely the sole method). Some species have simple pheromone systems and produce only a few pheromones, but others produce many with various functions. Pheromone systems are the most complex in some of the so-called social insects, insects that live in organized groups.

(10) Chemical communication differs from that by sight or sound in several ways. Transmission is relatively slow (the chemical signals are usually airborne), but the signal can be persistent, depending upon the volatility of the chemical, and is sometimes effective over a very long range. Localization of the signal is generally poorer than localization of a sound or visual stimulus and is usually effected by the animal's moving
(15) upwind in response to the stimulus. The ability to modulate a chemical signal is limited, compared with communication by visual or acoustic means, but some pheromones may convey different meanings and consequently result in different behavioral or physiological responses, depending on their concentration or when presented in combination. The modulation of chemical signals occurs via the elaboration of the number of exocrine
(20) glands that produce pheromones. Some species, such as ants, seem to be very articulate creatures, but their medium of communication is difficult for humans to study and appreciate because of our own olfactory, insensitivity and the technological difficulties in detecting and analyzing these pheromones.

Pheromones play numerous roles in the activities of insects. They may act as alarm
(25) substances, play a role in individual and group recognition, serve as attractants between sexes, mediate the formation of aggregations, identify foraging trails, and be involved in caste determination. For example, pheromones involved in caste determination include the "queen substance" produced by queen honey bees. Aphids, which are particularly vulnerable to predators because of their gregarious habits and sedentary nature, secrete an alarm pheromone when attacked that causes nearby aphids to respond by moving away.

40. What does the passage mainly discuss?

(A) How insects use pheromones to communicate
(B) How pheromones are produced by insects
(C) Why analyzing insect pheromones is difficult
(D) The different uses of pheromones among various insect species

41. The word "serve" in line I is closest in meaning to

(A) improve (B) function (C) begin (D) rely

42. The purpose of the second mention of "hormones" in line 4 is to point out

(A) chemical signals that are common among insects
(B) specific responses of various species to chemical signals
(C) similarities between two chemical substances
(D) how insects produce different chemical substances

43. The word "sole" in line 6 is closest in meaning to

(A) obvious (B) best (C) only (D) final

44. The passage suggests that the speed at which communication through pheromones occurs is dependent on how quickly they

(A) lose their effectiveness (B) evaporate in the air
(C) travel through the air (D) are produced by the body

45. According to the passage, the meaning of a message communicated through a pheromone may vary when the
(A) chemical structure of the pheromone is changed
(B) pheromone is excreted while other pheromones are also being excreted
(C) exocrine glands do not produce the pheromone
(D) pheromone is released near certain specific organisms

46. The word "detecting" in line 23 is closest in meaning to
(A) controlling (B) storing (C) questioning (D) finding

47. According to paragraph 2, which of the following has made the study of pheromones difficult?
(A) Pheromones cannot be easily reproduced in chemical laboratories.
(B) Existing technology cannot fully explore the properties of pheromones.
(C) Pheromones are highly volatile.
(D) Pheromone signals are constantly changing.

48. The word "They" in line 24 refers to
(A) pheromones (B) roles (C) activities (D) insects

49. The word "sedentary" in line 29 is closest in meaning to
(A) inactive (B) inefficient (C) unchangeable (D) unbalanced

50. Pheromone systems are relatively complex in insects that
(A) also communicate using sight and sound
(B) live underground
(C) prey on other insects
(D) live in organized groups

PRACTICE TEST 06
May 2002

Questions 1-9

The term "folk song" has been current for over a hundred years, but there is still a good deal of disagreement as to what it actually means. The definition provided by the International Folk Music Council states that folk music is the music of ordinary people, which is passed on from person to person by being listened to rather than learned from the printed page. Other factors that help shape a folk song include: continuity (many performances over a number of years); variation (changes in words and melodies either through artistic interpretation or failure of memory); and selection (the acceptance of a song by the community in which it evolves).

When songs have been subjected to these processes their origin is usually impossible to trace. For instance, if a farm laborer were to make up a song and sing it to a-couple of friends who like it and memorize it, possibly when the friends come to sing it themselves one of them might forget some of the words and make up new ones to fill the gap, while" the other, perhaps more artistic, might add a few decorative touches to the tune and improve a couple of lines of text. If this happened a few times there would be many different versions, the song's original composer would be forgotten, and the song would become common property. This constant reshaping and re-creation is the essence of folk music. Consequently, modem popular songs and other published music, even though widely sung by people who are not professional musicians, are not considered folk music. The music and words have been set by a printed or recorded source, limiting scope for further artistic creation. These songs' origins cannot be disguised and therefore they belong primarily to the composer and not to a community.

The ideal situation for the creation of folk music is an isolated rural community. In such a setting folk songs and dances have a special purpose at every stage in a person's life, from childhood to death. Epic tales of heroic deeds, seasonal songs relating to calendar events, and occupational songs are also likely to be sung.

1. What does the passage mainly discuss?

(A) Themes commonly found in folk music
(B) Elements that define folk music
(C) Influences of folk music on popular music
(D) The standards of the International Folk Music Council

2. Which of the following statements about the term "folk song" is supported by the passage?

(A) It has been used for several centuries.
(B) The International Folk Music Council invented it
(C) It is considered to be out-of-date.
(D) There is disagreement about its meaning.

3. The word "it" in line 8 refers to

(A) community (B) song (C) acceptance (D) memory

4. Which of the following is NOT mentioned in the passage as a characteristic of the typical folk song?

(A) It is constantly changing over time.
(B) it is passed on to other people by being performed.
(C) It contains complex musical structures.
(D) It appeals to many people.

5. The word "subjected" in line 9 is closest in meaning to

(A) reduced (B) modified (C) exposed (D) imitated

6. The author mentions the farm laborer and his friends (lines 10-14) in order to do which of the following?
(A) Explain how a folk song evolves over time
(B) Illustrate the importance of music to rural workers
(C) Show how subject matter is selected for a folk song
(D) Demonstrate how a community, chooses a folk song

7. According to the passage, why would the original composers of folk songs be forgotten?
(A) Audiences prefer songs composed by professional musicians.
(B) Singers dislike the decorative touches in folk song tunes.
(C) Numerous variations of folk songs come to exist at the same time.
(D) Folk songs are not considered an important form of music.

8. The word "essence" in line 16 is closest in meaning to
(A) basic nature
(B) growing importance
(C) full extent
(D) first phase

9. The author mentions that published music is not considered to be folk music because
(A) the original composer can be easily identified
(B) the songs attract only the young people in a community
(C) the songs are generally performed by professional singers
(D) the composers write the music in rural communities

Questions 10-20

Long before they can actually speak, babies pay special attention to the speech they hear around them. Within the first month of their lives, babies' responses to the sound of the human voice will be different from their responses to other sorts of auditory stimuli.
Line They will stop crying when they hear a person talking, but not if they hear a bell or the
(5) sound of a rattle. At first, the sounds that an infant notices might be only those words that receive the heaviest emphasis and that often occur at the ends of utterances. By the time they are six or seven weeks old, babies can detect the difference between syllables pronounced with rising and falling inflections. Very soon, these differences in adult stress and intonation can influence babies' emotional states and behavior. Long before they
(10) develop actual language comprehension, babies can sense when an adult is playful or angry, attempting to initiate or terminate new behavior, and so on, merely on the basis of cues such as the rate, volume, and melody of adult speech.

Adults make it as easy as they can for babies to pick up a language by exaggerating such cues. One researcher observed babies and their mothers in six diverse cultures and
(15) found that, in all six languages, the mothers used simplified syntax, short utterances and nonsense sounds, and transformed certain sounds into baby talk. Other investigators have noted that when mothers talk to babies who are only a few months old, they exaggerate the pitch, loudness, and intensity of their words. They also exaggerate their facial expressions, hold vowels longer, and emphasize certain words.

(20) More significant for language development than their response to general intonation is observation that tiny babies can make relatively fine distinctions between speech sounds. other words, babies enter the world with the ability to make precisely those perceptual discriminations that are necessary if they are to acquire aural language.

Babies obviously derive pleasure from sound input, too: even as young as nine months
(25) they will listen to songs or stories, although the words themselves are beyond their understanding. For babies, language is a sensory-motor delight rather than the route to prosaic meaning that it often is for adults.

10. What does the passage mainly discuss?
(A) How babies differentiate between the sound of the human voice and other sounds
(B) The differences between a baby's and an adult's ability to comprehend language
(C) How babies perceive and respond to the human voice in their earliest stages of language development
(D) The response of babies to sounds other than the human voice

11. Why does the author mention a bell and a rattle in lines 4-5?
(A) To contrast the reactions of babies to human and nonhuman sounds
(B) To give examples of sounds that will cause a baby to cry
(C) To explain how babies distinguish between different nonhuman sounds
(D) To give examples of typical toys that babies do not like

12. Why does the author mention syllables pronounced with rising and falling inflections in lines 7-8?
(A) To demonstrate how difficult it is for babies to interpret emotions
(B) To illustrate that a six-week-old baby can already distinguish some language differences
(C) To provide an example of ways adults speak to babies
(D) To give a reason for babies' difficulty in distinguishing one adult from another

13. The word "diverse" in line 14 is closest in meaning to
(A) surrounding (B) divided (C) different (D) stimulating

14. The word "noted" in line 17 is closest in meaning to
(A) theorized (B) requested (C) disagreed (D) observed

15. The word "They" in line 18 refers to
(A) mothers (B) investigators (C) babies (D) words

16. The passage mentions all of the following as ways adults modify their speech when talking to babies EXCEPT
(A) giving all words equal emphasis (B) speaking with shorter sentences
(C) speaking more loudly than normal (D) using meaningless sounds

17. The word "emphasize" in line 19 is closest in meaning to
(A) stress (B) repeat (C) explain (D) leave out

18. Which of the following can be inferred about the findings described in paragraph 2?
(A) Babies who are exposed to more than one language can speak earlier than babies exposed to a single language.
(B) Mothers from different cultures speak to their babies in similar ways.
(C) Babies ignore facial expressions in comprehending aural language.
(D) The mothers observed by the researchers were consciously teaching their babies to speak.

19. What point does the author make to illustrate that babies are born with the ability to acquire language?
(A) Babies begin to understand words in songs.
(B) Babies exaggerate their own sounds and expressions.
(C) Babies are more sensitive to sounds than are adults.
(D) Babies notice even minor differences between speech sounds.

20. According to the author, why do babies listen to songs and stories, even though they cannot understand them?
(A) They understand the rhythm.
(B) They enjoy the sound.
(C) They can remember them easily.
(D) They focus on the meaning of their parents' words.

Questions 21-29

Under the Earth's topsoil, at various levels, sometimes under a layer of rock, there are

deposits of clay. Look at cuts where highways have been built to see exposed clay beds; or look at a construction site, where pockets of clay may be exposed. Rivers also reveal clay
Line along their banks, and erosion on a hillside may make clay easily accessible.
(5) What is clay made of? The Earth's surface is basically rock, and it is this rock that gradually decomposes into clay. Rain, streams, alternating freezing and thawing, roots of trees and plants forcing their way into cracks, earthquakes, volcanic action, and glaciers--all of these forces slowly break down the Earth's exposed rocky crust into smaller and smaller pieces that eventually become clay.

(10) Rocks are composed of elements and compounds of elements. Feldspar, which is the most abundant mineral on the Earth's surface, is basically made up of the oxides silica and alumina combined with alkalies like potassium and some so-called impurities such as iron. Feldspar is an essential component of granite rocks, and as such it is the basis of clay. When it is wet, clay can be easily shaped to make a variety of useful objects, which can
(15) then be fired to varying degrees of hardness and covered with impermeable decorative coatings of glasslike material called glaze. Just as volcanic action, with its intense heat, fuses the elements in certain rocks into a glasslike rock called obsidian, so can we apply heat to earthen materials and change them into a hard, dense material. Different clays need different heat levels to fuse, and some, the low-fire clays, never become nonporous and
(20) watertight like highly fired stoneware. Each clay can stand only a certain amount of heat without losing its shape through sagging or melting. Variations of clay composition and the temperatures at which they are fired account for the differences in texture and appearance between a china teacup and an earthenware flowerpot.

21. The author's main point in paragraph 1 is that clay deposits
(A) conceal layers of rock
(B) can be found in various places
(C) are usually small
(D) must be removed from construction sites

22. It can be inferred from the passage that clay is LEAST likely to be plentiful in which of the following areas?
(A) In desert sand dunes
(B) In forests
(C) On hillsides
(D) Near rivers

23. The word "accessible" in line 4 is closest in meaning to
(A) buried (B) improved (C) available (D) workable

24. According to the passage, rock breaks down into clay under all of the following conditions EXCEPT when
(A) it is exposed to freezing and thawing
(B) roots of trees force their way into cracks
(C) it is combined with alkalies
(D) natural forces wear away the Earth's crust

25. Why does the author mention feldspar in line 10?
(A) It is often used as a substitute for clay.
(B) It is damaged by the oxides in clay.
(C) Its presence indicates inferior clay.
(D) It is a major component of clay.

26. The word "it" in line 13 refers to
(A) iron (B) feldspar (C) granite (D) clay

27. Based on the information in the passage, it can be inferred that low-fire clays are MOST appropriate for making objects that
(A) must be strong
(B) can be porous
(C) have a smooth texture
(D) are highly decorated

28. The phrase "account for" in line 22 is closest in meaning to
(A) reduce (B) explain (C) combine with (D) list all of

29. The passage supports which of the following conclusions?

(A) Clay deposits are only found deep in the Earth.
(B) If clay contains too much iron it will melt when fired.
(C) Only certain types of clay are appropriate for making china teacups.
(D) If sufficient heat is applied, all clay will become nonporous.

Questions 30-40

The smooth operation of an ant colony depends on ten to twenty different signals, most of which are pheromones (chemical signals triggering behavioral responses). It is estimated that red fire ants employ at least twelve different chemical signals. The simples of these is the carbon dioxide from the respiration of an ant cluster, a chemical that acts as a pheromone to promote aggregation. Workers move toward a source of carbon dioxide, resulting in solitary ants moving to join a group. At the other extreme, the most complex of the fire ants' signals is probably colony odor, by which the workers of a particular colony or nest identify another worker as local or foreign. Each ant nest has its own odor as a result of its location, history, and local food supply. The resident ants pick up this odor on their bodies, so that ants of the same species, but from different nests, have different colony odors. This allows ants to identify intruders and maintain colony integrity.

Fire ants also make use of an alarm pheromone to alert workers to an emergency, and their scouts lay down a trail pheromone as a guide during mass migrations. A fire ant queen emits a chemical signal that identifies her to the colony's workers. They respond by scurrying to gather around her. The decomposing corpse of a dead ant also generates a signal, to which workers respond by eliminating the corpse from the nest.

Ants provide examples of both public (accessible to other species) and private messages. One of their most important private messages concerns food, for a food source is worth keeping secret. Each species marks its trails with signals that are meaningless to others, so that an ant crossing a trail left by another ant species typically notices nothing. On the other hand, a secret signal to mark a dead body is unnecessary. Many kinds of ants perceive a natural decomposition product of dead insects as a signal to remove a corpse. If an outsider recognizes this message and moves the body, no harm is done.

30. What aspect of ants does the passage mainly discuss?
(A) The relationship between the queen and the worker ants
(B) Ways in which ants use chemical signals
(C) Methods ants use to identify food sources
(D) The importance of respiration in the production of ant pheromones

31. The phrase "smooth operation" in line 1 is closest in meaning to
(A) daily activity
(B) effective functioning
(C) delicate balance
(D) permanent location

32. According to the passage, carbon dioxide serves which of the following functions for fire ants?
(A) It protects the queen.
(B) It attracts other ant species.
(C) It informs workers of possible danger.
(D) It encourages the ants to gather together.

33. The word "cluster" in line 4 is closest in meaning to
(A) organ (B) activity (C) group (D) cycle

34. According to the passage, each nest has a distinct odor that allows its inhabitants to
(A) find the location of the nest in the dark
(B) distinguish worker ants from other ants

(C) distinguish foreign ants from resident ants
(D) signal other inhabitants when foreign ants attack

35. The word "alert" in line 13 is closest in meaning to
(A) allow (B) transport (C) ware (D) provide

36. What is the role of pheromones in the mass migrations of ants?
(A) Pheromones are used to create a trail that directs the ants during migrations.
(B) Pheromones signal the ants that the nest has been invaded and must be abandoned.
(C) Pheromones control the speed at which ants move from one location to another.
(D) Pheromones enable scouts to identify suitable areas for establishing a new nest.

37. The word "scurrying" in line 16 is closest in meaning to
(A) agreeing (B) appearing (C) competing (D) rushing

38. The word "others" in line 21 refers to
(A) private messages (B) species (C) trails (D) signals

39. Why does the author mention "dead insects" in line 23?
(A) To compare the social behaviors of ants with those of other insects
(B) To emphasize the dangers that all insects encounter
(C) To argue the superiority of ants over other insects
(D) To indicate a behavior that is common among various kinds of ants

40. Which of the following terms is defined in the passage?
(A) pheromones (line 2) (B) colony integrity (lines 11-12)
(C) mass migrations (line 14) (D) private messages (lines 18-19)

Questions 41-50

The Homestead Act of 1862 gave beads of families or individuals aged twenty-one or older the right to own 160 acres of public land in the western United States after five years of residence and improvement. This law was intended to provide land for small farmers
Line and to prevent land from being bought for resale at a profit or being owned by large
(5) landholders. An early amendment to the act even prevented husbands and wives from filing separate claims. The West, land reformers had assumed, would soon contain many 160-acre family farms.

They were doomed to disappointment. Most landless Americans were too poor to become farmers even when they could obtain land without cost. The expense of moving a
(10) family to the ever-receding frontier exceeded the means of many, and the cost of tools, draft animals, a wagon, a well, fencing, and of building the simplest house, might come to $1,000---a formidable barrier. As for the industrial workers for whom the free land was supposed to provide a "safety valve," they had neither the skills nor the inclination to become farmers. Homesteaders usually came from districts not far removed from frontier
(15) conditions. And despite the intent of the law, speculators often managed to obtain large tracts. They hired people to stake out claims, falsely swear that they had fulfilled the conditions laid down in the law for obtaining legal title, and then deed the land over to their employers.

Furthermore, 160 acres were not enough for raising livestock or for the kind of
(20) commercial agriculture that was developing west of the Mississippi. The national government made a feeble attempt to make larger holdings available to homesteaders by passing the Timber Culture Act of 1873, which permitted individuals to claim an additional 160 acres if they would agree to plant a quarter of it in trees within ten years.

This law proved helpful to some farmers in the largely treeless states of Kansas,
(25) Nebraska, and the Dakotas. Nevertheless, fewer than 25 percent of the 245,000 who took up land under the Act obtained final title to the property.

41. Which aspect of the Homestead Act of 1862 does the passage mainly discuss?
(A) How it transformed the western United States into a place of small farms
(B) Why it was an improvement over previous attempts at land reform
(C) Why it did not achieve its aim to provide land for small farmers
(D) How it failed in the largely treeless states of Kansas, Nebraska, and the Dakotas

42. An amendment added to the Homestead Act of 1862 specified that
(A) five years of residence was required for landownership
(B) husbands and wives could not file separate claims
(C) the price of 160 acres of land was $1,000
(D) land could not be resold for a profit

43. The word "formidable" in line 12 is closest in meaning to
(A) obvious (B) predictable (C) difficult (D) manageable

44. It can be inferred that the "safety valve" in line 13 refers to
(A) a new kind of machinery (B) an alternative for urban workers
(C) an area in a factory (D) a procedure designed to protect workers

45. The word "intent" in line 15 is closest in meaning to
(A) purpose (B) power (C) effect (D) invention

46. According to the passage, why did the government pass the Timber Culture Act of 1873?
(A) To make larger tracts of land available to small farmers
(B) To settle Kansas, Nebraska, and the Dakotas
(C) To encourage land speculation west of the Mississippi
(D) To increase the variety of trees growing in the western states

47. The word "they" in line 23 refers to
(A) larger holdings (B) individuals (C) 160 acres (D) trees

48. According to the passage, how many of the farmers who settled land under the Timber Culture Act of 1873 received final title to the property?
(A) Fewer than 25% (B) More than 160
(C) 10% per year (D) 245,000

49. The passage mentions all of the following as reasons the Homestead Act of 1862 did not achieve its aims EXCEPT:
(A) Most landless Americans could not afford the necessary tools and provisions.
(B) Industrial workers lacked the necessary fanning skills.
(C) The farms were too large for single families to operate successfully.
(D) Homesteaders usually came from areas relatively close to the frontier.

