## SECTION 1. LISTENING COMPREHENSION

In this section of the test, you will have an opportunity to demonstrate your ability to understand conversation and talks in English. There are three parts to this section, with special directions for each part. Answer all the questions on the basis of what is stated or implied by the speakers you hear.

## Part A

## Directions:

In Part A you will hear short conversations between two people. After each conversation, you will hear a question about the conversation. The conversations and questions will not be repeated. After you hear a question, read the four possible answers in your test book and choose the best answer. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen.

1. A. It was easy.
B. It was about the weather.
C. It was disagreeable.
D. It was disappointing.
2. A. She hasn't asked her parents about it.
B. She and her parents have different opinions on it.
C. She's depending on Ed to talk to her parents about it.
D. She doesn't have a dependable answer concerning it.
3. A. Go on the ride alone.
B. Have a thrill.
C. Avoid the ride
D. Urge others to take a ride
4. A. At a travel agency.
B. At a sporting goods store.
C. At a bank.
D. At a bus station.
5. A. She doesn't agree that they need fewer workers.
B. She can't find any reason not to agree with the man.
C. She thinks they should reduce the work force even more.
D. She's looking at fewer figures than the man.
6. A. She couldn't decide when to write her thesis.
B. She was thinking of more than one subject for her thesis.
C. She didn't mind writing her thesis.
D. Writing her thesis had been on her mind for a long time.
7. A. She's hoping to study the polar regions.
B. She thinks Professor Webster's class is worth waiting for.
C. Professor Webster's class is held in a cold room.
D. She has no intention of taking the physics class.
8. A. Teacher and student.
B. Doctor and patient.
C. Salesman and customer.
D. Judge and lawyer.
9. A She doesn't know if she'll be working.
B. She was hoping she'd work, but she isn't going to.
C. She'll be working but is unhappy about it.
D. She doesn't think there'll be any work until spring.
10. A. His homework includes research on swamps.
B. He'd rather tell jokes than do his homework.
C. He can't go because he has too much homework.
D. He'll be joining her as soon as he finishes his homework.
11. A. Repairing a walkway.
B. Planting a garden.
C. Painting a house.
D. Building a fence.
12. A. Look at her bruised knee.
B. Go back to gym class.
C. See a nurse or doctor.
D. Act more like him.
13. A. Lend him some texts.
B. Cancel classes because of the snow storm.
C. Go to the library.
D. Return some books to Professor Hata.
14. A. A mechanic.
B. A conductor
C. An accountant
D. A doctor
15. A. He doesn't really intend to go hot air ballooning.
B. It won't be long before he goes hot air ballooning.
C. He doesn't have much to say about hot air ballooning.
D. He shouldn't talk about hot air ballooning.
16. A. He can't go to the Grand Canyon.
B. He doesn't think plans are necessary.
C. He has already organized the trip.
D. He wants the woman to make all the arrangements.
17. A. He wishes other students would like him more.
B. He wants the woman to ask him more questions.
C. He thinks more students should look like the woman.
D. He'd like it if more students asked questions.
18. A. Chagall was not American.
B. The man also wanted to write about Chagall.
C. The woman isn't taking the same class as the man.
D. Chagall wasn't a good artist.
19. A. Study with his friends.
B. Stay at home.
C. Join the club.
D. Improve his grades.
20. A. The team will be divided.
B. The team has made some money.
C. The team hasn't been practicing much.
D. The team has been playing well.
21. A. If she had auditioned, she would have got the lead.
B. She auditioned but wasn't chosen for the lead.
C. She started to audition but was interrupted.
D. She wanted to audition but would have had to cut class.
22. A. He only wears the jacket to funerals.
B. He likes the jacket so much that he wants to wear it for the rest of his life.
C. He might catch a cold and die in that jacket.
D. He doesn't like the jacket and will never wear it.
23. A. Not to get her milk because she's going to the supermarket.
B. Not to bother going to the supermarket because she has enough milk.
C. To buy some milk for her at the supermarket.
D. To clean up some milk she spilled at the supermarket.
24. A. If the man had taken the woman's suggestion to leave early, he would have found a parking space at the beach.
B. If the man had listened to what the woman told him, he wouldn't have gone to the beach.
C. If the man had left the beach earlier, he could have listened to the woman's speech.
D. If the man had parked closer to the beach, he could have seen the woman earlier.
25. A. Why Peter is telling his secrets to others.
B. What reason Peter had to say what he did.
C. Where Peter got his information.
D. What Peter meant when he made the statement.
26. A. After all his studying, he would pass his final in calculus.
B. He was going to have to drop calculus.
C. He would fail his final exam in calculus.
D. He wasn't going to take his final because he'd decided to repeat calculus.
27. A. Travel agent.
B. Flight attendant.
C. Hotel desk clerk.
D. Airline check-in host.
28. A. Change his plans and go to the planetarium.
B. Stick with his plans and stay home.
C. Think about the things he'd like to see.
D. Show the woman he cares by making plans with her.
29. A. Her paper on genetic testing is going to be very long.
B. It won't be long before she's done with her paper.
C. The paper will be done long before the testing is finished.
D. She isn't nearly finished writing her paper.
30. A. She would go some distance to see it again.
B. She was seated too far away to hear it well.
C. She found it somewhat interesting.
D. She thought there were far too many issues discussed.

## Part B

## Directions:

In this part of the test, you will hear longer conversations. After each conversation, you will hear several questions. The conversations and questions will not be repeated.
After you hear a question, read the four possible answers in your test book and choose the best answer. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen.