50. Which of the following can be inferred from the passage about the Timber Culture Act of 1873?
(A) It especially helped farmers with large holdings of land.
(B) It was most important to farmers living in states that had plenty of trees.
(C) The majority of farmers did not benefit significantly from it.
(D) The majority of farmers did not need the extra 160 acres it provided.

PRACTICE TEST 07
August 2002

Question 1-9

Often enough the craft worker's place of employment in ancient Greece was set in rural isolation. Potter, for instance, found it convenient to locate their workshops near their source of clay, regardless of its relation to the center of settlement, At Corinth and
Line Athens, however, two of the best-known potters' quarters were situated on the cities'
(5) outskirts, and potters and makers of terra-cotta figurines were also established well within the city of Athens itself. The techniques of pottery manufacture had evolved well before the Greek period, but marked stylistic developments occurred in shape and in decoration, for example, in the interplay of black and other glazes with the red surface of the fired pot. Athenian black-figure and red-figure decoration, which emphasized human figures rather
(10) than animal images, was adopted between 630 and 530 B.C.; its distinctive color and luster were the result of the skillful adjustments of the kiln's temperature during an extended three-stage period if firing the clayware. Whether it was the potters or the vase-painters who initiated changes in firing is unclear; the functions of making and decorating were usually divided between them, but neither group can have been so specialized the they
(15) did not share in the concerns of the other.

The broad utility of terra-cotta was such that workers in clay could generally afford to confine themselves to either decorated ware and housewares like cooking pots and storage jars or building materials like roof tiles and drainpipes. Some sixth-and fifth-century B.C. Athenian pottery establishments are known to have concentrated on a limited range of fine
(20) ware, but a rural pottery establishment on the island of Thasos produced many types of pottery and roof tiles too, presumably to meet local demand. Molds were used to create particular effects for some products, such as relief-decorated vessels and figurines; for other products such as roof tiles, which were needed in some quantity, they were used to facilitate mass production. There were also a number of poor-quality figurines and painted
(25) pots produced in quantity by easy, inexpensive means- as numerous featureless statuettes and unattractive cases testify.

1. The passage mainly discusses ancient Greek pottery and its
(A) production techniques
(B) similarity to other crafts
(C) unusual materials
(D) resemblance to earlier pottery

2. The phrase "regardless of" in line 3 is closest in meaning to
(A) as a result of
(B) no matter what
(C) proud of
(D) according to

3. It can be inferred from the passage that most pottery establishments in ancient Greece were situated
(A) in city centers
(B) on the outskirts of cities
(C) where clay could be found
(D) near other potters' workshops

4. The word "marked" in line 7 is closest in meaning to
(A) original
(B) attractive
(C) noticeable
(D) patterned

5. The word "confine" in line 17 is closest in meaning to
(A) adapt
(B) train
(C) restrict
(D) organize

6. It can be inferred from the passage that terra-cotta had which of the following advantages"
(A) It did not break during the firing process.
(B) It was less expensive than other available materials.
(C) Its surface had a lasting shine.
(D) It could be used for many purposes.

7. The word “presumably” in line 21 is closest in meaning to
(A) frequently (B) practically (C) preferably (D) probably

8. The word “they” in line 23 refers to
(A) molds (B) particular effects
(C) products (D) vessels and figurines

9. According to the passage, all of the following are true of ancient Greek potters and vase painters EXCEPT:
(A) Their functions were so specialized that they lacked common concerns.
(B) They sometimes produced inferior ware.
(c) They produced pieces that had unusual color and shine.
(D) They decorated many of their works with human images.

Question 10-19

Geographers say that what defines a place are four properties: soil, climate, altitude, and aspect, or attitude to the Sun. Florida’s ancient scrub demonstrates this principle. Its soil is pure silica, so barren it supports only lichens as ground cover.(It does, however, sustain a sand-swimming lizard that cannot live where there is moisture or plant matter the soil.) Its climate, despite more than 50 inches of annual rainfall, is blistering desert plant life it can sustain is only the xerophytic, the quintessentially dry. Its altitude is a mere couple of hundred feet, but it is high ground on a peninsula elsewhere close to sea level, and its drainage is so critical that a difference of inches in elevation can bring major changes in its plant communities. Its aspect is flat, direct, brutal – and subtropical. Florida’s surrounding lushness cannot impinge on its desert scrubbiness.

This does not sound like an attractive place. It does not look much like one either; Shrubby little oaks, clumps of scraggly bushes, prickly pear, thorns, and tangles. “It appear Said one early naturalist,” to desire to display the result of the misery through which it has Passed and is passing.” By our narrow standards, scrub is not beautiful; neither does it meet our selfish utilitarian needs. Even the name is an epithet, a synonym for the stunted, the scruffy, the insignificant, what is beautiful about such a place?

The most important remaining patches of scrub lie along the Lake Wales Ridge, a chain of paleoislands running for a hundred miles down the center of Florida, in most places less than ten miles wide. It is relict seashore, tossed up millions of years ago when ocean levels were higher and the rest of the peninsula was submerged. That ancient emergence is precisely what makes Lake Wales Ridge so precious: it has remained unsubmerged, its ecosystems essentially undisturbed, since the Miocene era. As a result, it has gathered to itself one of the largest collections of rare organisms in the world. Only about 75 plant species survive there, but at least 30 of these are found nowhere else on Earth.

10. What does the passage mainly discuss?
(A) How geographers define a place (B) The characteristics of Florida’s ancient scrub
(C) An early naturalist’s opinion of Florida (D) The history of the Lake Wales Ridge

11. The author mentions all of the following as factors that define a place EXCEPT
(A) aspect (B) altitude (C) soil (D) life-forms

12. It can be inferred from the passage that soil composed of silica
(A) does not hold moisture (B) is found only in Florida
(C) nourishes many kinds of ground cover (D) provides food for many kinds of lizards

13. The word ”sustain” in line 6 is closets in meaning to
(A) select (B) strain (C) support (D) store

14. The author mentions the prickly pear (line 12) as an example of
(A) valuable fruit-bearing plants of the scrub area
(B) unattractive plant life of the scrub area
(C) a pant discovered by an early naturalist
(D) plant life that is extremely are

15. The author suggests that human standards of beauty are
(A) tolerant (B) idealistic (C) defensible (D) limited

16. The word “insignificant” in line 16 is closest in meaning to
(A) unimportant (B) undisturbed (C) immature (D) inappropriate

17. According to the passage, why is the Lake Wales Ridge valuable?
(A) It was originally submerged in the ocean.
(B) It is less than ten miles wide.
(C) It is located near the seashore.
(D) It has ecosystems that have long remained unchanged

18. The word “it” in line 22 refer to
(A) Florida (B) the peninsula
(C) the Lake Wales Ridge (D) the Miocene era

19. The passage probably continues with a discussion of
(A) ancient scrub found in other areas of the country
(B) geographers who study Florida’s scrub
(C) the climate of the Lake Wales Ridge
(D) the unique plants found on the Lake Wales Ridge

Question 20-30

It is estimated that over 99 percent of all species that ever existed have become extinct. What causes extinction? When a species is no longer adapted to a changed environment, it may perish. The exact causes of a species’ death vary from situation
Line to situation. Rapid ecological change may render an environment hostile to a species.
(5) For example, temperatures may change and a species may not be able to adapt. Food Resources may be affected by environmental changes, which will then cause problems For a species requiring these resources. Other species may become better adapted to an Environment, resulting in competition and, ultimately, in the death of a species.

The fossil record reveals that extinction has occurred throughout the history of Earth.
(10) Recent analyses have also revealed that on some occasions many species became extinct at the same time – a mass extinction. One of the best-known examples of mass extinction occurred 65 million years ago with the demise of dinosaurs and many other forms of life. Perhaps the largest mass extinction was the one that occurred 225 million years ago, When approximately 95 percent of all species died, Mass extinctions can be caused by
(15) a relatively rapid change in the environment and can be worsened by the close interrelationship of many species. If, for example, something were to happen to destroy much of the plankton in the oceans, then the oxygen content of Earth would drop, affection even organisms not living in the oceans. Such a change would probably lead to a mass extinction.

(20) One interesting, and controversial, finding is that extinctions during the past 250 Million years have tended to be more intense every 26 million years. This periodic

extinction might be due to intersection of the Earth's orbit with a cloud of comets, but this theory is purely speculative. Some researchers have also speculated tat extinction may often be random. That is, certain species may be eliminated and others may survive
(25) for no particular reason. A species' survival may have nothing to do with its ability or inability to adapt. If so, some of evolutionary history may reflect a sequence of essentially random events.

20. The word "it" in line 3 refers to
(A) environment (B) species (C) extinction (D) 99 percent

21. The word "ultimately" in line 8 is closest in meaning to
(A) exceptionally (B) dramatically (C) eventually (D) unfortunately

22. What does the author say in paragraph 1 regarding most species in Earth's history
(A) They have remained basically unchanged from their original forms.
(B) They have been able to adapt to ecological changes.
(C) They have caused rapid change in the environment.
(D) They are no longer in existence.

23. Which of the following is NOT mentioned in paragraph 1 as resulting from rapid ecological change?
(A) Temperature changes(B) Availability of food resources
(C) Introduction of new species (D) Competition among species

24. The word "demise" in line 12 is closest in meaning to
(A) change (B) recovery (C) help (D) death

25. Why is " plankton" mentioned in line 17?
(A) To demonstrate the interdependence of different species
(B) To emphasize the importance of food resources in preventing mass extinction.
(C) To illustrate a comparison between organisms that live on the land and those that live in the ocean
(D) To point out that certain species could never become extinct.

26. According to paragraph 2, evidence from fossils suggests that
(A) extinction of species has occurred from time to time throughout Earth's history.
(B) Extinctions on Earth have generally been massive
(C) there has been only one mass extinction in Earth's history.
(D) dinosaurs became extinct much earlier than scientists originally believed.

27. The word "finding" in line 20 is closest in meaning to
(A) published information (B) research method
(C) ongoing experiment (D) scientific discovery

28. Which of the following can be in
(A) Many scientists could be expected to disagree with it
(B) evidence to support the theory has recently been found.
(C) The theory is no longer seriously considered.
(D) Most scientists believe the theory to be accurate.

29. In paragraph 3, the author makes which of the following statements about a species' survival?
(A) It reflects the interrelationship of may species.
(B) It may depend on chance events.
(C) It does not vary greatly from species to species
(D) It is associated with astronomical conditions.

30. According to the passage, it is believed that the largest extinction of a species occurred
(A) 26 million years ago (B) 65 million years ago

(C) 225 million years ago (D) 250 million years ago

Question 31-40

Because the low latitudes of the Earth, the areas near the equator, receive more heat than the latitudes near the poles, and because the nature of heat is to expand and move, heat is transported from the tropics to the middle and high latitudes. Some of this heat is moved by winds and some by ocean currents, and some gets stored in the atmosphere in the form of latent heat. The term “latent heat” refers to the energy that has to be used to convert liquid water to water vapor. We know that if we warm a pan of water on a stove, it will evaporate, or turn into vapor, faster than if it is allowed to sit at room temperature. We also know that if we hang wet clothes outside in the summertime they will dry faster than in winter, when temperatures are colder. The energy used in both cases to change liquid water to water vapor is supplied by heat – supplied by the stove in the first case and by the Sun in the latter case. This energy is not lost. It is stored in water vapor in the atmosphere as latent heat. Eventually, the water stored as vapor in the atmosphere will condense to liquid again, and the energy will be released to the atmosphere.

In the atmosphere, a large portion of the Sun’s incoming energy is used to evaporate Water, primarily in the tropical oceans. Scientists have tried to quantify this proportion of the Sun’s energy. By analyzing temperature, water vapor, and wind data around the globe, they have estimated the quantity to be about 90 watts per square meter, or nearly 30 percent of the Sun’s energy. Once this latent heat is stored within the atmosphere, it can be transported, primarily to higher latitudes, by prevailing, large-scale winds. Or it can be transported vertically to higher levels in the atmosphere, where it forms clouds and subsequent storms, which then release the energy back to the atmosphere.

31. The passage mainly discusses how heat
(A) is transformed and transported in the Earth’s atmosphere
(B) is transported by ocean currents
(C) can be measured and analyzed by scientists
(D) moves about the Earth’s equator

32. The passage mentions that the tropics differ from the Earth’s polar regions in which of the following ways?
(A) The height of cloud formation in the atmosphere
(B) The amount of heat they receive from the Sun
(C) The strength of their large scale winds.
(D) The strength of their oceanic currents

33. The word “convert” line 6 is closest in meaning to
(A) mix (B) change (C) adapt (D) reduce

34. Why does the author mention “the stove” in line 10?
(A) To describe the heat of the Sun (B) To illustrate how water vapor is stored
(C) To show how energy is stored (D) To give an example of a heat source

35. According to the passage, most ocean water evaporation occurs especially
(A) around the higher latitudes (B) in the tropics
(C) because of large-scale winds (D) because of strong ocean currents

36. According to the passage, 30 percent of the Sun’s incoming energy
(A) is stored in clouds in the lower latitudes (B) is transported by ocean currents
(C) never leaves the upper atmosphere (D) gets stored as latent heat

37. The word “it” in line 18 refers to
(A) square meter (B) the Sun’s energy

(C) latent heat (D) the atmosphere

38. The word “primarily” in line 19 is closest in meaning to
(A) chiefly (B) originally (C) basically (D) clearly

39. The word “prevailing” in line 19 is closest in meaning to
(A) essential (B) dominant (C) circular (D) closest

40. All of the following words are defined in the passage EXCEPT
(A) low latitudes (line1) (B) latent heat (line 5)
(C) evaporate (line7) (D) atmosphere (line14)

Question 41-50

The Moon, which has undergone a distinct and complex geological history, presents a striking appearance. The moon may be divided into two major terrains: the maria (dark lowlands) and the terrace(bright highlands). The contrast in the reflectivity (the capability of reflecting light) of these two terrains suggested to many early observers that the two terrains might have different compositions, and this supposition was confirmed by missions to the Moon such as Surveyor and Apollo. One of the most obvious differences between the terrains is the smoothness of the maria in contrast to the roughness of the highlands. This roughness is mostly caused by the abundance of craters; the highlands are completely covered by large craters(greater than 40-50 km in diameter), while the craters of the maria tend to be much smaller. It is now known that the vast majority of the Moon’s craters were formed by the impact of solid bodies with the lunar surface.

Most of the near side of the Moon was thoroughly mapped and studied from telescopic pictures years before the age of space exploration. Earth-based telescopes can resolve objects as small as a few hundred meters on the lunar surface. Close observation of craters, combined with the way the Moon diffusely reflects sunlight, led to the understanding that the Moon is covered by a surface layer, or regolith, that overlies the solid rock of the Moon. Telescopic images permitted the cataloging of a bewildering array of land forms. Craters were studied for clues to their origin; the large circular maria were seen. Strange, sinuous features were observed in the maria. Although various land forms were catalogued, the majority of astronomers’ attention was fixed on craters and their origins.

Astronomers have known for a fairly long time that the shape of craters changes as they increase in size. Small craters with diameters of less than 10-15 km have relatively simple shapes. They have rim crests that are elevated above the surrounding terrain, smooth, bowl-shaped interiors, and depths that are about one-fifth to one-sixth their diameters. The complexity of shape increases for larger craters.

41. What does the passage mainly discuss?
(A) What astronomers learned from the Surveyor and Apollo space missions
(B) Characteristics of the major terrains of the Moon
(C) The origin of the Moon’s craters
(D) Techniques used to catalogue the Moon’s land forms

42. The word ”undergone” in line1 is closest in meaning to
(A) altered (B) substituted (C) experienced (D) preserved

43. According to the passage, the maria differ from the terrace mainly in terms of
(A) age (B) manner of creation
(C) size (D) composition

44. The passage supports which of the following statements about the Surveyor and Apollo missions?
(A) They confirmed earlier theories about the Moon's surface.
(B) They revealed that previous ideas about the Moon's craters were incorrect.
(C) They were unable to provide detailed information about the Moon's surface.
(D) They were unable to identify how the Moon's craters were made.

45. The word "vast" in line 10 is closest in meaning to
(A) special (B) known (C) varied (D) great

46. All of the following are true of the maria EXCEPT:
(A) They have small craters.
(B) They have been analyzed by astronomers.
(C) They have a rough texture.
(D) They tend to be darker than the terrace.

47. All of the following terms are defined in the passage EXCEPT
(A) Moon (line1)
(B) reflectivity (line3)
(C) regolith (line16)
(D) rays (line19)

48. The author mentions "wispy marks" in line 19 as an example of
(A) an aspect of the lunar surface discovered through lunar missions
(B) a characteristic of large craters
(C) a discovery made through the use of Earth-based telescopes
(D) features that astronomers observed to be common to Earth and the Moon

49. According to the passage, lunar researchers have focused mostly on
(A) the possibility of finding water on the Moon
(B) the lunar regolith
(C) cataloging various land formations
(D) craters and their origins

50. The passage probably continues with a discussion of
(A) the reasons craters are difficult to study
(B) the different shapes small craters can have
(C) some features of large craters
(D) some difference in the ways small and large craters were formed

PRACTICE TEST 08
September 2002

Question 1-10

Hunting is at best a precarious way of procuring food, even when the diet is supplemented with seeds and fruits. Not long after the last Ice Age, around 7,000 B.C. (during the Neolithic period), some hunters and gatherers began to rely chiefly on agriculture for their sustenance. Others
Line continued the old pastoral and nomadic ways. Indeed, agriculture itself evolved over the course of
(5) time, and Neolithic peoples had long known how to grow crops. The real transformation of human life occurred when huge numbers of people began to rely primarily and permanently on the grain they grew and the animals they domesticated.

Agriculture made possible a more stable and secure life. With it Neolithic peoples flourished, fashioning an energetic, creative era. They were responsible for many fundamental inventions and
(10) innovations that the modern world takes for granted. First, obviously, is systematic agriculture--- that is, the reliance of Neolithic peoples on agriculture as their primary, not merely subsidiary, source of food.

Thus they developed the primary economic activity of the entire ancient world and the basis of all modern life. With the settled routine of Neolithic farmers came the evolution of towns and
(15) eventually cities. Neolithic farmers usually raised more food than they could consume, and their surpluses permitted larger, healthier populations. Population growth in turn created an even greater reliance on settled farming, as only systematic agriculture could sustain the increased numbers of people. Since surpluses o food could also be bartered for other commodities, the Neolithic era witnessed the beginnings of large-scale exchange of goods. In time the increasing
(20) complexity of Neolithic societies led to the development of writing, prompted by the need to keep records and later by the urge to chronicle experiences, learning, and beliefs.

The transition to settled life also had a profound impact on the family. The shared needs and pressures that encourage extended-family ties are less prominent in settled than in nomadic societies. Bonds to the extended family weakened. In towns and cities, the nuclear family was more dependent on its immediate neighbors than on kinfolk.

1. What does the passage mainly discuss?
(A) Why many human societies are dependent on agriculture
(B) the changes agriculture brought to human life
(C) How Neolithic peoples discovered agriculture
(D) Why the first agricultural societies failed

2. The word "precarious" in line 1 is closest in meaning to
(A) uncertain (B) humble (C) worthy (D) unusual

3. The author mentions "seeds and fruits" in line 2 as examples of
(A) the first crops cultivated by early agricultural societies
(B) foods eaten by hunters and gatherers as a secondary food source
(C) types of food that hunters and gatherers lacked in their diets
(D) the most common foods cultivated by early agricultural societies

4. The word "settled" in line 14 is closest in meaning to
(A) advanced (B) original (C) involved (D) stable

5. According to the passage, agricultural societies produced larger human populations because agriculture
(A) created more varieties of food (B) created food surpluses
(C) resulted in increases in leisure time (D) encouraged bartering

6. According to the passage, all of the following led to the development of writing EXCEPT the
(A) need to keep records (B) desire to write down beliefs
(C) extraction of ink from plants (D) growth of social complexity

7. The word "chronicle" in line 21 is closest in meaning to
(A) repeat (B) exchange (C) understand (D) describe

8. According to the passage, how did the shift to agricultural societies impact people's family relationships?
(A) the extended family became less important.
(B) Immediate neighbors often became family members.
(C) the nuclear family became self-sufficient.
(D) Family members began to wok together to raise food.

9. The author mentions all of the following as results of the shift to agricultural societies EXCEPT
(A) an increase in invention and innovation (B) emergence of towns and cities
(C) development of a system of trade (D) a decrease in warfare

10. Which of the following is true about the human diet prior to the Neolithic period?
(A) It consisted mainly of agricultural products
(B) It varied according to family size.
(C) It was based on hunting and gathering.
(D) It was transformed when large numbers of people no longer depended on the grain they grew themselves.

Question 11-21

In the North American colonies, red ware, a simple pottery fired at low temperatures, and stone ware, a strong, impervious grey pottery fired at high temperatures, were produced from two different native clays. These kind of pottery were produced to supplement imported European
Line pottery. When the American Revolution (1775-1783) interrupted the flow of the superior European
(5) ware, there was incentive for American potters to replace the imports with comparable domestic goods. Stoneware, which had been simple, utilitarian kitchenware, grew increasingly ornate throughout the nineteenth century, and in addition to the earlier scratched and drawn designs, three-dimensional molded relief decoration became popular. Representational motifs largely replaced the earlier abstract decorations. Birds and flowers were particularly evident, but other
(10) subjects---lions, flags, and clipper ships--- are found. Some figurines, mainly of dogs and lions, were made in this medium. Sometimes a name, usually that of the potter, was die-stamped onto a piece.

As more and more large kilns were built to create the high-fired stoneware, experiments revealed that the same clay used to produce low-fired red ware could produce a stronger, paler pottery if
(15) fired at a hotter temperature. The result was yellow ware, used largely for serviceable items; but a further development was Rockingham ware--- one of the most important American ceramics of the nineteenth century. (The name of the ware was probably derived from its resemblance to English brown-glazed earthenware made in South Yorkshire.) It was created by adding a brown glaze to the fired clay, usually giving the finished product a mottled appearance. Various methods of
(20) spattering or sponging the glaze onto the ware account for the extremely wide variations in color and add to the interest of collecting Rockingham. An advanced form of Rockingham was flint enamel, created by dusting metallic powders onto the Rockingham glaze to produce brilliant varicolored streaks.

Articles for nearly every household activity and ornament could be bought in Rockingham ware:
(25) dishes and bowls, of course; also bedpans, foot warmers, cuspidors, lamp bases, doorknobs, molds, picture frames, even curtain tiebacks. All these items are highly collectible today and are

eagerly sought. A few Rockingham specialties command particular affection among collectors and correspondingly high prices.

11. Why did the potters discussed in the passage change the kind of pottery they made?
(A) They discovered a new kind of clay.
(B) They were compensation for the loss of an overseas supplier.
(C) They studied new techniques in Europe.
(D) The pottery they had been producing was not very strong.

12. The word "ornate" in line 7 is closest in meaning to
(A) elaborate (B) puzzling (C) durable (D) common

13. The passage suggests that the earliest stoneware
(A) was decorated with simple, abstract designs
(B) used three-dimensional decorations
(C) was valued for its fancy decorations
(D) had no decoration

14. How did yellow ware achieve its distinctive color?
(A) By sponging on a glaze (B) By dusting on metallic powders
(C) By brown-glazing (D) By firing at a high temperature

15. The phrase "derived from" in line 19 is closest in meaning to
(A) ruined by (B) warned against (C) based on (D) sold by

16. The word "It" in line 20 refers to
(A) red ware (B) yellow ware
(C) Rockingham ware (D) English brown-glazed earthenware

17. The word “Various" in line 21 is closest in meaning to
(A) complicated (B) accepted (C) careful (D) different

18. The phrase "account for" in line 22 is closest in meaning to
(A) explain (B) restrict (C) finance (D) supplement

19. What was special about flint enamel?
(A) Its even metallic shine (B) Its mottled appearance
(C) Its spattered effect (D) Its varicolored streaks

20. Which of the following kinds of Rockingham ware were probably produced in the greatest quantity?
(A) Picture frames (B) Dishes and bowls (C) Curtain tiebacks (D) Doorknobs

21. The passage would most probably continue with a discussion of
(A) what bedpans, foot warmers, and cuspidors were used for
(B) well-known, modern-day potters who make Rockingham ware
(C) examples of Rockingham ware that collectors especially want
(D) pieces of Rockingham ware that are inexpensive in today's market

Question 22-31

Archaeological discoveries have led some scholars to believe that the first Mesopotamian inventors of writing may have been a people the later Babylonians called Subarians. According to tradition, they came from the north and moved into Uruk in the south. By about 3100B.C, They
Line were apparently subjugated in southern Mesopotamia by the Sumerians, whose name became
(5) synonymous with the region immediately north of the Persian Gulf, in the fertile lower valleys of the Tigris and Euphrates. Here the Sumerians were already well established by the year 3000B.C.

They had invented bronze, an alloy that could be cast in molds, out of which they made tools and weapons. They lived in cities, and they had begun to acquire and use capital. Perhaps most important, the Sumerians adapted writing (probably from the Subarians) into a flexible tool of communication.

Archaeologists have known about the Sumerians for over 150 years. Archaeologists working at Nineveh in northern Mesopotamia in the mid-nineteenth century found many inscribed clay tablets. Some they could decipher because the language was a Semitic one (Akkadian), on which scholars had already been working for a generation. But other tablets were inscribed in another language that was not Semitic and previously unknown. Because these inscriptions mad reference to the king of Sumer and Akkad, a scholar suggested that the mew language be called Sumerian. But it was not until the 1890's that archaeologists excavating in city-states well to the south o f Nieveh found many thousands of tablets inscribed in Sumerian only. Because the Akkadians thought of Sumerian as a classical language (as ancient Greek and Latin are considered today), they taught it to educated persons and they inscribed vocabulary, translation exercised, and other study aids on tablets. Working from known Akkadian to previously unknown Sumerian, scholars since the 1890's have learned how to read the Sumerian language moderately well. Vast quantities of tablets in Sumerian have been unearthed during the intervening years from numerous sites.

22. According to the passage, the inventors of written language in Mesopotamia were probably the
(A) Babylonians (B) Subarians (C) Akkadians (D) Sumerians

23. The word "subjugated" in line 4 is closest in meaning to
(A) distinguished (B) segregated (C) concentrated (D) conquered

24. The phrase "synonymous with" in line 5 is closest in meaning to
(A) equivalent to (B) important for (C) respected in (D) familiar with

25. According to the passage, by the year 3000 B.C. the Sumerians had already done all of the following EXCEPT:
(A) They had abandoned the area north of the Persian Gulf.
(B) They had established themselves in cities.
(C) They had started to communicate through
(D) They had created bronze tools and weapons.

26. The word "some" in line 14 refers to
(A) Archaeologists (B) Sumerians (C) years (D) clay tablets

27. Which of the following can be inferred from the passage concerning the Sumerians?
(A) They were descendants of the Persians.
(B) They were the first people to cultivate the valley of the Tigris.
(C) They were accomplished musicians.
(D) They had the beginnings of an economy.

28. According to the passage, when did archaeologists begin to be able to understand tablets inscribed in Sumerian?
(A) In the early nineteenth century (B) More than 150 years ago
(C) After the 1890's (D) In the mid-eighteenth century

29. According to the passage, in what way did the Sumerian language resemble ancient Greek and Latin?
(A) It was invented in Mesopotamia.
(B) It became well established around 3000 B.C.
(C) It became a classical language.
(D) It was used exclusively for business transactions.

30. The word "excavating" in line 19 is closest in meaning to
(A) Living (B) digging (C) assembling (D) building

31. According to the passage, how did archaeologists learn to read the Sumerian language?
(A) By translating the work of the Subarians
(B) By using their knowledge of spoken Semitic languages
(C) By comparing Sumerian to other classical languages
(D) By using their knowledge of Akkadian

Question 32-40

Generally, in order to be preserved in the fossil record, organisms must possess hard body parts such as shells or bones. Soft, fleshy structures are quickly destroyed by predators pr decayed by bacteria. Even hard parts left on the surface for and length of time will be destroyed Therefore, organisms must be buried rapidly to escape destruction by the elements and to be protected agents of weathering and erosion Marine organisms thus are better candidates for fossilization than those living on the land because the ocean is typically the site of sedimentation, whereas the land is largely the site of erosion.

The beds of ancient lakes were also excellent sites for rapid burial of skeletal remains of freshwater organisms and skeletons of other animals, including those of early humans Ancient swamps were particularly plentiful with prolific growths of vegetation, which fossilized in abundance. Many animals became trapped in bogs overgrown by vegetation. The environment of the swamps kept bacterial decay to a minimum, which greatly aided in the preservation of plants and animals. The rapidly accumulating sediments in flood plains, deltas, and stream channels buried freshwater organisms, along with other plants and animals that happened to fall into the water.

Only a small fraction of all the organisms that have ever lived are preserved as fossils. Normally, the remains of a plant or animal are completely destroyed through predation and decay. Although it seems that fossilization is common for some organisms, for others it is almost impossible. For the most part, the remains of organisms are recycled in the earth, which is fortunate because otherwise soil and water would soon become depleted of essential nutrients. Also, most of the fossils exposed on Earth's surface are destroyed by weathering processes. This makes for an incomplete fossil record with poor or no representation of certain species.
The best fossils are those composed of unaltered remains. Generally, it is the inorganic hard parts, composed mostly of calcium carbonate, that form the vast majority of unaltered fossils. Calcite and aragonite also contributed to a substantial number of fossils of certain organisms.

32. According to the passage, an organism without hard body parts
(A) is not likely to appear in the fossil record
(B) is not heavy enough to sink below the surface
(C) is not attractive to predators
(D) takes a long time to decay

33. The word "agents" in line 5 is closest in meaning to
(A) dangers (B) examples (C) areas (D) causes

34. Why are marine organisms good candidates for fossilization?
(A) they have more fleshy structures than land organisms.
(B) It is likely that they will be buried rapidly
(C) The water environment speeds the decay caused by bacteria.

(D) It takes longer for them to be preserved.

35. The fact that the "land is largely the site of erosion" (line 7) is significant because
(A) erosion is less destructive than sedimentation
(B) fossils are most common in areas subject to erosion
(C) erosion contributes to the destruction of skeletal remains
(D) few organisms live in areas that experience extensive erosion

36. According to the passage, why were the remains of organisms trapped in swamps better preserved for the fossil record than those that were not?
(A) The swamp environment reduced the amount of bacterial decay.
(B) Swamp waters contained higher amounts of materials such as calcium carbonate.
(C) There were fewer sediments in swamps than in other bodies of water.
(D) Swamp vegetation accelerated the decomposition of organisms.

37. The word "aided" in line 12 is closest in meaning to
(A) reversed (B) helped (C) reformed (D) counted

38. It can be inferred that flood plains, deltas, and stream channels (lines 13-14) are similar in which of the following ways?
(A) Animals rather than plants have been preserved at such locations.
(B) Such locations are likely to be rich sources of fossils.
(C) Fossilized human remains are only rarely found in such locations.
(D) Rapid sedimentation in such locations makes it difficult to locate fossils.

39. What is the author's main point in paragraph 3?
(A) Weathering makes it impossible to identify many fossils.
(B) Many fossils have been buried forever under the soil.
(C) Fossils provide a limited sample of ancient organisms.
(D) It is easier to find the remains of plants than animals.

40. Why does the author mention "aragonite" in line 26
(A) To explain why fossils are rare
(B) To compare aragonite fossils and calcite fossils
(C) To argue that certain fossils are more informative than others
(D) To illustrate the kinds of inorganic hard parts that can form fossils

Question 41-50

Naturalists and casual observers alike have been struck by the special relationship between squirrels and acorns (the seeds of oak trees). Ecologists, though, cannot observe these energetic mammals scurrying up and down oak trees and eating and burying acorns
Line without wondering about their complex relationship with trees. Are squirrels dispersers
(5) and planters of oak forests or pesky seed predators? The answer is not simple. Squirrels may devour many acorns, but by storing and failing to recover up to 74 percent of them (as they do when seeds are abundant), these arboreal o\rodents can also aid regeneration and dispersal of the oaks.

Their destructive powers are well documented. According to one report, squirrels
(10) destroyed tens of thousands of fallen acorns from an oak stand on the University of Indiana campus. A professor there estimated that each of the large while oaks had

produced between two and eight thousand acorns, but within weeks of seed maturity, hardly an intact acorn could be found among the fallen leaves.

Deer, turkey, wild pigs, and bears also feed heavily on acorns, but do not store them, and are therefore of no benefit to the trees. Flying squirrels, chipmunks, and mice are also unlikely to promote tree dispersal – whose behavior of caching (hiding) acorns below the leaf litter often promotes successful germination of acorns – and perhaps blue jays, important long-distance dispersers, seem to help oaks spread and reproduce.

Among squirrels, though, there is a particularly puzzling behavior pattern. Squirrels pry off the caps of acorns, bite through the shells to get at the nutritious inner kernels, and then discard them half-eaten. The ground under towing oaks is often littered with thousands of half -eaten acorns, each one only bitten from the top. Why would any animal waste so much time and energy and risk exposure to such predators as red-tail hawks only to leave a large part of each acorn uneaten? While research is not conclusive at this point, one thing that is certain is that squirrels do hide some of the uneaten portions, and these acorn halves, many of which contain the seeds, may later germinate.

41. What does the passage mainly discuss?
(A) The ecology of oak trees
(B) Factors that determine the feeding habits of Squirrels
(C) Various species of animals that promote the dispersal of tree seeds
(D) The relationship between squirrels and oak trees

42. The word "they" in line 7 refers to
(A) oak forests (B) acorns (C) squirrels (D) predators

43. According to the passage, what do squirrels do when large quantities of acorns are available?
(A) They do not store acorns.
(B) They eat more than 74 percent of available acorns.
(C) They do not retrieve all the acorns that they have stored.
(D) They hide acorns in tree cavities.

44. The word "estimated" in line 11 is closest in meaning to
(A) commented (B) judged (C) observed (D) discovered

45. Why does the author mention “the University of Indiana campus" in line 10-11
(A) To provide evidence that intact acorns are hard to find under oak trees
(B) To indicate a place where squirrels can aid seed dispersal of oaks
(C) To argue in favor of additional studies concerning the destructive force of squirrels
(D) To support the claim that squirrels can do great damage to oak stands

46. It can be inferred from paragraph 3 that chipmunks do not aid in the dispersal of oak trees because
(A) they store their acorns where they cannot germinate
(B) they consume most of their stored acorns
(C) their stored acorns are located and consumed by other species
(D) they cannot travel the long distance required for dispersal

47. According to the passage, which of the following do squirrels and blue jays have in common?
(A) They travel long distances to obtain acorns. (B) They promote the reproduction of oak trees.
(C) They bury acorns under fallen leaves. (D) They store large quantities of acorns.

48. The phrase “pry off" in line 21 is closest in meaning to
(A) swallow (B) remove (C) squeeze (D) locate

49. The word "littered" in line 22 is closest in meaning to

(A) covered (B) displayed (C) fertilized (D) planted

50. According to the passage, scientists cannot explain which of the following aspects of squirrel behavior?

(A) Where squirrels store their acorn caches

(B) Why squirrels prefer acorns over other seeds

(C) Why squirrels eat only a portion of each acorn they retrieve

(D) Why squirrels prefer acorns from a particular species of oak trees

PRACTICE TEST 09
October 2002

Question 1-9

The first birds appeared during late Jurassic times. These birds are known from four very good skeletons, two incomplete skeletons, and an isolated feather, all from the Solnhofen limestone of Bavaria, Germany. This fine-grained rock, which is
Line extensively quarried for lithographic stone, was evidently deposited in a shallow
(5) coral lagoon of a tropical sea, and flying vertebrates occasionally fell into the water and were buried by the fine limy mud, to be preserved with remarkable detail In this way, the late Jurassic bird skeletons, which have been named Archaeopteryx, were fossilized. And not only were the bones preserved in these skeletons, but so also were imprints of the feathers. If the indications of feathers had not been preserved in
(10) association with Archaeopteryx, it is likely that these fossils would have been classified among the dinosaurs, for they show numerous theropod characteristics. Archaeopteryx were animals about the size of a crow, with an archeosaurian type of skull, a long neck, a compact body balanced on a pair of strong hind limbs, and a long tail. The forelimbs were enlarged and obviously functioned as wings.

(15) Modern birds, who are the descendants of these early birds, are highly organized animals, with a constant body temperature and a very high rate of metabolism. In addition, they are remarkable for having evolved extraordinarily complex behavior patterns such as those of nesting and song, and the habit among many species of making long migrations from one continent to another and back
(20) each year.

Most birds also have very strong legs, which allows them to run or walk on the ground as well as to fly in the air. Indeed, some of the waterbirds, such as ducks and geese, have the distinction of being able to move around proficiently in the water, on land, and in the air, a range in natural locomotor ability that has never been attained
(25) by any other vertebrate.

1. According to the author, all of-the following evidence relating to the first birds was found EXCEPT
(A) nesting materials
(B) four skeletons in good condition
(C) two fragmented skeletons
(D) a single feather

2. The word "preserved" in line 8 is closest in meaning to
(A) confused with others
(B) gradually weakened
(C) protected from destruction
(D) lost permanently

3. It can be inferred from the passage that the Archaeopteryx were classified as birds on the basis of
(A) imprints of bones
(B) imprints of feathers
(C) the neck structure
(D) skeletons

4. The word "they" in line 11 refers to
(A) indications
(B) fossils
(C) dinosaurs
(D) characteristics

5. Why does the author mention "a crow" in line 12?
(A) to indicate the size of Archaeopteryx
(B) To specify the age of the Archaeopteryx fossils
(C) To explain the evolutionary history of Archaeopteryx
(D) To demonstrate the superiority of the theropod to Archaeopteryx

6. It can be inferred from the passage that theropods were
(A) dinosaurs (B) birds (C) Archaeopteryx (D) crows

7. The word "constant" in line 16 is closest in meaning to
(A) comfortable (B) combined (C) consistent (D) complementary

8. The author mentions all of the following as examples of complex behavior patterns evolved by birds EXCEPT
(A) migrating (B) nesting (C) singing (D) running

9. The word "attained" in line 24 is closest in meaning to
(A) required (B) achieved (C) observed (D) merited

Questions 10-19

Newspaper publishers in the United States have long been enthusiastic users and distributors of weather maps. Although some newspapers that had carried the United States Weather Bureau's national weather map in 1912 dropped it once the novelty had passed, many continued to print the daily weather chart provided by their local forecasting office. In the 1930's, when interest in aviation and progress in air-mass analysis made weather patterns more newsworthy, additional newspapers started or resumed the daily weather map. In 1935, The Associated Press (AP) news service inaugurated its WirePhoto network and offered subscribing newspapers morning and afternoon weather maps redrafted by the AP's Washington, B.C., office from charts provided by the government agency. Another news service, United Press International (UPI), developed a competing photowire network and also provided timely weather maps for both morning and afternoon newspapers. After the United States government launched a series of weather satellites in 1966, both the AP and UPI offered cloud-cover photos obtained from the Weather Bureau.

In the late 1970's and early 1980's, the weather map became an essential ingredient in the redesign of the American newspaper. News publishers, threatened by increased competition from television for readers' attention, sought to package the news more conveniently and attractively. In 1982, many publishers felt threatened by the new USA Today, a national daily newspaper that used a page-wide, full-color weather map as its key design element. That the weather map in USA today did not include information about weather fronts and pressures attests to the largely symbolic role it played. Nonetheless, competing local and metropolitan newspapers responded in a variety of ways. Most substituted full-color temperature maps for the standard weather maps, while others dropped the comparatively drab satellite photos or added regional forecast maps with pictorial symbols to indicate rainy, snowy, cloudy, or clear conditions. A few newspapers, notably The New York Times, adopted a highly informative yet less visually prominent weather map that was specially designed to explain an important recent or imminent weather event. Ironically, a newspaper's richest, most instructive weather maps often are comparatively small and inconspicuous.

10. What does the passage mainly discuss?
(A) The differences between government and newspaper weather forecasting in the United States.
(B) The history of publishing weather maps in United States newspapers
(C) A comparison of regional and national weather reporting in the United States.
(D) Information that forms the basis for weather forecasting in the United States

11. The word "resumed" in line 7 is closest in meaning to
(A) began again (B) held back
(C) thought over (D) referred to

12. According to the passage, one important reason why newspapers printed daily weather maps during the first half of the twentieth century was
(A) the progress in printing technology
(B) a growing interest in air transportation
(C) a change in atmospheric conditions
(D) the improvement of weather forecasting techniques

13. What regular service did The Associated Press and United Press International begin to offer subscribing newspapers in the 1930's?
(A) A new system of weather forecasting (B) An air-mass analysis
(C) Twice daily weather maps (D) Cloud-cover photographs

14. The phrase "attests to" in line 21 is closest in meaning to
(A) makes up for (B) combines with
(C) interferes with (D) gives evidence of

15. The word "others" in line 24 refers to
(A) newspapers (B) ways
(C) temperature maps (D) weather maps

16. The word "drab" in line 24 is closest in meaning to
(A) precise (B) poor (C) simple (D) dull

17. In contrast to the weather maps of USA Today, weather maps in The New York Times tended to be
(A) printed in foil color (B) included for symbolic reasons
(C) easily understood by the readers (D) filled with detailed information

18. The word "prominent" in line 27 is closest in meaning to
(A) complex (B) noticeable (C) appealing (D) perfect

19. The author uses the term "Ironically" in line 29 to indicate that a weather map's appearance
(A) is not important to newspaper publishers
(B) does not always indicate how much information it provides
(C) reflects how informative a newspaper can be
(D) often can improve newspaper sales

Question 20-30

Some animal behaviorists argue that certain animals can remember past events, anticipate future ones, make plans and choices, and coordinate activities within a group. These scientists, however, are cautious about the extent to which animals can be credited with conscious processing.

Line
(5) Explanations of animal behavior that leave out any sort of consciousness at all and ascribe actions entirely to instinct leave many questions unanswered. One example of such unexplained behavior: Honeybees communicate the sources of nectar to one another by doing a dance in a figure-eight pattern. The orientation of the dance conveys the position of the food relative to the sun's position in the sky,
(10) and the speed of the dance tells how far the food source is from the hive. Most researchers assume that the ability to perform and encode the dance is innate and

shows no special intelligence. But in one study, when experimenters kept changing the site of the food source, each time moving the food 25 percent farther from the previous site, foraging honeybees began to anticipate where the food source would
(15) appear next. When the researchers arrived at the new location, they would find the bees circling the spot, waiting for their food. No one has yet explained how bees, whose brains weigh four ten-thousandths of an ounce, could have inferred the location of the new site.

Other behaviors that may indicate some cognition include tool use. Many
(20) animals, like the otter who uses a stone to crack mussel shells, are capable of using objects in the natural environment as rudimentary tools. One researcher has found that mother chimpanzees occasionally show their young how to use tools to open hard nuts. In one study, chimpanzees compared two pairs of food wells containing chocolate chips. One pair might contain, say, five chips and three chips, the other
(25) our chips and three chips. Allowed to choose which pair they wanted, the chimpanzees almost always chose the one with the higher total, showing some sort of summing ability. Other chimpanzees have learned to use numerals to label quantities of items and do simple sums.

20. What does the passage mainly discuss?
(A) The role of instinct in animal behavior
(B) Observations that suggest consciousness in animal behavior
(C) The use of food in studies of animal behavior
(D) Differences between the behavior of animals in their natural environments and in laboratory experiments.

21. Which of the following is NOT discussed as an ability animals are thought to have?
(A) Selecting among choices
(B) Anticipating events to come
(C) Remembering past experiences
(D) Communicating emotions

22. What is the purpose of the honeybee dance?
(A) To determine the quantity of food at a site
(B) To communicate the location of food
(C) To increase the speed of travel to food sources
(D) To identify the type of nectar that is available

23. The word "yet" in line 16 is closest in meaning to
(A) however
(B) since
(C) generally
(D) so far

24. What did researchers discover in the study of honeybees discussed in paragraph 2?
(A) Bees are able to travel at greater speeds than scientists thought.
(B) The bees could travel 25% farther than scientists expected.
(C) The bees were able to determine in advance where scientists would place their food.
(D) Changing the location of food caused bees to decrease their dance activity.

25. It can be inferred from the passage that brain size is assumed to
(A) be an indicator of cognitive ability
(B) vary among individuals within a species
(C) be related to food consumption
(D) correspond to levels of activity

26. Why are otters and mussel shells included in the discussion in paragraph 3?
(A) To provide an example of tool use among animals
(B) To prove that certain species demonstrate greater ability in tool use than other species

27. The word "rudimentary" in line 21 is closest in meaning to
(A) superior
(B) original
(C) basic
(D) technical

28. It can be inferred from the statement about mother chimpanzees and their young (lines 21-23) that young chimpanzees have difficulty

(A) communicating with their mothers
(B) adding quantities
(C) making choices
(D) opening hard nuts

29. The phrase "the one" in line 26 refers to the

(A) study (B) pair (C) chimpanzee (D) ability

30. Scientists concluded from the experiment with chimpanzees and chocolate chips that chimpanzees

(A) lack abilities that other primates have
(B) prefer to work in pairs or groups
(C) exhibit behavior that indicates certain mathematical abilities
(D) have difficulty selecting when given choices

Questions 31-39

In eighteenth-century colonial America, flowers and fruit were typically the province of the botanical artist interested in scientific illustration rather than being the subjects of fine art. Early in the nineteenth century, however, the Peale family of Philadelphia established the still life, a picture consisting mainly of inanimate objects, as a valuable part of the artist's repertoire. The fruit paintings by James and Sarah Miriam Peale are simple arrangements of a few objects, handsomely colored, small in size, and representing little more than what they are. In contrast were the highly symbolic, complex compositions by Charles Bird King, with their biting satire and critical social commentary. Each of these strains comminuted into and well past mid-century.

John F. Francis (1808-86) was a part of the Pennsylvania still-life tradition that arose, at least in part, from the work of the Peales. Most of his still lifes date from around 1850 to 1875. Luncheon Still Life looks like one of the Peales' pieces on a larger scale, kits greater complexity resulting from the number of objects. It is also indebted to the luncheon type of still life found in seventeenth-century Dutch painting. The opened bottles of wine and the glasses of wine partially consumed suggest a number of unseen guests. The appeal of the fruit and nuts to our sense of taste is heightened by the juicy orange, which has already been sliced. The arrangement is additive, that is, made up of many different parts, not always compositionally integrated, with all objects of essentially equal importance.

About 1848, Severin Roesen came to the United States from Germany and settled in New York City, where he began to paint large, lush still lifes of flowers, fruit, or both, often measuring over four feet across. Still Life with Fruit and champagne is typical in its brilliance of color, meticulous rendering of detail, compact composition, and unabashed abundance. Rich in symbolic overtones, the beautifully painted objects carry additional meanings------butterflies or fallen buds suggest the impermanence of life, a bird's nest with eggs means fertility, and so on. Above all, Roesen's art expresses the abundance that America symbolized to many of its citizens.

31. What does the passage mainly discuss?

(A) The artwork of James and Sarah Miriam Peale
(B) How Philadelphia became a center for art in the nineteenth century

(C) Nineteenth-century still-life paintings in the United States
(D) How botanical art inspired the first still-life paintings

32. Which of the following is mentioned as a characteristic of the still lifes of James and Sarah Miriam Peale?
(A) Simplicity (B) Symbolism
(C) Smooth texture (D) Social commentary

33. The word "biting" in line 8 is closest in meaning to
(A) simple (B) sorrowful (B) frequent (D) sharp

34. The word "It" in line 14 refers to
(A) Luncheon Still Life (B) one of the Peales' pieces
(C) a larger scale (D) the number of objects

35. The word "heightened" in line 18 is closest in meaning to
(A) complicated (B) directed (C) observed (D) increased

36. The word "meticulous" in line 24 is closest in meaning to
(A) careful (B) significant (C) appropriate (D) believable

37. Which of the following terms is defined in the passage?
(A) "repertoire" (line 5) (B) "satire" (line 9)
(C) "additive" (line 19) (D) "rendering" (line 24)

38. All of the following are mentioned as characteristics of Roesen's still lifes EXCEPT that they
(A) are symbolic
(B) use simplified representations of flowers and fruit
(C) include brilliant colors
(D) are large in size

39. Which of the following is mentioned as the dominant theme in Roesen's painting?
(A) Fertility (B) Freedom (C) Impermanence (D) Abundance

Question 40-50

Scientists have discovered that for the last 160,000 years, at least, there has been a consistent relationship between the amount of carbon dioxide in the air and the average temperature of the planet. The importance of carbon dioxide in regulating the Earth's temperature was confirmed by scientists working in eastern Antarctica. Drilling down into a glacier, they extracted a mile-long cylinder of ice from the hole. The glacier had formed as layer upon layer of snow accumulated year after year. Thus drilling into the ice was tantamount to drilling back through time.

The deepest sections of the core are composed of water that fell as snow 160,000 years ago. Scientists in Grenoble, France, fractured portions of the core and measured the composition of ancient air released from bubbles in the ice. Instruments were used to measure the ratio of certain isotopes in the frozen water to get an idea of the prevailing atmospheric temperature at the time when that particular bit of water became locked in the glacier.

The result is a remarkable unbroken record of temperature and of atmospheric levels of carbon dioxide. Almost every time the chill of an ice age descended on the planet, carbon dioxide levels dropped. When the global temperature dropped 9°F (5 °C), carbon dioxide levels dropped to 190 parts per million or so. Generally, as each

ice age ended and the Earth basked in a warm interglacial period, carbon dioxide levels were around 280 parts per million. Through the 160,000 years of that ice record, the level of carbon dioxide in the atmosphere fluctuated between 190 and 280 parts per million, but never rose much higher-until the Industrial Revolution beginning in the eighteenth century and continuing today.

There is indirect evidence that the link between carbon dioxide levels and global temperature change goes back much further than the glacial record. Carbon dioxide levels may have been much greater than the current concentration during the Carboniferous period, 360 to 285 million years ago. The period was named for a profusion of plant life whose buried remains produced a large fraction of the coal deposits that are being brought to the surface and burned today.

40. Which of the following does the passage mainly discuss?
(A) Chemical causes of ice ages
(B) Techniques for studying ancient layers of ice in glaciers
(C) Evidence of a relationship between levels of carbon dioxide and global temperature
(D) Effects of plant life on carbon dioxide levels in the atmosphere

41. The word “accumulated” in line 6 is closest in meaning to
(A) spread out (B) changed (C) became denser (D) built up

42. According to the passage, the drilling of the glacier in eastern Antarctica was important because it
(A) allowed scientists to experiment with new drilling techniques
(B) permitted the study of surface temperatures in an ice-covered region of Earth
(C) provided insight about climate conditions in earlier periods
(D) confirmed earlier findings about how glaciers are formed

43. The phrase "tantamount to" in line 7 is closest in meaning to
(A) complementary to (B) practically the same as
(C) especially well suited to (D) unlikely to be confused with

44. *???*

45. According to the passage, scientists used isotopes from the water of the ice core to determine which of following?
(A) The amount of air that had bubbled to the surface since the ice had formed
(B) The temperature of the atmosphere when the ice was formed
(C) The date at which water had become locked in the glacier
(D) The rate at which water had been frozen in the glacier

46. The word "remarkable" in line 14 is closest in meaning to
(A) genuine (B) permanent (C) extraordinary (D) continuous

47. The word "link" in line 23 is closest in meaning to
(A) tension (B) connection (C) attraction (D) distance

48. The passage implies that the warmest temperatures among the periods mentioned occurred
(A) in the early eighteenth century (B) 160,000 years ago
(C) at the end of each ice age (D) between 360 and 285 million years ago

49. According to the passage, the Carboniferous period was characterized by
(A) a reduction in the number of coal deposits
(B) the burning of a large amount of coal
(C) an abundance of plants
(D) an accelerated rate of glacier formation

50. The passage explains the origin of which of the following terms?

(A) Glacier (line 5)
(B) Isotopes (line 11)
(C) Industrial Revolution (line 21)
(D) Carboniferous period (lines 26)

PRACTICE TEST 10
January 2001

Questions 1-9

In 1972, a century after the first national park in the United States was established at Yellowstone, legislation was passed to create the National Marine Sanctuaries Program The intent of this legislation was to provide protection to selected coastal habitats similar
Line To that existing for land areas designated as national parks. The designation of an areas
(5) a marine sanctuary indicates that it is a protected area, just as a national park is. People are permitted to visit and observe there, but living organisms and their environments may not be harmed or removed.

The National Marine Sanctuaries Program is administered by the National Oceanic and Atmospheric Administration, a branch of the United States Department of Commerce.
(10) Initially, 70 sites were proposed as candidates for sanctuary status. Two and a half decades later, only fifteen sanctuaries had been designated, with half of these established after 1978. They range in size from the very small (less than I square kilometer) Fagatele Bay National Marine Sanctuary in American Samoa to the Monterey Bay National Marine Sanctuary in California, extending over 15,744 square kilometers.

(15) The National Marine Sanctuaries Program is a crucial part of new management practices in which whole communities of species, and not just individual species, are offered some degree of protection from habitat degradation and overexploitation. Only in this way can a reasonable degree of marine species diversity be maintained in a setting that also maintains the natural interrelationships that exist among these species.

(20) Several other types of marine protected areas exist in the United States and other countries. The National Estuarine Research Reserve System, managed by the United States government, includes 23 designated and protected estuaries. Outside the United States, marine protected-area programs exist as marine parks, reserves, and preserves. Over 100 designated areas exist around the periphery of the Caribbean Sea. Others range
(25) from the well-known Australian Great Barrer Reef Marine Park to lesser-known parks in countries such as Thailand and Indonesia, where tourism is placing growing pressures on fragile coral reef systems. As state, national, and international agencies come to recognize the importance of conserving marine biodiversity, marine projected areas. whether as sanctuaries, parks, or estuarine reserves, will play an increasingly important role in preserving that diversity.

1. What does the passage mainly discuss?
(A) Differences among marine parks, sanctuaries, and reserves
(B) Various marine conservation programs
(C) International agreements on coastal protection
(D) Similarities between land and sea protected environments

2. The word “intent” in line 3 is closest in meaning to
(A) repetition (B) approval (C) goal (D) revision

3. The word “administered” in line 8 is closest in meaning to
(A) managed (B) recognized (C) opposed (D) justified

4. The word “these” in line 11 refers to
(A) sites (B) candidates (C) decades (D) sanctuaries

5. The passage mentions the Monterey Bay National Marine Sanctuary (lines 13-14) as an example of a sanctuary that
(A) is not well know
(B) covers a large area
(C) is smaller than the Fagatele Bay National Marine Sanctuary
(D) was not originally proposed for sanctuary status

6. According to the passage, when was the National Marine Sanctuaries Program established?
(A) Before 1972
(B) After 1987
(C) One hundred years before national parks were established
(D) One hundred years after Yellowstone National Park was established

7. According to the passage, all of the following are achievements of the National Marine Sanctuaries Program EXCEPT
(A) the discovery of several new marine organisms
(B) the preservation of connections between individual marine species
(C) the protection of coastal habitats
(D) the establishment of areas where the public can observe marine life

8. The word “periphery” in line 24 is closest in meaning to
(A) depth (B) landmass (C) warm habitat (D) outer edge

9. The passage mentions which of the following as a threat to marine areas outside the United States?
(A) Limitations in financial support (B) The use of marine species as food
(C) Variability of the climate (D) Increases in tourism

Questions 10-17

From their inception, most rural neighborhoods in colonial North America included at least one carpenter, joiner, sawyer, and cooper in woodworking; a weaver and a tailor for clothing production; a tanner, currier, and cordwainer (shoemaker) for fabricating leather
Line objects; and a blacksmith for metalwork, Where stone was the local building material, a
(5) mason was sure to appear on the list of people who paid taxes. With only an apprentice as an assistant, the rural artisan provided the neighborhood with common goods from furniture to shoes to farm equipment in exchange for cash or for “goods in kind” from the customer’s field, pasture, or dairy. Sometimes artisans transformed material provided by the customer wove cloth of yam spun at the farm from the wool of the family sheep; made chairs or tables
(10) from wood cut in the customer’s own woodlot; produced shoes or leather breeches from cow, deer, or sheepskin tanned on the farm.

Like their farming neighbors, rural artisans were part of an economy seen, by one historian, as “an orchestra conducted by nature.” Some tasks could not be done in the winter, other had to be put off during harvest time, and still others waited on raw materials that were
(15) only produced seasonally. As the days grew shorter, shop hours kept pace, since few artisans could afford enough artificial light to continue work when the Sun went down. To the best of their ability, colonial artisans tried to keep their shops as efficient as possible and to regularize their schedules and methods of production for the best return on their investment in time, tools, and materials, While it is pleasant to imagine a woodworker, for example,
(20) carefully matching lumber, joining a chest together without resort to nails or glue, and applying all thought and energy to carving beautiful designs on the finished piece, the time required was not justified unless the customer was willing to pay extra for the quality – and few in rural areas were, Artisans, therefore, often found it necessary to employ as

many shortcuts and economics as possible while still producing satisfactory products.

10. What aspect of rural colonial North America does the passage mainly discuss?
(A) Farming practices
(B) The work of artisans
(C) The character of rural neighborhoods
(D) Types of furniture that were popular

11. The word “inception” in line 1 is closest in meaning to
(A) investigation (B) location (C) beginning (D) records

12. The word “fabricating” in line 3 is closest in meaning to
(A) constructing (B) altering (C) selecting (D) demonstrating

13. It can be inferred from the from the passage that the use of artificial light in colonial times was
(A) especially helpful to woodworkers (B) popular in rural areas
(C) continuous in winter (D) expensive

14. Why did colonial artisans want to “regularize their schedules their schedules” (line 18)?
(A) To enable them to produce high quality products
(B) To enable them to duplicate an item many times
(C) To impress their customers
(D) To keep expenses low

15. The phrase “resort to” in line 20 is closest in meaning to
(A) protecting with (B) moving toward (C) manufacturing (D) using

16. The word “few’ in lines 23 refers to
(A) woodworkers (B) finished pieces
(C) customers (D) chests

17. It can inferred that the artisans referred to in the passage usually produced products that were
(A) simple (B) delicate
(C) beautifully decorated (D) exceptionally long-lasting

Questions 18-28

Cities develop as a result of functions that they can perform. Some functions result directly from the ingenuity of the citizenry, but most functions result from the needs of the local area and of the surrounding hinterland (the region that supplies goods to the city and to which the city furnishes services and other goods). Geographers often make a distinction between the situation and the site of a city. Situation refers to the general position in relation to the surrounding region, whereas site involves physical characteristics of the specific location. Situation is normally much more important to the continuing prosperity of a city. if a city is well situated in regard to its hinterland, its development is much more likely to continue. Chicago, for example, possesses an almost unparalleled situation: it is located at the southern end of a huge lake that forces east-west transportation lines to be compressed into its vicinity, and at a meeting of significant land and water transport routes. It also overlooks what is one of the world’s finest large farming regions. These factors ensured that Chicago would become a great city regardless of the disadvantageous characteristics of the available site, such as being prone to flooding during thunderstorm activity.

Similarly, it can be argued that much of New York City’s importance stems from its early and continuing advantage of situation. Philadelphia and Boston both originated at

about the same time as New York and shared New York's location at the western end of one of the world's most important oceanic trade routes, but only New York possesses an
(20) easy-access functional connection (the Hudson-Mohawk lowland) to the vast Midwestern hinterland. This account does not alone explain New York's primacy, but it does include several important factors. Among the many aspects of situation that help to explain why some cities grow and others do not, original location on a navigable waterway seems particularly applicable. Of course, such characteristic as slope, drainage, power
(25) resources, river crossings, coastal shapes, and other physical characteristics help to determine city location, but such factors are normally more significant in early stages of city development than later.

18. What does the passage mainly discuss?
(A) The development of trade routes through United States cities
(B) Contrasts in settlement patterns in United States
(C) Historical differences among three large United States cities
(D) The importance of geographical situation in the growth of United States cities

19. The word "ingenuity" in line 2 is closest in meaning to
(A) wealth (B) resourcefulness (C) traditions (D) organization

20. The passage suggests that a geographer would consider a city's soil type part of its
(A) hinterland (B) situation (C) site (D) function

21. According to the passage, a city's situation is more important than its site in regard to the city's.
(A) long-term growth and prosperity
(B) ability to protect its citizenry
(C) possession of favorable weather conditions
(D) need to import food supplies

22. The author mentions each of the following as an advantage of Chicago's location EXCEPT its.
(A) hinterland (B) nearness to a large lake
(C) position in regard to transport routes (D) flat terrain

23. The word "characteristics" in line 14 is closest in meaning to
(A) choices (B) attitudes (C) qualities (D) inhabitants

24. The primary purpose of paragraph 1 is to
(A) summarize past research and introduce anew study
(B) describe a historical period
(C) emphasize the advantages of one theory over another
(D) define a term and illustrate it with an example

25. According to the passage, Philadelphia and Boston are similar to New York City in
(A) size of population (B) age
(C) site (D) availability of rail transportation

26. The word "functional" in line 20 is closest in meaning to
(A) alternate (B) unknown (C) original (D) usable

27. The word "it" in line 21 refers to
(A) account (B) primacy (C) connection (D) hinterland

28. The word "significant" in line 26 is closest in meaning to
(A) threatening (B) meaningful (C) obvious (D) available

Questions 29-10

The largest of the giant gas planets, Jupiter, with a volume 1,300 times greater than Earth's, contains more than twice the mass of all the other planets combined. It is thought to be a gaseous and fluid planet without solid surfaces, Had it been somewhat more massive, Jupiter might have attained internal temperatures as high as the ignition point for nuclear reactions, and it would have flamed as a star in its own right. Jupiter and the other giant planets are of a low-density type quite distinct from the terrestrial planets: they are composed predominantly of such substances as hydrogen, helium, ammonia, and methane, unlike terrestrial planets. Much of Jupiter's interior might be in the form of liquid, metallic hydrogen, Normally, hydrogen is a gas, but under pressures of millions of kilograms per square centimeter, which exist in the deep interior of Jupiter, the hydrogen atoms might lock together to form a liquid with the properties of a metal. Some scientists believe that the innermost core of Jupiter might be rocky, or metallic like the core of Earth.
Jupiter rotates very fast, once every 9.8 hours. As a result, its clouds, which are composed largely of frozen and liquid ammonia, have been whipped into alternating dark and bright bands that circle the planet at different speeds in different latitudes. Jupiter's puzzling Great Red Spot changes size as it hovers in the Southern Hemisphere. Scientists speculate it might be a gigantic hurricane, which because of its large size (the Earth could easily fit inside it), lasts for hundreds of years.

Jupiter gives off twice as much heat as it receives from the Sun. Perhaps this is primeval heat or beat generated by the continued gravitational contraction of the planet. Another starlike characteristic of Jupiter is its sixteen natural satellites, which, like a miniature model of the Solar System, decrease in density with distance – from rocky moons close to Jupiter to icy moons farther away. If Jupiter were about 70 times more massive, it would have become a star, Jupiter is the best-preserved sample of the early solar nebula, and with its satellites, might contain the most important clues about the origin of the Solar System.

29. The word "attained" in line 4 is closest in meaning to
(A) attempted (B) changed (C) lost (D) reached

30. The word "flamed" in line 5 is closest in meaning to
(A) burned (B) divided (C) fallen (D) grown

31. The word "they" in line 6 refers to
(A) nuclear reactions (B) giant planets (C) terrestrial (D) substances

32. According to the passage, hydrogen can become a metallic-like liquid when it is
(A) extremely hot (B) combined with helium
(C) similar atmospheres (D) metallic cores

33. According to the passage, some scientists believe Jupiter and Earth are similar in that they both have
(A) solid surfaces (B) similar masses
(C) similar atmospheres (D) metallic cores

34. The clouds surrounding Jupiter are mostly composed of
(A) ammonia (B) helium (C) hydrogen (D) methane

35. It can be inferred from the passage that the appearance of alternating bands circling Jupiter is caused by
(A) the Great Red Spot (B) heat from the Sun

(C) the planet's fast rotation
(D) Storms from the planet's Southern Hemisphere

36. The author uses the word "puzzling" in line 15 to suggest that the Great Red Spot is
(A) the only spot of its kind
(B) not well understood
(C) among the largest of such spots
(D) a problem for the planet's continued existence

37. Paragraph 3 supports which of the following conclusions?
(A) Jupiter gives off twice as much heat as the Sun.
(B) Jupiter has a weaker gravitational force than the other planets.
(C) Scientists believe that Jupiter was once a star.
(D) Scientists might learn about the beginning of the Solar System by Studying Jupiter.

38. Why does the author mention primeval heat (lines 19-20) ?
(A) To provide evidence that Jupiter is older than the Sun
(B) To provide evidence that Jupiter is older than the other planets
(C) To suggest a possible explanation for the number of satellites that Jupiter has
(D) To suggest a possible source of the quantity of heat that Jupiter gives off

39. According to the passage, Jupiter's most distant moon is
(A) the least dense
(B) the largest
(C) warm on the surface
(D) very rocky on the surface

40. Which of the following statements is supported by the passage?
(A) If Jupiter had fewer satellites, it would be easier for scientists to study the planet itself.
(B) If Jupiter had had more mass, it would have developed internal nuclear reactions.
(C) If Jupiter had been smaller, it would have become a terrestrial planet.
(D) if Jupiter were larger, it would give off much less heat

Questions 41-50

The term "art deco" has come to encompass three distinct but related design trends of the 1920's and 1930's. The first was what is frequently referred to as "zigzag moderne" –the exotically ornamental style of such skyscrapers as the Chrysler Building
Line in New York City and related structures such as the Paramount Theater in Oakland,
(5) California The word "zigzag" alludes to the geometric and stylized ornamentation of zigzags, angular patterns, abstracted plant and animal motifs, sunbursts, astrological imagery, formalized fountains, and related themes that were applied in mosaic relief. and mural form to the exterior and interior of the buildings. Many of these buildings were shaped in the ziggurat form, a design resembling an ancient Mesopotamian temple tower
(10) that recedes in progressively smaller stages to the summit, creating a staircase-like effect.

The second manifestation of art deco was the 1930's streamlined moderne" style – a Futuristic-looking aerodynamic style of rounded corners and horizontal bands known as "speed stripes." In architecture, these elements were frequently accompanied by round windows, extensive use of glass block, and flat rooftops.

(15) The third style, referred to as cither " international stripped classicism," or simply "classical moderne," also came to the forefront during the Depression, a period of severe economic difficult in the 1930's. This was amore conservative style, blending a simplified modernistic style with a more austere form of geometric and stylized relief sculpture and other ornament, including interior murals. May buildings in this style
(20) were erected nationwide through government programs during the Depression.

Although art deco in its many forms was largely perceived as thoroughly modern, it was strongly influenced by the decorative arts movements that immediately preceded

it. For example, like "art nouveau" (1890-1910), art deco also used plant motifs, but regularized the forms into abstracted repetitive patterns rather than presenting them as
(25) flowing, asymmetrical foliage, Like the Viennese craftspeople of the Wiener Werkstatte, art deco designers worked with exotic materials, geometricized shapes, and colorfully ornate patterns. Furthermore, like the artisans of the Arts and Crafts Movement in England and the United States, art deep practitioners considered it their mission to transform the domestic environment through well-designed furniture and household accessories.

41. What aspect of art deco does the passage mainly discuss?
(A) The influence of art deco on the design of furniture and household accessories
(B) Ways in which government programs encouraged the development of art deco
(C) Architectural manifestations of art deco during the 1920's and 1930's
(D) Reasons for the popularity of art deco in New York and California

42. The word "encompass" in line 1 is closest in meaning to
(A) separate (B) include (C) replace (D) enhance

43. The phrase "The first" in line 2 refers to
(A) the term "art deco" (B) design trends
(C) the 1920's and 1930's (D) skyscrapers

44. In line 9, the author mentions "an ancient Mesopotamian temple tower " in order to
(A) describe the exterior shape of certain "art deco" buildings
(B) explain the differences between ancient and modern architectural steles
(C) emphasize the extent of architectural advances
(D) argue for a return to more traditional architectural design

45. The streamlined moderne style is characterized by all of the following EXCEPT
(A) animal motifs (B) flat roofs
(C) round windows (D) "speed stripes"

46. The phrase "came to the forefront" in line 16 is closest in meaning to
(A) grew in complexity (B) went through a process
(C) changed its approach (D) became important

47. According to the passage, which of the following statements most accurately describes the relationship between art deco and art nouveau?
(A) They were art forms that competed with each other for government support during the Depression era.
(B) They were essentially the same art form.
(C) Art nouveau preceded art deco and influenced it.
(D) Art deco became important in the United States while art nouveau became popular in England.

48. According to the passage, a building having an especially ornate appearance would most probably have been designed in the style of
(A) zigzag moderne (B) streamlined moderne
(C) classical moderne (D) the Arts and Crafts Movement

49. According to the passage, which of the following design trends is known by more than one name ?
(A) Zigzag moderne (B) Streamlined moderne
(C) International stripped classicism (D) Arts and Crafts Movement

50. The passage is primarily developed as
(A) the historical chronology of a movement
(B) a description of specific buildings that became famous for their unusual beauty
(C) an analysis of various trends within an artistic movement
(D) an argument of the advantages of one artistic form over another

PRACTICE TEST 11
May 2001

Questions 1-10

In the early 1800's, over 80 percent of the United States labor force was engaged in agriculture. Sophisticated technology and machinery were virtually nonexistent. People who lived in the cities and were not directly involved in trade often participated in small cottage industries making handcrafted goods. Others cured meats, silversmiths, candle or otherwise produced needed goods and commodities. Blacksmiths, silversmiths, candle makers, and other artisans worked in their homes or barns, relying on help of family

Perhaps no single phenomenon brought more widespread and lasting change to the United States society than the rise of industrialization. Industrial growth hinged on several economic factors. First, industry requires an abundance of natural resources, especially coal, iron ore, water, petroleum, and timber-all readily available on the North American continent. Second, factories demand a large labor supply. Between the 1870's and the First World War (1914-1918), approximately 23 million immigrants streamed to the United States, settled in cities, and went to work in factories and mines. They also helped build the vast network of canals and railroads that crisscrossed the continent and linked important trade centers essential to industrial growth.

Factories also offered a reprieve from the backbreaking work and financial unpredictability associated with farming. Many adults, poor and disillusioned with farm life, were lured to the cities by promises of steady employment, regular paychecks, increased access to goods and services, and expanded social opportunities. Others were pushed there when new technologies made their labor cheap or expendable; inventions such as steel plows and mechanized harvesters allowed one farmhand to perform work that previously had required several, thus making farming capital-intensive rather than labor-intensive.

The United States economy underwent a massive transition and the nature of work was permanently altered. Whereas cottage industries relied on a few highly skilled craft workers who slowly and carefully converted raw materials into finished products from start to finish, factories relied on specialization. While factory work was less creative and more monotonous, it was also more efficient and allowed mass production of goods at less expense.

1. What aspect of life in the United States does the passage mainly discuss?

(A) The transition from an agricultural to an industrial economy
(B) The inventions that transformed life in the nineteenth century
(C) The problems associated with the earliest factories
(D) The difficulty of farm life in the nineteenth century

2. Blacksmiths, silversmiths, and candle makers are mentioned in lines 5-6 as examples of artisans who

(A) maintained their businesses at home
(B) were eventually able to use sophisticated technology
(C) produced unusual goods and commodities
(D) would employ only family members

3. The phrase "hinged on" in line 9 is closest in meaning to

(A) recovered from
(B) depended on
(C) started on
(D) contributed to

4. Which of the following is mentioned in the passage as a reason for the industrial growth that occurred in the United States before 1914?

(A)The availability of natural resources found only in the United States
(B) The decrease in number of farms resulting from technological advances
(C) The replacement of canals and railroads by other forms of transportation
(D) The availability of a large immigrant work force

5. The word "lured" in line 19 is closest in meaning to

(A) attracted (B) assigned (C) restricted (D) attached

6. The word "Others" in line 20 refers to other

(A) adults (B) promises
(C) goods and services (D) social opportunities

7.The word "expendable" in line 21 is closest in meaning to

(A) nonproductive (B) unacceptable (C) nonessential (D) unprofitable

8. It can be inferred from the passage that industrialization affected farming in that industrialization

(A) increased the price of farm products
(B) limited the need for new farm machinery
(C) created new and interesting jobs on farms
(D) reduced the number of people willing to do farm work

9.What does the author mean when stating that certain inventions made farming "capital-intensive rather than labor-intensive" (lines 23-24)?

(A) Workers had to be trained to operate the new machines.
(B) Mechanized farming required more capital and fewer laborers.
(C) The new inventions were not helpful for all farming activities.
(D) Human labor could still accomplish as much work as the first machines.

10. According to the passage, factory workers differed from craft workers in that factory workers

(A) were required to be more creative
(B) worked extensively with raw materials
(C) changed jobs frequently
(D) specialized in one aspect of the finished product only

Question 11-20

Molting is one of the most involved processes of a bird's annual life cycle. Notwithstanding preening and constant care, the marvelously intricate structure of a bird's Feather inevitably wears out. All adult birds molt their feathers at least once a year, and upon close observation, one can recognize the frayed, ragged appearance of feathers that are nearing the end of their useful life. Two distinct processes are involved in molting. The first step is when the old, worn feather is dropped, or shed. The second is when a new feather grows in its place. When each feather has been shed and replaced, then the molt can be said to be complete. This, however, is an abstraction that often does not happen: incomplete, overlapping, and arrested molts are quite common.

Molt requires that a bird find and process enough protein to rebuild approximately one-third of its body weight. It is not surprising that a bird in heavy molt often seems listless and unwell. But far from being random, molt is controlled by strong evolutionary forces that have established an optimal time and duration. Generally, molt occurs at the time of least stress on the bird. Many songbirds, for instance, molt in late summer, when the hard work of breeding is done but the weather is still warm and food still plentiful. This is why the woods in late summer often seem so quiet, when compared with the

exuberant choruses of spring.

Molt of the flight feathers is the most highly organized part of the process. Some species, for example, begin by dropping the outermost primary feathers on each side (to retain balance in the air) and wait until the replacement feathers are about one-third grown before shedding the next outermost, and so on. Others always start with the innermost primary feathers and work outward. Yet other species begin in the middle and work outward on both weeks while the replacement feathers grow.

(20)

11. The passage mainly discusses how
(A) birds prepare for breeding
(B) bird feathers differ from species
(C) birds shed and replace their feathers
(D) birds are affected by seasonal changes

12. The word “Notwithstanding” in line 2 is closest in meaning to
(A) despite (B) because of (C) instead of (D) regarding

13. The word “intricate” in line 2 is closest in meaning to
(A) regular (B) complex (C) interesting (D) important

14. The word “random” in line 12 is closest in meaning to
(A) unfortunate (B) unusual (C) unobservable (D) unpredictable

15. The word “optimal” in line 13 is closest in meaning to
(A) slow (B) frequent (C) best (D) early

16. Which of the following is NOT mentioned as a reason that songbirds molt in the late summer?
(A) Fewer predators are in the woods.
(B) The weathers is still warm.
(C) The songbirds have finished breeding.
(D) Food is still available.

17. Some birds that are molting maintain balance during flight by
(A) constantly preening and caring for their remaining feathers
(B) dropping flight feathers on both sides at the same time
(C) adjusting the angle of their flight to compensate for lost feathers
(D) only losing one-third of their feathers

18. The word “Others” in line 21 refers to
(A) ducks (B) sides (C) species (D) flight feathers

19. The author discusses ducks in order to provide an example of birds that
(A) grow replacement feathers that are very long
(B) shed all their wing feathers at one time
(C) keep their innermost feathers
(D) shed their outermost feathers first

20. It can inferred from the discussion about ducks that the molting of their flight feathers takes.
(A) a year (B) a season (C) several months (D) a few weeks

Question 21-30

The Harlem Renaissance, a movement of the 1920's, marked the twentieth century's first period of intense activity by African Americans in the field of literature, art, and music in the United States. The philosophy of the movement combined realism, ethnic consciousness, and Americanism. Encouraged by the example of certain Americans of European descent such as Thomas Eakins, Robert Henri, and George Luks, who had included persons of African descent in their paintings as serious studies rather than as trivial or sentimental stereotypes, African American artists of this period set about creating a new portrayal of themselves and their lives in the United States. As they began to strive for social and cultural independence. Their attitudes toward themselves changed, and, to some extent, other segments of American society began to change their attitudes toward them. Thus, thought the Harlem Renaissance was a short-lived movement, its impact on American art and culture continues to the present.

The district in New York City know as Harlem was the capital of the movement. In 1925 an issue of Survey Graphic magazine devoted exclusively to Harlem and edited by philosopher Alain Locke became the manifesto of the African American artistic movement. Locke strongly suggested that individuals, while accepting their Americanism, take pride in their African ancestral arts and urged artists to look to Africa for substance and inspiration. Far from advocating a withdrawal from American culture, as did some of his contemporaries, Locke recommended a cultural pluralism through which artists could enrich the culture of America. African Americans were urged by Locke to be collaborators and participators with other Americans in art, literature, and music; and at the same time to preserve, enhance, and promote their own cultural heritage.

Artists and intellectuals from many parts of the United States and the Caribbean had been attracted to Harlem by the pulse and beat of its unique and dynamic culture. From this unity created by the convergence of artists from various social and geographical backgrounds came a new spirit, which, particularly in densely populated Harlem, was to result in greater group awareness and self-determination. African American graphic artists took their place beside the poets and writers of the Harlem Renaissance and carried on efforts to increase and promote the visual arts.

21. What does the passage mainly discuss?

(A) African American paintings in the 1920's
(B) An arts movement of the 1920's
(C) The influence of Alain Locke on African American art
(D) Some ways in which African culture inspired American literature, art and music

22. According to the passage, Tomas Eakins, Robert Henri, and George Luks were important because of

(A) the philosophical contributions they made to the Harlem Renaissance
(B) their development of a new style of African American art
(C) they way in which they depicted African Americans in their paintings
(D) their independence from European artistic traditions

23. The word "them" in line 11 refers to

(A) Americans of European descent
(B) paintings
(C) African American artists
(D) attitudes

24. According to the passage, African American artists of the 1920's differed from earlier African American artists in terms of their feelings about

(A) themselves (B) other artists
(C) their impact on American art (D) stereotypes

25. The word “urged” in line 17 is closest is meaning to
(A) prepared (B) defined (C) permitted (D) encouraged

26. Alain Locke believed all of the following to be important to the African American artistic movement EXCEPT
(A) pride in African art (B) cultural pluralism
(C) collaboration with other artists (D) withdrawal from American culture

27. In mentioning “the pulse and beat” (line24) of Harlem during the 1920’s, the author is characterizing the district as one that
(A) depended greatly on its interaction with other parts of the city
(B) grew economically in a short period of time
(C) was an exciting place to be
(D) was in danger of losing population

28. The word “convergence” in line 25 is closest in meaning to
(A) gathering (B) promotion (C) expression (D) influence

29. According to the passage, all of the following were true of Harlem in the 1920’s EXCEPT:
(A) Some Caribbean artists and intellectuals lived there.
(B) It attracted people from various regions of United States.
(C) It was one of the most expensive neighborhoods in New York City.
(D) It was a unique cultural center.

30. The phrase “carried on” in line 29 is closest in meaning to
(A) continued (B) praised (C) transformed (D) connected

Questions 31-40

Ethology is concerned with the study of adaptive, or survival, value of behavior and its Evolutionary history. Ethological theory began to be applied to research on children in the 1960’s but has become even more influential today. The origins of ethology can be traced
Line to the work of Darwin. Its modern foundations were laid by two European zoologists,
(5) Konrad Lorenz and Niko Tinbergen.

Watching the behaviors diverse animal species in their natural habitats, Lorenz, and Tinbergen observed behavior patterns that promote survival. The most well-known of these *is imprinting,* the early following behavior of certain baby birds that ensures that the young will stay close to their mother and be fed and protected from danger. Imprinting takes place
(10) during an early, restricted time period of development. If the mother goose is not present during this time, but an object resembling her in important features is, young goslings may imprint on it instead.

Observations of imprinting led to major concept that has been applied in child Development” the *critical period.* It refers to a limited times span during which the child is
(15) biologically prepared to acquire certain adaptive behaviors but needs the support of suitably stimulating environment. Many researchers have conducted studies to find out whether complex cognitive and social behaviors must be learned during restricted time periods. for example, if children are deprived of adequate food or physical and social stimulation during the early years of life, will their intelligence be permanently impaired? If language
(20) is not mastered during the preschool years, is the child’s capacity to acquire it reduced?

Inspired by observations of imprinting, in 1969 the British psychoanalyst John Bowlby applied ethological theory to the understanding of the relationship between an infant and its parents. He argued that attachment behaviors of babies, such as smiling, babbling, grasping, and crying, are built-in social signals that encourage the parents to approach, care for, and interact with the baby. By keeping a parent near, these behaviors help ensure that the baby will be fed, protected from danger, and provided with the stimulation and affection necessary for healthy growth. The development of attachment in human infants is a lengthy process involving changes in psychological structures that lead to a deep affectional tie between parent and baby.

31. What was Darwin's contribution to ethology?
(A) Darwin improved on the original principles of ethology.
(B) Darwin was the professor who taught Lorenz and Tinbergen.
(C) Darwin's work provided the basis for ethology.
(D) Darwin was the first person to apply ethological theory to children.

32. The word "diverse" in line 6 is closest in meaning to
(A) small (B) varied (C) wild (D) particular

33. The word "ensures" in line 8 is closest in meaning to
(A) guarantees (B) proves (C) teaches (D) assumes

34. According to the passage, if a mother goose is not present during the time period when imprinting takes place, which of the following will most likely occur?
(A) The gosling will not imprint on any object.
(B) The gosling may not find a mate when it matures.
(C) The mother will later imprint on the gosling.
(D) The gosling may imprint on another object.

35. The word "it" in line 12 refers to
(A) development (B) goose (C) time (D) object

36. The word "suitably" in line 15 is closest in meaning to
(A) willingly (B) moderately (C) appropriately (D) emotionally

37. The author mentions all of the following as attachment behaviors of human infants EXCEPT
(A) grasping (B) crying (C) eating (D) smiling

38. According to the passage, attachment behaviors of infants are intended to
(A) get the physical, emotional and social needs of the infant met
(B) allow the infant to become imprinted on objects that resemble the parent
(C) provide the infant with a means of self-stimulation
(D) prepare the infant to cope with separation

39. The phrase "affectional tie" in line 29 is closest in meaning to
(A) cognitive development (B) emotional attachment
(C) psychological need (D) behavioral change

40. It can be inferred from the passage that ethological theory assumes that
(A) to learn about human behavior only human subjects should be studied
(B) failure to imprint has no influence on intelligence
(C) the notion of critical periods applies only to animals
(D) there are similarities between animal and human behavior

Questions 41-50

There are only a few clues in the rock record about climate in the Proterozoic con. Much of our information about climate in the more recent periods of geologic history comes from the fossil record, because we have a reasonably good understanding of
Line the types of environment in which many fossil organisms flourished. The scarce fossils
(5) of the Proterozoic, mostly single-celled bacteria, provide little evidence in this regard. However, the rocks themselves do include the earliest evidence for glaciation, probably a global ice age.

The inference that some types of sedimentary rocks are the result of glacial activity is based on the principle of uniformitarianism, which posits that natural processes now
(10) at work on and within the Earth operated in the same manner in the distant past. The deposits associated with present-day glaciers have been well studied, and some of their characteristics are quite distinctive. In 2.3-billion-year-old rocks in Canada near Lake Huron (dating from the early part of the Proterozoic age), there are thin laminae of fine-grained sediments that resemble varves, the annual layers of sediment deposited in
(15) glacial lakes. Typically, present-day varves show two-layered annual cycle, one layer corresponding to the rapid ice melting and sediment transport of the summer season, and the other, finer-grained, layer corresponding to slower winter deposition. Although it is not easy to discern such details in the Proterozoic examples, they are almost certainly glacial varves. These fine-grained, layered sediments even contain occasional large
(20) pebbles or “dropstones,” a characteristic feature of glacial environments where coarse material is sometimes carried on floating ice and dropped far from its source, into otherwise very fine grained sediment. Glacial sediments of about the same age as those in Canada have been found in other parts of North America and in Africa, India, and Europe. This indicates that the glaciation was global, and that for a period of time in
(25) the early Proterozoic the Earth was gripped in an ice age.

Following the early Proterozoic glaciation, however, the climate appears to have been fairly benign for a very long time. There is no evidence for glaciation for the next 1.5 billion years or so. Then, suddenly, the rock record indicates a series of glacial episodes between about 850 and 600 million year ago, near the end of the Proterozoic con.

41. Which of the following does the passage mainly discuss?

(A) How patterns in rock layers have been used to construct theories about the climate of the Proterozoic age
(B) What some rare fossils indicate about glacial conditions during the late Proterozoic age
(C) The varying characteristics of Proterozoic glacial varves in different parts of the world
(D) The number of glacial episodes that the Earth has experienced since the Proterozoic age

42. According to the passage, the fossil record of the Proterozoic con is

(A) highly regarded because it preserves the remains of many kinds of organisms
(B) less informative than the fossil record of more recent periods
(C) very difficult to interpret due to damage from bacteria
(D) more useful to researchers than other aspects of the rock record

43. The word “scarce” in line 4 is closest in meaning to

(A) ancient (B) tiny (C) available (D) rare

44. It can be inferred from the passage that the principle of uniformitarianism indicates that

(A) similar conditions produce similar rock formations
(B) rock layers in a given region remain undisturbed over time
(C) different kinds of sedimentary rocks may
(D) each continent has its own distinctive pattern of sediment layers

45. The word “resemble” in line 14 is closest in meaning to

(A) result from (B) penetrate
(C) look like (D) replace have similar origins

46. According to the passage, the layers in varves are primarily formed by

(A) fossilized bacteria
(B) pieces of ancient dropstones
(C) a combination of ancient and recent sediments
(D) annual cycles of sediment transport and deposition

47. The phrase “the other” in line 17 refers to another

(A) annual cycle (B) glacial lake
(C) layer of sediment (D) season

48. According to the passage, the presence of dropstones indicates that

(A) the glacial environment has been unusually server
(B) the fine-grained sediment has built up very slowly
(C) there has been a global ice age
(D) coarse rock material has been carried great distances

49. Why does the author mention Canada, North America, Africa, India, and Europe in lines 23-24?

(A) To demonstrate the global spread of dropstones
(B) To explain the principles of varve formation
(C) To provide evidence for the theory that there was a global ice age in the early Proterozoic eon
(D) To illustrate the varied climatic changes of the Proterozoic con in different parts of the globe

50. Which of the following terms is defined in the passage?

(A) fossil record (line 3) (B) laminae (line 13)
(C) varves (line14) (D) glacial episodes (line 29)

PRACTICE TEST 12
August 2001

Questions 1-9

Glass fibers have a long history. The Egyptians made coarse fibers by 1600 B.C., and fibers survive as decorations on Egyptian pottery dating back to 1375 B c. During the Renaissance (fifteenth and sixteenth centuries A.D.), glassmakers from Venice used glass
Line fibers to decorate the surfaces of plain glass vessels. However, glassmakers guarded their
(5) secrets so carefully that no one wrote about glass fiber production until the early seventeenth century.

The eighteenth century brought the invention of "spun glass" fibers. Rene-Antoine de Reaumur, a French scientist, tried to make artificial feathers from glass. He made fibers by rotating a wheel through a pool of molten glass, pulling threads of glass where the hot
(10) thick liquid stuck to the wheel. His fibers were short and fragile, but he predicted that spun glass fibers as thin as spider silk would be flexible and could be woven into fabric. By the start of the nineteenth century, glassmakers learned how to make longer, stronger fibers by pulling them from molten glass with a hot glass tube. Inventors wound the cooling end of the thread around a yarn reel, then turned the reel rapidly to pull more fiber
(15) from the molten glass. Wandering tradespeople began to spin glass fibers at fairs, making decorations and ornaments as novelties for collectors, but this material was of little practical use; the fibers were brittle, ragged, and no longer than ten feet, the circumference of the largest reels. By the mid-1870's, however, the best glass fibers were finer than silk and could be woven into fabrics or assembled into imitation ostrich feathers to decorate
(20) hats. Cloth of white spun glass resembled silver; fibers drawn from yellow-orange glass looked golden.

Glass fibers were little more than a novelty until the 1930's, when their thermal and electrical insulating properties were appreciated and methods for producing continuous filaments were developed. In the modern manufacturing process, liquid glass is fed
(25) directly from a glass-melting furnace into a bushing, a receptacle pierced with hundreds of fine nozzles, from which the liquid issues in fine streams. As they solidify, the streams of glass are gathered into a single strand and wound onto a reel.

1. Which of the following aspects of glass fiber does the passage mainly discuss?
(A) The major developments in its production
(B) Its relationship with pottery making
(C) Important inventors in its long history
(D) The variety of its uses in modern industry

2. The word "coarse" in line 1 is closest in meaning to
(A) decorative (B) natural (C) crude (D) weak

3. Why was there nothing written about the making of Renaissance glass fibers until the seventeenth century?
(A) Glassmakers were unhappy with the quality of the fibers they could make.
(B) Glassmakers did not want to reveal the methods they used.
(C) Few people were interested in the Renaissance style of glass fibers.
(D) Production methods had been well known for a long time.

4. According to the passage, using a hot glass tube rather than a wheel to pull fibers from molten glass made the fibers

(A) quicker to cool
(B) harder to bend
(C) shorter and more easily broken
(D) longer and more durable

5. The phrase "this material" in line 16 refers to

(A) glass fibers
(B) decorations
(C) ornaments
(D) novelties for collectors

6. The word "brittle" in line 17 is closest in meaning to

(A) easily broken (B) roughly made (C) hairy (D) shiny

7. The production of glass fibers was improved in the nineteenth century by which of the following

(A) Adding silver to the molten glass
(B) Increasing the circumference of the glass tubes
(C) Putting silk thread in the center of the fibers
(D) Using yam reels

8. The word "appreciated" in line 23 is closest in meaning to

(A) experienced (B) recognized (C) explored (D) increased

9. Which of the following terms is defined in the passage?

(A) invention (line 7)
(B) circumference (line 17)
(C) manufacturing process (line 24)
(D) bushing (line25)

Questions 10-19

The most thoroughly studied cases of deception strategies employed by ground-nesting birds involve plovers, small birds that typically nest on beaches or in open fields, their nests merely scrapes in the sand or earth. Plovers also have an effective repertoire of tricks
Line for distracting potential nest predators from their exposed and defenseless eggs or chicks.
(5) The ever-watchful plover can detect a possible threat at a considerable distance. When she does, the nesting bird moves inconspicuously off the nest to a spot well away from eggs or chicks. At this point she may use one of several ploys. One technique involves first moving quietly toward an approaching animal and then setting off noisily through the grass or brush in a low, crouching run away from the nest, while emitting rodent like
(10) squeaks. The effect mimics a scurrying mouse or vole, and the behavior rivets the attention of the type of predators that would also be interested in eggs and chicks. Another deception begins with quiet movement to an exposed and visible location well away from the nest. Once there, the bird pretends to incubate a brood. When the predator approaches, the parent flees, leaving the false nest to be searched. The direction in which
(15) the plover "escapes" is such that if the predator chooses to follow, it will be led still further away from the true nest.

The plover's most famous stratagem is the broken-wing display, actually a continuum of injury-mimicking behaviors spanning the range from slight disability to near-complete helplessness. One or both wings are held in an abnormal position, suggesting injury. The
(20) bird appears to be attempting escape along an irregular route that indicates panic. In the most extreme version of the display, the bird flaps one wing in an apparent attempt to take to the air, flops over helplessly, struggles back to its feet, runs away a short distance, seemingly attempts once more to take off, flops over again as the "useless" wing fails to provide any lift, and so on. Few predators fail to pursue such obviously vulnerable prey. Needless to say, each short run between "flight attempts" is directed away from the nest.

10. What does the passage mainly discuss?
(A) The nest-building techniques of plovers
(B) How predators search for plovers
(C) The strategies used by plovers to deceive predators
(D) Why plovers are vulnerable to predators

11. The word "merely" in fine 3 is closest in meaning to
(A) often (B) only (C) usually (D) at first

12. Which of the following is mentioned in the passage about plovers?
(A) Their eggs and chicks are difficult to find.
(B) They are generally defenseless when away From their nests.
(C) They are slow to react in dangerous situations.
(D) Their nests are on the surface of the ground.

13. The word "emitting" in line 9 is closest in meaning to
(A) bringing (B) attracting (C) producing (D) minimizing

14. In the deception technique described in paragraph 2 the plover tries to
(A) stay close to her nest (B) attract the predator's attention
(C) warn other plovers of danger (D) frighten the approaching predator

15. The word "spanning" in line 18 is closest in meaning to
(A) covering (B) selecting (C) developing (D) explaining

16. According to paragraph 4, which of the following aspects of the plover's behavior gives the appearance that it is frightened?
(A) Abnormal body position (B) Irregular escape route
(C) Unnatural wing movement (D) Unusual amount of time away from the nest

17. The word "pursue" in line 24 is closest in meaning to
(A) catch (B) notice (C) defend (D) chase

18. According to the passage, a female plover utilizes all of the following deception techniques EXCEPT
(A) appearing to be injured (B) sounding like another animal
(C) pretending to search for prey (D) pretending to sit on her eggs

19. Which of the following best describes the organization of the passage?
(A) A description of the sequence of steps involved in plovers nest building
(B) A generalization about plover behavior followed by specific examples
(C) A comparison and contrast of the nesting behavior of plovers and other ground nesting birds
(D) A cause-and-effect analysis of the relationship between a prey and a predator

Questions 20-28

The interrelationship of science, technology, and industry is taken for granted today – summed up, not altogether accurately, as "research and development." Yet historically this widespread faith in the economic virtues of science is a relatively recent
Line phenomenon, dating back in the United States about 150 years, and in the Western world
(5) as a whole not over 300 years at most. Even in this current era of large scale, intensive research and development, the interrelationships involved in this process are frequently misunderstood. Until the coming of the Industrial Revolution, science and technology evolved for the most part independently of each other. Then as industrialization became increasingly complicated, the craft techniques of preindustrial society gradually gave way
(10) to a technology based on the systematic application of scientific knowledge and scientific methods. This changeover started slowly and progressed unevenly. Until late in the nineteenth century, only a few industries could use scientific techniques or cared about using them. The list expanded noticeably after 1870, but even then much of what passed for the application of science was "engineering science" rather than basic science.

(15) Nevertheless, by the middle of the nineteenth century, the rapid expansion of scientific knowledge and of public awareness-if not understanding-of it had created a belief that the advance of science would in some unspecified manner automatically generate economic benefits. The widespread and usually uncritical acceptance of this thesis led in turn to the assumption that the application of science to industrial purposes was a linear process, starting
(20) with fundamental science, then proceeding to applied science or technology, and through them to industrial use. This is probably the most common pattern, but it is not invariable. New areas of science have been opened up and fundamental discoveries made as a result of attempts to solve a specific technical or economic problem. Conversely, scientists who mainly do basic research also serve as consultants on projects that apply research in practical ways.

(25) In sum, the science-technology-industry relationship may flow in several different ways, and the particular channel it will follow depends on the individual situation. It may at times even be multidirectional.

20. What is the author's main purpose in the passage?

(A) To show how technology influenced basic science
(B) To describe the scientific base of nineteenth-century American industries
(C) To correct misunderstandings about the connections between science, technology, and industry
(D) To argue that basic science has no practical application

21. The word "altogether" in line 2 is closest in meaning to

(A) completely (B) realistically (C) individually (D) understandably

22. The word "intensive" in line 5 is closest in meaning to

(A) decreased (B) concentrated (C) creative (D) advanced

23. The "list" mentioned in line 13 refers to

(A) types of scientific knowledge
(B) changes brought by technology
(C) industries that used scientific techniques
(D) applications of engineering science

24. The understanding of research and development in the late nineteenth century is based on which of the following?

(A) Engineering science is not very important.
(B) Fundamental science naturally leads to economic benefits.

(C) The relationship between research and development should be criticized.
(D) Industrial needs should determine what areas fundamental science focuses on.

25. The word "it" in line 16 refers to
(A) understanding (B) public awareness
(C) scientific knowledge (D) expansion

26. The word "assumption" in line 19 is closest in meaning to
(A) regulation (B) belief (C) contract (D) confusion

27. Why does the author mention "consultants" in line 24 ?
(A) To show how new areas of science have given rise to new professions
(B) To distinguish between scientists who work in industry and those who do not
(C) To explain the ways in which scientists find financial support for their work
(D) To show how scientists who work in basic research contribute to applied science

28. Which of the following statements does the passage support?
(A) The development of science and of industry is now interdependent.
(B) Basic scientific research cannot generate practical applications.
(C) Industries should spend less money on research and development.
(D) Science and technology are becoming more separate.

Questions 29-39

The economic depression in the late-nineteenth-century United States contributed significantly to a growing movement in literature toward realism and naturalism. After the 1870' s, a number of important authors began to reject the romanticism that had prevailed
Line immediately following the Civil War of 1861-1865 and turned instead to realism.
(5) determined to portray life as it was, with fidelity to real life and accurate representation without idealization, they studied local dialects, wrote stories which focused on life in specific regions of the country, and emphasized the "true" relationships between people. In doing so, they reflected broader trends in the society, such as industrialization, evolutionary theory which emphasized the effect of the environment on humans, and the
(10) influence of science.

Realists such as Joel Chandler Harris and Ellen Glasgow depicted life in the South; Hamlin Garland described life on the Great Plains; and Sarah One Jewett wrote about everyday life in rural New England. Another realist, Bret Harte, achieved fame with stories that portrayed local life in the California mining camps.

(15) Samuel Clemens, who adopted the pen name Mark Twain, became the country's most outstanding realist author, observing life around him with a humorous and skeptical eye. In his stories and novels, Twain drew on his own experiences and used dialect and common speech instead of literary language, touching off a major change in American prose style. Other writers became impatient even with realism. Pushing evolutionary theory to its
(20) limits, they wrote of a world in which a cruel and merciless environment determined human fate. These writers, called naturalists, often focused on economic hardship, studying people struggling with poverty, and other aspects of urban and industrial life. Naturalists brought to their writing a passion for direct and honest experience.

Theodore Dreiser, the foremost naturalist writer, in novels such as Sister Carrie, grimly
(25) portrayed a dark world in which human beings were tossed about by forces beyond their understanding or control. Dreiser thought that writers should tell the truth about human

affairs, not fabricate romance, and Sister Carrie, he said, was "not intended as a piece of literary craftsmanship, but was a picture of conditions."

29. Which aspect of late-nineteenth-century United States literature does the passage mainly discuss?
(A) The influence of science on literature
(B) The importance of dialects for realist writers
(C) The emergence of realism and naturalism
(D) The effects of industrialization on romanticism

30. The word "prevailed" in line 3 is closest in meaning to
(A) dominated (B) transformed (C) entered (D) generalized

31. The word "they" in line 8 refers to
(A) authors (B) dialects (C) stories (D) relationships

32. According to the passage, a highly significant factor in the development of realist and naturalist literature was
(A) the Civil War
(B) a recognition that romanticism was unpopular
(C) an increased interest in the study of common speech
(D) an economic depression

33. Realist writers took an interest in all of the following EXCEPT
(A) human relationships (B) characteristics of different regions
(C) the idealization of life (D) social and historical theories

34. The word "depicted" in line 11 is closest in meaning to
(A) emphasized (B) described (C) criticized (D) classified

35. Why does the author mention mining camps in line 14?
(A) To contrast the themes of realist and naturalist writers
(B) To illustrate how Bret Harte differed from other authors
(C) As an example of a topic taken up by realist writers
(D) As an example of how setting can influence literary style

36. Which of the following wrote about life in rural New England?
(A) Ellen Glasgow (B) Sarah Orne Jewett
(C) Hamlin Garland (D) Mark Twain

37. Mark Twain is considered an important literary figure because he
(A) was the first realist writer in the United States
(B) rejected romanticism as a literary approach
(C) wrote humorous stories and novels
(D) influenced American prose style through his use of common speech

38. The word "foremost" in line 24 is closest in meaning to
(A) most difficult (B) interesting (C) most focused (D) leading

39. Which of the following statements about Theodore Dreiser is supported by the passage?
(A) He mainly wrote about historical subjects such as the Civil War.
(B) His novels often contained elements of humor.
(C) He viewed himself more as a social commentator than as a literary artist.
(D) He believed writers should emphasize the positive aspects of life.

Questions 40-50

In 1900 the United States had only three cities with more than a million residents- New York, Chicago, and Philadelphia. By 1930, it had ten giant metropolises. The newer ones experienced remarkable growth, which reflected basic changes in the economy.
Line The population of Los Angeles (114,000 in 1900) rose spectacularly in the early
(5) decades of the twentieth century, increasing a dramatic 1,400 percent from 1900 to 1930.

A number of circumstances contributed to the meteoric rise of Los Angeles. The agricultural potential of the area was enormous if water for irrigation could be found, and the city founders had the vision and dating to obtain it by constructing a 225-mile aqueduct, completed in 1913, to tap the water of the Owens River. The city had a superb
(10) natural harbor, as well as excellent rail connections. The climate made it possible to shoot motion pictures year-round; hence Hollywood. Hollywood not only supplied jobs; it disseminated an image of the good life in Southern California on screens all across the nation. The most important single industry powering the growth of Los Angeles, however, was directly linked to the automobile. The demand for petroleum to fuel gasoline engines
(15) led to the opening of the Southern California oil fields, and made Los Angeles North America's greatest refining center.

Los Angeles was a product of the auto age in another sense as well: its distinctive spatial organization depended on widespread private ownership of automobiles. Los Angeles was a decentralized metropolis, sprawling across the desert landscape over an
(20) area of 400 square miles. It was a city without a real center. The downtown business district did not grow apace with the city as a whole, and the rapid transit system designed to link the center with outlying areas withered away from disuse. Approximately 800,000 cars were registered in Los Angeles County in 1930, one per 2.7 residents. Some visitors from the east coast were dismayed at the endless urban sprawl and dismissed Los
(25) Angeles as a mere collection of suburbs in search of a city. But the freedom and mobility of a city built on wheels attracted floods of migrants to the city.

40. What is the passage mainly about?
(A) The growth of cities in the United States in the early 1900's
(B) The development of the Southern California oil fields
(C) Factors contributing to the growth of Los Angeles
(D) Industry and city planning in Los Angeles

41. The author characterizes the growth of new large cities in the United States after 1900 as resulting primarily from
(A) new economic conditions
(B) images of cities shown in movies
(C) new agricultural techniques
(D) a large migrant population

42. The word "meteoric" in line 6 is closest in meaning to
(A) rapid
(B) famous
(C) controversial
(D) methodical

43. The word "it" in line 8 refers to
(A) aqueduct
(B) vision
(C) water
(D) agricultural potential

44. According to the passage, the most important factor in the development of agriculture around Los Angeles was the

(A) influx of "new residents to agricultural areas near the city
(B) construction of an aqueduct
(C) expansion of transportation facilities
(D) development of new connections to the city's natural harbor

45. According to the passage, the initial success of Hollywood' s motion picture industry was due largely to the
(A) availability of many skilled workers
(B) beauty of the countryside
(C) region's reputation for luxurious lifestyles
(D) region's climate and good weather

46. It can be inferred from the passage that in 1930 the greatest number of people in the Los Angeles area were employed in
(A) farming
(B) oil refining
(C) automobile manufacturing
(D) the motion picture industry

47. According to the passage, the Southern California oil fields were initially exploited due to
(A) the fuel requirements of Los Angeles' rail system
(B) an increase in the use of gasoline engines in North America
(C) a desire to put unproductive desert land to good use
(D) innovative planning on the part of the city founders

48. The phrase "apace with" in line 21 is closest in meaning to
(A) anew with
(B) apart from
(C) as fast as
(D) at the middle of

49. It can be inferred from the passage that the spatial organization of Los Angeles contributed to the relative decline there of
(A) public transportation
(B) industrial areas
(C) suburban neighborhoods
(D) oil fields

50. The visitors from the east coast mentioned in the passage thought that Los Angeles
(A) was not accurately portrayed by Hollywood images
(B) lacked good suburban areas in which to live
(C) had an excessively large population
(D) was not really a single city

PRACTICE TEST 13
October 2001

Question 1-9

Composers today use a wider variety of sounds than ever before, including many that were once considered undesirable noises. Composer Edgard Varese (1883-1965) called thus the "liberation of sound...the right to make music with any and all sounds."

Line Electronic music, for example – made with the aid of computers, synthesizers, and
(5) electronic instruments – may include sounds that in the past would not have been considered musical. Environmental sounds, such as thunder, and electronically generated hisses and blips can be recorded, manipulated, and then incorporated into a musical composition. But composers also draw novel sounds from voices and nonelectronic instruments. Singers may be asked to scream, laugh, groan, sneeze, or to sing phonetic
(10) sounds rather than words. Wind and string players may lap or scrape their instruments. A brass or woodwind player may hum while playing, to produce two pitches at once; a pianist may reach inside the piano to pluck a string and then run a metal blade along it. In the music of the Western world, the greatest expansion and experimentation have involved percussion instruments, which outnumber strings and winds in many recent compositions.
(15) Traditional percussion instruments are struck with new types of beaters; and instruments that used to be couriered unconventional in Western music – tom-toms, bongos, slapsticks, maracas – are widely used.

In the search for novel sounds, increased use has been made in Western music of Microtones. Non-Western music typically divides and interval between two pitches more
(20) finely than Western music does, thereby producing a greater number of distinct tones, or micro tones, within the same interval. Composers such as Krzysztof Penderecki create sound that borders on electronic noise through tone clusters – closely spaced tones played together and heard as a mass, block, or band of sound. The directional aspect of sound has taken on new importance as well Loudspeakers or groups of instruments may be placed
(25) at opposite ends of the stage, in the balcony, or at the back and sides of the auditorium. Because standard music notation makes no provision for many of these innovations, recent music scores may contain graphlike diagrams, new note shapes and symbols, and novel ways of arranging notation on the page.

1. What does the passage mainly discuss?

(A) The use of nontraditional sounds in contemporary music
(B) How sounds are produced electronically
(C) How standard musical notation has beer, adapted for nontraditional sounds
(D) Several composers who have experimented with the electronic production of sound

2. The word "wider" in one 1 is closest in meaning to

(A) more impressive
(B) more distinctive
(C) more controversial
(D) more extensive

3. The passage suggests that Edgard Varese is an example of a composer who

(A) criticized electronic music as too noiselike
(B) modified sonic of the electronic instruments he used in his music
(C) believed that any sound could be used in music
(D) wrote music with environmental themes

4. The word "it" in line 12 refers to

(A) piano
(B)string
(C) blade
(D) music

5. According to the passage, which of the following types of instruments has played a role in much of the innovation in Western music?

(A) String (B) Percussion (C) Woodwind (D) Brass

6. The word "thereby" in line 20 is closest in meaning to

(A) in return for (B) in spite of
(C) by the way (D) by that means

7. According to the passage, Krzysztof Penderecki is known for which of the following practices?

(A) Using tones that are clumped together
(B) Combining traditional and nontraditional instruments
(C) Seating musicians in unusual areas of an auditorium
(D) Playing Western music for non-Western audiences

8. According to the passage, which of the following would be considered traditional elements of Western music?

(A) Microtones (B) Tom-toms and bongos
(C) Pianos (D) Hisses

9. In paragraph 3, the author mentions diagrams as an example of a new way to

(A) chart the history of innovation in musical notation
(B) explain the logic of standard musical notation
(C) design and develop electronic instruments
(D) indicate how particular sounds should be produced

Questions 10-19

What unusual or unique biological train led to the remarkable diversification and unchallenged success of the ants for ever 50 million years? The answer appears to be that they were the first group of predatory eusocial insects that both lived and foraged
Line primarily in the soil and in rotting vegetation on the ground. Eusocial refers to a form
(5) of insect society characterized by specialization of tasks and cooperative care of the young; it is rare among insects. Richly organized colonies of the land made possible by eusociality enjoy several key advantages over solitary individuals.

Under most circumstances groups of workers arc better able to forage for food and defend the nest, because they can switch from individual to group response and back
(10) again swiftly and according to need. When a food object or nest intruder is too large for one individual to handle, nestmates can be quickly assembled by alarm or recruitment signals. Equally important is the fact that the execution of multiple-step tasks is accomplished in a series-parallel sequence. That is, individual ants can specialize in particular steps, moving from one object (such as a larva to be fed) to another (a second
(15) larva to be fed). They do not need to carry each task to completion from start to finish – . for example, to check the larva first, then collect the food, then feed the larva. Hence, if each link in the chain has many workers in attendance, a sense directed at any particular object is less likely to fail. Moreover, ants specializing in particular labor categories typically constitute a caste specialized by age or body form or both. There has bees some
(20) documentation of the superiority in performance and net energetic yield of various castes for their modal tasks, although careful experimental studies are still relatively few.
What makes ants unusual in the company of eusocial insects is the fact that they are the only eusocial predators (predators are animals that capture and feed on other animals) occupying the soil and ground litter. The eusocial termites live in the same places as ants and also have wingless workers, but they feed almost exclusively on dead vegetation.

10. Which of the following questions does the passage primarily answer?
(A) How do individual ants adapt to specialized tasks?
(B) What are the differences between social and solitary insects?
(C) Why are ants predators?
(D) Why have ants been able to thrive for such a long time?

11. The word "unique" in line 1 is closest in meaning to
(A) inherited (B) habitual (C) singular (D) natural

12. The word "rotting" in line 4 is closest in meaning to
(A) decaying (B) collected (C) expanding (D) cultivated

13. The word "key" in line 7 is closest in meaning to
(A) uncommon (B) important (C) incidental (D) temporary

14. According to the passage, one thing eusocial insects can do is rapidly switch from
(A) one type of food consumption to another (B) one environment to another
(C) a solitary task to a group task (D) a defensive to an offensive stance

15. The task of feeding larvae is mentioned in the passage to demonstrate
(A) the advantages of specialization
(B) the type of food that larvae are fed
(C) the ways ant colonies train their young for adult tasks
(D) the different stages of ant development

16. The author uses the word "Hence" in line 16 to indicate
(A) a logical conclusion (B) the next step in a sense of steps
(C) a reason for further study (D) the relationship among ants

17. All of the following terms art defined in the passage EXCEPT
(A) eusocial (line 3) (B) series-parallel sequence (line 13)
(C) caste (line 19) (D) predators (line 23)

18. The word "they" in line 25 refers to
(A) termites (B) ants (C) places (D) predators

19. It can be inferred from the passage that one main difference between termites and ants is that termites
(A) live above ground (B) are eusocial
(C) protect their nests (D) eat almost no animal substances

Questions 20-29

Glaciers are large masses of ice on land that show evidence of past or present movement. They grow by the gradual transformation of snow into glacier ice.

A fresh snowfall is a fluffy mass of loosely packed snowflakes, small delicate ice crystals grown in the atmosphere. As the snow ages on the ground for weeks or months, the crystals shrink and become more compact, and the whole mass becomes squeezed together into a more dense form, granular snow. As new snow falls and buries the older snow, the layers of granular snow further compact to form firm, a much denser kind of snow, usually a year or more old, which has little pore space. Further burial and slow cementation – a process by which crystals become bound together in a mosaic of intergrown ice crystals – finally produce solid glacial ice. In this process of recrystallization, the growth of new crystals at the expense of old ones, the percentage of air is reduced from about 90 percent for snowflakes to less than 20 percent for glacier ice. The whole process may take as little as a few years, but more likely ten or twenty years or longer. The snow is usually many meters deep by the time the lower layers art convened

(15) into ice.

In cold glaciers those formed in the coldest regions of the Earth, the entire mass of ice is at temperatures below the melting point and no free water exists. In temperate glaciers, the ice is at the melting point at every pressure level within the glacier, and free water is present as small drops or as larger accumulations in tunnels within or beneath the ice.

(20) Formation of a glacier is complete when ice has accumulated to a thickness (and thus weight) sufficient to make it move slowly under pressure, in much the same way that solid rock deep within the Earth can change shape without breaking. Once that point is reached, the ice flows downhill, either as a tongue of ice filling a valley or as thick ice cap that flows out in directions from the highest central area where the most snow accumulates. The up down leads to the eventual melting of ice.

20. Which of the following does the passage mainly discuss?

(A) The effect of glaciers on climate
(B) Damage from glaciers
(C) Glacier formation
(D) The location of glaciers

21. Which of the following will cause density within the glacier to increase?

(A) Increased water and air content
(B) Pressure from the weight of new snow
(C) Long periods of darkness and temperature variations
(D) Movement of the glacier

22. The word "bound" in line 9 is closest in meaning to

(A) covered (B) chosen (C) planned (D) held

23. Which of the following will be lost is a glacier forms?

(A) Air (B) Pressure (C) Weight (D) Rocks

24. According to the passage, which of the following is the LEAST amount of time necessary for glacial ice to form?

(A) Several months
(B) Several years
(C) At least fifty years
(D) A century

25. The word "converted" in line 14 is closest in meaning to

(A) changed (B) delayed (C) promoted (D) dissolved

26. What is the purpose of the material in paragraph three (lines 16-19)

(A) To define two types of glaciers
(B) To contrast glacier ice with non-glacier ice
(C) To present theories of glacier formation
(D) To discuss the similarities between glacial types

27. In temperate glaciers, where is water found?

(A) Only near the surface
(B) In pools a: various depths
(C) In a thin layer below the firm
(D) In tunnels

28. The word "it" in line 21 refers to

(A) formation (B) ice (C) thickness (D) weight

29. It can be inferred from the last paragraph that a glacier

(A) can revert to a fluffy mass
(B) maintains the same shape throughout the glacial process
(C) is too cold to be thoroughly studied
(D) can contribute water to lakes, rivers, or oceans

Questions 30-39

The lack of printing regulations and the unenforceability of British copyright law in the American colonies made it possible for colonial printers occasionally to act as publishers. Although they rarely undertook major publishing project because it was
Line difficult to sell books as cheaply as they could be imported from Europe, printers in
(5) Philadelphia did publish work that required only small amounts of capital, paper, and type. Broadsides could be published with minimal financial risk. Consisting of only one sheet of paper and requiring small amounts of type, broadsides involved lower investments of capital than longer works. Furthermore, the broadside format lent itself to subjects of high, if temporary, interest, enabling them to meet with ready sale. If the broadside printer
(10) miscalculated, however, and produced a sheet that did not sell, it was not likely to be a major loss, and the printer would know this immediately, There would be no agonizing wait with large amounts of capital tied up, books gathering dust on the shelves, and creditors impatient for payment

In addition to broadsides, books and pamphlets, consisting mainly of political tracts,
(15) catechisms, primers, and chapbooks were relatively inexpensive to print and to buy. Chapbook were pamphlet-sized books, usually containing popular tales, ballads, poems, short plays, and jokes, small, both in formal and number of pages, they were generally bound simply, in boards (a form of cardboard) or merely stitched in paper wrappers (a sewn antecedent of modern-day paperbacks). Pamphlets and chapbooks did not require
(20) fine paper or a great deal of type to produce they could thus be printed in large, cost-effective editions and sold cheaply.

By far, the most appealing publishing investments were to be found in small books that had proven to be steady sellers, providing a reasonably reliable source of income for the publisher. They would not, by nature, be highly topical or political, as such publications
(25) would prove of fleeting interest. Almanacs, annual publications that contained information on astronomy and weather patterns arranged according to the days, week, and months of a given year, provided the perfect steady seller because their information pertained to the locale in which they would be used

30. Which aspect of colonial printing does the passage mainly discuss?

(A) Laws governing the printing industry.
(B) Competition among printers
(C) Types of publications produced
(D) Advances in printing technology

31. According to the passage, why did colonial printers avoid major publishing projects?

(A) Few colonial printers owned printing machinery that was large enough to handle major projects.
(B) There was inadequate shipping available in the colonies.
(C) Colonial printers could not sell their work for a competitive price.
(D) Colonial printers did not have the skills necessary to undertake large publishing projects.

32. Broadsides could be published with little risk to colonial printers because they

(A) required a small financial investment and sold quickly
(B) were in great demand in European markets
(C) were more popular with colonists than chapbooks and pamphlets
(D) generally dealt with topics of long-term interest to many colonists

33. The word "they" in line 17 refers to

(A) chapbooks (B) tales (C) jokes (D) pages

34. The word "antecedent" in line 19 is closest in meaning to

(A) predecessor (B) format (C) imitation (D) component

35. Chapbooks produced in colonial America were characterized by
(A) fine paper (B) cardboard covers
(C) elaborate decoration (D) a large number of pages

36. The word "appealing" in line 22 is closest in meaning to
(A) dependable (B) respectable (C) enduring (D) attractive

37. What were "steady sellers" (line 23) ?
(A) Printers whose incomes were quite large
(B) People who traveled from town to town selling Books and pamphlets
(C) Investors who provided reliable financial Support for new printers
(D) Publications whose sales were usually consistent from year to year

38. The word "locale" in line 28 is closest in meaning to
(A) topic (B) season (C) interest (D) place

39. All of the following are defined in the passage EXCEPT
(A) "Broadsides" (line 6) (B) "catechisms" (line 15)
(C) "chapbooks" (line 16) (D) "Almanacs" (line 25)

Questions 40-50

Industrialization came to the United State after 1790 as North American entrepreneurs increased productivity by reorganizing work and building factories. These innovations in manufacturing boosted output and living standards to an unprecedented extent; the
Line average per capita wealth increased by nearly 1 percent per year – 30 percent over
(5) the course of a generation. Goods that had once been luxury items became part of everyday life.

The impressive gain in output stemmed primarily from the way in which workers made goods, since the 1790's, North American entrepreneurs – even without technological improvements – had broadened the scope of the outwork system that mace manufacturing
(10) more efficient by distributing materials to a succession of workers who each performed a single step of the production process. For example, during the 1820's and 1830's the shoe industry greatly expanded the scale and extend of me outwork system. Tens of thousands of rural women, paid according to the amount they produced, fabricated the "uppers" of shoes, which were bound to the soles by wage-earning journeymen shoemakers in dozens
(15) of Massachusetts towns, whereas previously journeymen would have made the enduring shoe. This system of production made the employer a powerful "shoe boss" and eroded workers' control over the pace and conditions of labor. However, it also dramatically increased the output of shoes while cutting their price.

For tasks that were not suited to the outwork system, entrepreneurs created an even
(20) more important new organization, the modem factory, which used power-driven machines and assembly-line techniques to turn out large quantities of well-made goods. As early as 1782 the prolific Delaware inventor Oliver Evans had built a highly automated, laborsaving flour mill driven by water power. His machinery lifted the grain to the top of the mill, cleaned it as it fell into containers known as hoppers, ground the grain into flour,
(25) and then conveyed the flour back to the top of the mill to allow it to cool as it descended into barrels. Subsequently, manufacturers made use of new improved stationary steam engines to power their mills. This new technology enabled them to build factories in the

nation's largest cities, taking advantage of urban concentrations of inexpensive labor, good transportation networks, and eager customers.

40. What is the passage mainly about?

(A)The difficulties of industrialization in North America
(B)The influence of changes in manufacturing on the growth of urban centers
(C) The rapid speed of industrialization in North America
(D) Improved ways of organizing the manufacturing of goods

41. The word "boosted" in line 3 is closest in meaning to

(A) ensured (B) raised (C) arranged (D) discouraged

42. The word "scope" in line 9 is closest in meaning to

(A) value (B) popularity (C) extent (D) diversity

43. The author mentions the shoe industry in the second paragraph to provide an example of how

(A) entrepreneurs increased output by using an extended outwork system
(B) entrepreneurs used technological improvements to increase output
(C) rural workers responded to "shoe bosses"
(D) changes in the outwork system improved the quality of shoes

44. All of the following are mentioned as effects of changes in the shoe industry during the 1820's and 1830's EXCEPT

(A) an increase in the worker's dependence on entrepreneurs
(B) an increase in the wages paid to journeymen shoemakers
(C) a decline in the workers ability to control the speed of production
(D) a decrease in the price of shoes

45. All of the following are true of the outwork system EXCEPT

(A) It involved stages of production.
(B) It was more efficient than the systems used before 1790.
(C) It made many employers less powerful than they had been before.
(D) It did not necessarily involve any technological improvements.

46. The word "prolific" in line 22 is closest in meaning to

(A) efficient (B) productive (C) self-employed (D) progressive

47. According to the passage, how did later mills differ from the mills differ from the mill built by Oliver Evans?

(A) They were located away from large cities.
(B) They used new technology to produce power.
(C)They did not allow flour to cool before it was placed in Barrels.
(D)They combined technology with the outwork system.

48. The word "it" in line 24 refers to

(A) water power (B) machinery (C) grain (D) mill

49. The passage mentions which of the following as a result of improvements in factory machinery?

(A) It become easier for factory' owners to find workers and customers.
(B) Manufacturers had to employ more highly skilled workers.
(C) The amount of power required for factories operate was reduced.
(D) Factories could operate more than one engine at a time.

50. The word "eager" in line 29 is closest in meaning to

(A) wealthy (B) knowledgeable (C) regular (D) enthusiastic

PRACTICE TEST 14
January 2000

Questions 1-10

As Philadelphia grew from a small town into a city in the first half of the eighteenth century, it became an increasingly important marketing center for a vast and growing agricultural hinterland. Market days saw the crowded city even more crowded, as
Line farmers from within a radius of 24 or more kilometers brought their sheep, cows, pigs,
(5) vegetables, cider, and other products for direct sale to the townspeople. The High Street Market was continuously enlarged throughout the period until 1736, when it reached from Front Street to Third. By 1745 New Market was opened on Second Street between Pine and Cedar. The next year the Callowhill Market began operation.

Along with market days, the institution of twice-yearly fairs persisted in
(10) Philadelphia even after similar trading days had been discontinued in other colonial cities. The fairs provided a means of bringing handmade goods from outlying places to would-be buyers in the city. Linens and stockings from Germantown, for example, were popular items.

Auctions were another popular form of occasional trade. Because of the
(15) competition, retail merchants opposed these as well as the fairs. Although governmental attempts to eradicate fairs and auctions were less than successful, the ordinary course of economic development was on the merchants' side, as increasing business specialization became the order of the day. Export merchants became differentiated from their importing counterparts, and specialty shops began to appear in
(20) addition to general stores selling a variety of goods.

One of the reasons Philadelphia's merchants generally prospered was because the surrounding area was undergoing tremendous economic and demographic growth. They did their business, after all, in the capital city of the province. Not only did they cater to the governor and his circle, but citizens from all over the colony came to the
(25) capital for legislative sessions of the assembly and council and the meetings of the courts of justice.

1. What does the passage mainly discuss?
(A) Philadelphia's agriculture importance
(B) Philadelphia's development as a marketing center
(C) The sale of imported goods in Philadelphia
(D) The administration of the city of Philadelphia

2. It can be inferred from the passage that new markets opened in Philadelphia because
(A) they provided more modem facilities than older markets
(B) the High Street Market was forced to close
(C) existing markets were unable to serve the growing population
(D) farmers wanted markets that were closer to the farms.

3. The word "hinterland " in line 3 is closest in meaning to
(A) tradition (B) association (C) produce (D) region

4. The word "it" in line 6 refers to
(A) the crowded city (B) a radius
(C) the High Street Market (D) the period

5. The word "persisted" in line 9 is closest in meaning to
(A) returned (B) started (C) declined (D) continued

6. According to the passage, fairs in Philadelphia were held
(A) on the same day as market says (B) as often as possible
(C) a couple of times a year (D) whenever the government allowed it

7. It can be inferred that the author mentions "Linens and stockings" in line 12 to show that they were items that
(A) retail merchants were not willing to sell
(B) were not available in the stores in Philadelphia
(C) were more popular in Germantown man in Philadelphia
(D) could easily be transported

8. The word "eradicate" in line 16 is closest in meaning to
(A) eliminate (B) exploit (C) organize (D) operate

9. What does the author mean by stating in line 17 that "economic development was on the merchants' side"?
(A) Merchants had a strong impact on economic expansion.
(B) Economic forces allowed merchants to prosper.
(C) Merchants had to work together to achieve economic independence
(D) Specialty shops near large markets were more likely to be economically successful.

10. The word "undergoing" in line 22 is closest in meaning to
(A) requesting (B) experiencing (C) repeating (D) including

Questions 11-22

Aviculturists, people who raise birds for commercial sale, have not yet learned how to simulate the natural incubation of parrot eggs in the wild. They continue to look for better ways to increase egg production and *to* improve chick survival rates.

Line When parrots incubate their eggs in the wild, the temperature and humidity of the
(5) nest are controlled naturally. Heat is transferred from the bird's skin to the top portion of the eggshell, leaving the sides and bottom of the egg at a cooler temperature. This temperature gradient may be vital to successful hatching. Nest construction can contribute to this temperature gradient Nests of loosely arranged sticks, rocks, or dirt are cooler in temperature at the bottom where the egg contacts the nesting material.
(10) Such nests also act as humidity regulators by allowing rain to drain into the bottom sections of the nest so that the eggs are not in direct contact with the water. As the water that collects in the bottom of the nest evaporates, the water vapor rises and is heated by the incubating bird, which adds significant humidity to the incubation environment.

(15) In artificial incubation programs, aviculturists remove eggs from the *nests* of parrots and incubate them under laboratory conditions. Most commercial incubators heat the eggs fairly evenly from top to bottom, thus ignoring the bird's method of natural incubation, and perhaps reducing the viability and survivability of the hatching chicks. When incubators are not used, aviculturists sometimes suspend wooden boxes outdoors
(20) to use as nests in which to place eggs. In areas where weather can become cold after eggs are laid, it is very important to maintain a deep foundation of nesting material to act as insulator against the cold bottom of the box. If eggs rest against the wooden bottom in extremely cold weather conditions, they can become chilled to a point where the embryo can no longer survive. Similarly, these boxes should be protected from
(25) direct sunlight to avoid high temperatures that are also fatal to the growing embryo. Nesting material should be added in sufficient amounts to avoid both extreme temperature situations mentioned above and assure that the eggs have a soft, secure place to rest.

11. What is the main idea of the passage?
(A) Nesting material varies according to the parrots' environment.
(B) Humidity is an important factor in incubating parrots' eggs.
(C) Aviculturists have constructed the ideal nest box for parrots.
(D) Wild parrots' nests provide information useful for artificial incubation.

12. The word "They" in line 2 refers to
(A) aviculturists (B) birds (C) eggs (D) rates

13. According to paragraph 2, when the temperature of the sides and bottom of the egg are cooler than the top, then
(A) there may be a good chance for successful incubation
(B) the embryo will not develop normally
(C) the incubating parent moves the egg to a new position.
(D) the incubation process is slowed down

14. According to paragraph 2, sticks, rocks, or dirt are used to
(A) soften the bottom of the nest for the newly hatched chick
(B) hold the nest together
(C) help lower the temperature at the bottom of the nest
(D) make the nest bigger

15. According to paragraph 2, the construction of the nest allows water to
(A) provide a beneficial source of humidity in the nest
(B) loosen the materials at the bottom of the nest
(C) keep the nest in a clean condition
(D) touch the bottom of the eggs

16. All of the following are part of a parrot's incubation method EXCEPT
(A) heating the water vapor as it rises from the bottom of the nest
(B) arranging nesting material at the bottom of the nest
(C) transferring heat from the parent to the top of the eggshell
(D) maintaining a constant temperature on the eggshell

17. The word "suspend" in line 19 is closest in meaning to
(A) build (B) paint (C)hang (D) move

18. The word "fatal" in line 25 is closest in meaning to
(A) close (B) deadly (C) natural (D) hot

19. The word "secure" in line 27 is closest in meaning to
(A) fresh (B) dry (C) safe (D) warm

20. According to paragraph 3, a deep foundation of nesting material provides
(A) a constant source of humidity (B) a strong nest box
(C) more room for newly hatched chicks (D) protection against cold weather

21. Which of the following is a problem with commercial incubators?
(A) They lack the natural temperature changes of the outdoors.
(B) They are unable to heat the eggs evenly
(C) They do not transfer heat to the egg in the same way the parent bird does.
(D) They are expensive to operate.

22. Which of the following terms is defined in the passage?
(A) Aviculturists (line I) (B) Gradient (line 8)
(C) Incubation (line 15) (D) Embryo (line 24)

Questions 23-33

The mineral particles found in soil range in size from microscopic clay particles to large boulders. The most abundant particles – sand, silt, and clay – are the focus of examination in studies of soil texture. *Texture* is the term used to describe the composite sizes of particles in a soil sample, typically several representative handfuls. To measure soil texture, the sand, silt, and clay particles are sorted out by size and weight. The weights of each size are then expressed as a percentage of the sample weight.

In the field, soil texture can be estimated by extracting a handful of sod and squeezing the damp soil into three basic shapes; *(1)* cast, a lump formed by squeezing a sample in a clenched fist; *(2)* thread, a pencil shape formed by rolling soil between the palms; and *(3)* ribbon, a flatfish shape formed by squeezing a small sample between the thumb and index finger. The behavioral characteristics of the soil when molded into each of these shapes, if they can be formed at all, provides the basis for a general textural classification. The behavior of the soil in the hand test is determined by the amount of clay in the sample. Clay particles are highly cohesive, and when dampened, behave as a plastic. Therefore the higher the clay content in a sample, the more refined and durable the shapes into which it can be molded.

Another method of determining soil texture involves the use of devices called sediment sieves, screens built with a specified mesh size. When the soil is filtered through a group of sieves, each with a different mesh size, the particles become grouped in corresponding size categories. Each category can be weighed to make a textural determination. Although sieves work well for silt, sand, and larger particles, they are not appropriate for clay particles. Clay is far too small to sieve accurately; therefore, in soils with a high proportion of clay, the fine particles are measured on the basis of their settling velocity when suspended in water .Since clays settle so slowly, they are easily segregated from sand and silt. The water can be drawn off and evaporated, leaving a residue of clay, which can be weighed.

23. What does the passage mainly discuss?

(A) Characteristics of high quality soil
(B) Particles typically found in most soils
(C) How a high clay content affects the texture of soil
(D) Ways to determine the texture of soil

24. The author mentions "several representative handfuls" in line 4 in order to show

(A) the range of soil samples
(B) the process by which soil is weighed
(C) the requirements for an adequate soil sample
(D) how small soil particles are

25. The phrase "sorted out" in line 5 is closest in meaning to

(A) mixed (B) replaced (C) carried (D) separated

26. It can be inferred mat the names of the three basic shapes mentioned in paragraph 2 reflect

(A) the way the soil is extracted` (B) the results of squeezing the soil
(C) the need to check more than one handful (D) the difficulty of forming different shapes

27. The word "dampened" in line 15 is closest in meaning to

(A) damaged (B) stretched (C) moistened (D) examined

28. Which of the following can be inferred from the passage about a soil sample with little or no clay in it?
(A) It is not very heavy. (B) It may not hold its shape when molded.
(C) Its shape is durable (D) Its texture cannot be classified

29. The word "they" in line 23 refers to
(A) categories (B) sieves (C) larger particles (D) clay particles

30. It can be inferred from the passage that the sediment sieve has an advantage over the hand test in determining soil texture because
(A) using the sieve takes less time (B) the sieve can measure clay
(C) less training is required to use the sieve (D) the sieve allows for a more exact measure

31. During the procedure described in paragraph 3, when clay particles are placed into water they
(A) stick to the sides of the water container (B) take some time to sink to the bottom
(C) separate into different sizes (D) dissolve quickly

32. The word "fine" in line 24 is closest in meaning to
(A) tiny (B) many (C) excellent (D) various

33. All of the following words are defined in the passage EXCEPT
(A) texture (line 3) (B) ribbon (line 11)
(C) sediment sieves (line 19) (D) evaporated (line 27)

Questions 34-43

A number of factors related to the voice reveal the personality of the speaker.

The first is the broad area of communication, which includes imparting information by use of language, communicating with a group or an individual, and specialized communication through performance. A person conveys thoughts and ideas through choice of words, by a tone of voice that is pleasant or unpleasant, gentle or harsh, by the rhythm that is inherent within the language itself, and by speech rhythms that are flowing and regular or uneven and hesitant, and finally, by the pitch and melody of the utterance. When speaking before a group, a person's tone may indicate unsureness or fright, confidence or calm. At interpersonal levels, the tone may reflect ideas and feelings over and above the words chosen, or may belie them. Here the conversant's tone can consciously or unconsciously reflect intuitive sympathy or antipathy, lack of concern or interest, fatigue, anxiety, enthusiasm or excitement, all of which are usually discernible by the acute listener. Public performance is a manner of communication that is highly specialized with its own techniques for obtaining effects by voice and /or gesture. The motivation derived from the text, and in the case of singing, the music, in combination with the performer's skills, personality, and ability to create empathy will determine the success of artistic, political, or pedagogic communication.

Second, the voice gives psychological clues to a person's self-image, perception of others, and emotional health. Self-image can be indicated by a tone of voice that is confident, pretentious, shy, aggressive, outgoing, or exuberant, to name only a few personality traits. Also the sound may give a clue to the facade or mask of that person, for example, a shy person hiding behind an overconfident front. How a speaker perceives the listener's receptiveness, interest, or sympathy in any given conversation can drastically alter the tone of presentation, by encouraging or discouraging the speaker. Emotional health is evidenced in the voice by free and melodic sounds of the

happy, by constricted and harsh sound of the angry, and by dull and lethargic qualities of the depressed

34. What does the passage mainly discuss?
(A) The function of the voice in performance
(B) The connection between voice and personality
(C) Communication styles
(D) The production of speech

35. What does the author mean by staring that, "At interpersonal levels, tone may reflect ideas and feelings over and above the words chosen" (lines 9-10)?
(A) Feelings are expressed with different words than ideas are.
(B) The tone of voice can carry information beyond the meaning of words.
(C) A high tone of voice reflects an emotional communication.
(D) Feelings are more difficult to express than ideas.

36. The word "Here" in line 10 refers to
(A) interpersonal interactions (B) the tone
(C) ideas and feelings (D) words chosen

37. The word "derived" in line 15 is closest in meaning to
(A) discussed (B) prepared (C) registered (D) obtained

38. Why does the author mention "artistic, political, or pedagogic communication" in line 17?
(A) As examples of public performance (B) As examples of basic styles of communication
(C) To contrast them to singing (D) To introduce the idea of self-image

39. According to the passage, an exuberant tone of voice, may be an indication of a person's
(A) general physical health (B) personality
(C) ability to communicate (D) vocal quality

40. According to the passage, an overconfident front may hide
(A) hostility (B) shyness (C) friendliness (D) strength

41. The word "drastically" in line 24 is closest in meaning to
(A) frequently (B) exactly (C) severely (D) easily

42. The word "evidenced" in line 25 is closest in meaning to
(A) questioned (B) repeated (C) indicated (D) exaggerated

43. According to the passage, what does a constricted and harsh voice indicate?
(A) Lethargy (B) Depression (C) Boredom (D) Anger

Questions 44-50

As the twentieth century began, the importance of formal education in the United States increased The frontier had mostly disappeared and by 1910 most Americans lived in towns and cities. Industrialization and the bureaucratization of economic
Line life combined with a new emphasis upon credentials and expertise to make schooling
(5) increasingly important for economic and social mobility. Increasingly, too, schools were viewed as the most important means of integrating immigrants into American society.

The arrival of a great wave of southern and eastern European immigrants at the turn of the century coincided with and contributed to an enormous expansion of formal

schooling. By 1920 schooling to age fourteen or beyond was compulsory in most states, and the school year was greatly lengthened. Kindergartens, vacation schools, extracurricular activities, and vocational education and counseling extended the influence of public schools over the lives of students, many of whom in the larger industrial cities were the children of immigrants. Classes for adult immigrants were sponsored by public schools, corporations, unions, churches, settlement houses, and other agencies.

Reformers early in the twentieth century suggested that education programs should suit the needs of specific populations. Immigrant women were one such population. Schools tried to educate young women so they could occupy productive places in the urban industrial economy, and one place many educators considered appropriate for women was the home.

Although looking after the house and family was familiar to immigrant women, American education gave homemaking a new definition. In preindustrial economies, homemaking had meant the production as well as the consumption of goods, and it commonly included income-producing activities both inside and outside the home, in the highly industrialized early-twentieth-century United States, however, overproduction rather than scarcity was becoming a problem. Thus, the ideal American homemaker was viewed as a consumer rather than a producer. Schools trained women to be consumer homemakers cooking, shopping, decorating, and caring for children "efficiently" in their own homes, or if economic necessity demanded, as employees in the homes of others. Subsequent reforms have made these notions seem quite out-of-date.

44. It can be inferred from paragraph 1 that one important factor in the increasing importance of education in the United States was

(A) the growing number of schools in frontier communities
(B) an increase in the number of trained teachers
(C) the expanding economic problems of schools
(D) the increased urbanization of the entire country

45. The word "means" in line 6 is closest in meaning to

(A) advantages (B) probability (C) method (D) qualifications

46. The phrase "coincided with" in line 9 is closest in meaning to

(A) was influenced by (B) happened at the same time as
(C) began to grow rapidly (D) ensured the success of

47. According to the passage, one important change in United States education by the 1920's was that

(A) most places required children to attend school
(B) the amount of time spent on formal education was limited
(C) new regulations were imposed on nontraditional education
(D) adults and children studied in the same classes

48. Vacation schools and extracurricular activities are mentioned in lines 11-12 to illustrate

(A) alternatives to formal education provided by public schools
(B) the importance of educational changes
(C) activities that competed to attract new immigrants to their programs.
(D) the increased impact of public schools on students.

49. According to the passage, early-twentieth century education reformers believed that

(A) different groups needed different kinds of education
(B) special programs should be set up in frontier communities to modernize them

(C) corporations and other organizations damaged educational progress
(D) more women should be involved in education and industry

50. The word "it" in line 24 refers to
(A) consumption (B) production (C) homemaking (D) education

ANSWER KEY

PRACTICE TEST 01

ACDDA ABCDB CACBC ABBDA DCBAB CCACD BBDCC AADBC AAAAD BCBCC

PRACTICE TEST 02

DACDB DACCA BCDCC ADADB CADBA DABAA ACADB CACCB AACDD BCDAC

PRACTICE TEST 03

DAABA DDBAB CDBCB DCBBA BDACB DDBAA DDABC DCBBA DCDBC CADCB

PRACTICE TEST 04

CDACD BDABC DBADB DCACB DAACA DBCBD CDDBD BCBAB AACCB CCDDB

PRACTICE TEST 05

ABCCB CABDB BADBD ACCBA DABCC CDCCC BADCC DCCBD BCCCA DBAAD

PRACTICE TEST 06

BDBCC ACAAC ABCDA AABDB BACCD BBBCB BDCCC ADBDA CBCDA ABACC

PRACTICE TEST 07

ABCCC DDAAB DACBD ADCDB CDCDA ADABC ABBDB DCABD BCDAD CCCDC

PRACTICE TEST 08

BABDB CDADC DAADC CDADB CBDDA DDCCB DADBD ABBCD DCCBC ABBAC

PRACTICE TEST 09

ACBBA ACDBB ABBDA DDBBB CBDCA ABDBC CADAD ACBDC DCBDB CBACC

PRACTICE TEST 10

BCADB DADDB CADAD CDDBC ADCDB DABDA BCDAC BDDAA CBBAA DCDCC

PRACTICE TEST 11

AABDA ADDBD CCBDC ABCBD BACAD DCACA CBADD CCABD BBDCC DCDCC

PRACTICE TEST 12

ACBDA ADBDC BDCBA BDCBC ABCBC BDACA ADCBC BDDCC AACBD BBCAD

PRACTICE TEST 13

ADCBB DACDD CABCA ACADC BDABA ADBDC CAAAB DDDBD BCABC BBCAD

PRACTICE TEST 14

BCDCD CBABB DAACA DCBCD CADAD BCBBD BADBB ADABB CCDDC BADAC