## Conversation 1 for number 31-34

31. A. The history of Morocco.
B. Temperature differences between modern and ancient times.
C. The man's concern over Jennifer's absence.
D. Jennifer's experiences on an expedition.
32. A. Two professors.
B. Two archaeologists.
C. An historian and a student.
D. Two students.
33. A. She likes to travel.
B. She's studying to be an archaeologist.
C. She's a hard worker.
D. She's fascinated with Morocco.
34. A. They worked in the cooler hours of the day.
B. They set up tents in which to rest.
C. They drank a lot of water.
D. They went there during the winter months.

## Conversation 2 for number 35-38

35. A. In a restaurant.
B. In a bank.
C. In a department store.
D. At a dry cleaning shop.
36. A. A fashion designer.
B. A veterinarian.
C. A hair dresser.
D. A nutritionist.
37. A. She doesn't have a sales receipt.
B. She's taken the price tags off it.
C. She isn't talking to the right person.
D. She doesn't have a good reason for returning it.
38. A. It's too big.
B. It's not the right color.
C. She'd rather have something else.
D. She doesn't need it now that she's moved.

## Part C

## Directions:

In this part of the test, you will hear several talks. After each talk, you will hear some questions. The talks and questions will not be repeated.
After you hear a question, you will read the four possible answers in your test book and choose the best answer. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen.

## Talk 1 for questions number 39-42

39. A. Storms
B. The weather
C. Tides
D. The moon and sun
40. A. In a planetarium.
B. In a classroom.
C. On a beach.
D. In a laboratory.
41. A. One is natural force, and the other is not.
B. Only one has been discussed with the students.
C. The causes of tides are known, but not the causes of weather.
D. One is predictable, and the other is difficult to predict.
42. A. The lowest tides are produced.
B. The tides are not constant.
C. The highest tides of the year take place.
D. The heights of the tides are irregular.

## Talk 2 for questions number 43-46

43. A. The spring track and field events.
B. What it means to be a team member.
C. The difference between sprinting and long-distance running.
D. The elements of the relay race.
44. A. A student.
B. A coach.
C. An employer.
D. A talent scout.
45. A. On a Saturday morning.
B. After school on Monday.
C. During lunch break on a weekday.
D. On a Sunday afternoon.
46. A. At the beginning of the race.
B. Just before the baton is passed.
C. For a few moments after the baton has been passed.
D. When the slowest runner catches up with the fastest.

Talk 3 for questions number 47-50
47. A. How to identify birds.
B. Where to look for birds.
C. What equipment is necessary for birdwatching.
D. Why birds have different songs and calls.
48. A. She is a writer.
B. She is a salesman.
C. She is an artist.
D. She is a scientist.
49. A. By looking at the spread of the wings.
B. By comparing it to a familiar bird.
C. By studying its colors and patterns.
D. By determining the shape of its body.
50. A. Play a recording.
B. Bring in birds.
C. Show slides.
D. Whistle some calls.

## Section 2. Structure and Written Expression

## Part A.

Questions 1 to 20 are partial sentences. Below each sentence you will see four words or phrases, marked (A), (B), (C), and (D). Select the one word or phrase that best completes the sentence. Then, on your answer sheet, find the number of the question you have selected. Blacken the space so that the letter inside the circle does not show.

1. $\qquad$ adequate computer unit contains a monitor, CPU , keyboard, mouse and printer.
A. Each every
B. Every one
C. Every
D. Everyone being an
2. Mining operation in developing countries can use synthetic diamonds as effective $\qquad$ for real diamond in drilling bits.
A. low-cost substitutes
B. substituting low-cost
C. a low substitute cost
D. costing low substitutes
3. The first multicultural university in Malang, $\qquad$ matriculated its first students in 1975.
A. the University of Kanjuruhan Malang was
B. was the University of Kanjuruhan Malang
C. the University of Kanjuruhan Malang
D. the University of Kanjuruhan was of Malang
4. Architects normally proceed by listening carefully to the desires of their clients, $\qquad$ the proposed building site intently, and then incorporating their own creative ideas into the design.
A. to study
B. study
C. studying
D. having studied
5. It has been widely documented that vitamin C offers many more health benefits $\qquad$ .
A. Vitamin K does
B. than does Vitamin K
C. which does Vitamin K
D. that Vitamin K does
6. Like city mayors, $\qquad$ for five year terms.
A. city councilmembers are elected
B. electing city councilmembers
C. that city councilmembers elect
D. which elect city councilmembers
7. $\qquad$ changes in the way cement is made since its discovery by a British bricklayer.
A. Despite the
B. In spite of
C. Even though many changes
D. There have been few
8. Standing under the tree during a lighting storm will afford $\qquad$ protection at all.
A. none
B. no
C. not
D. never
9. Mozart was known to have had an affinity for $\qquad$ and popular music.
A. not only classical
B. neither classical
C. either classical
D. both classical
10. Numerous homes $\qquad$ by the high wind and heavy rain of hurricane Andrew.
A. destroy
B. destroyed
C. have destroyed
D. were destroyed
11. Asteroids may have a diameter of $\qquad$
A. that one thousand kilometers
B. at least one thousand kilometers
C. one thousand's kilometers
D. the one thousand kilometers
12. According to space photography, the amount of Brazillian rainforest $\qquad$ to slash and burn agriculture is less than what had been previously thought.
A. which has been lost
B. has lost
C. to lose
D. that has been losing
13. It is only by studying existing habitat and $\qquad$ that species such as Komodo dragon can be preserved.
A. implementing creative solutions
B. to solve implemented creations
C. have implemented solutions creatively
D. creatively to implement solutions
14. Similar to the paintings of Matisse $\qquad$ of Picasso employ bright, sharp colors.
A. them
B. those
C. its
D. which
15. $\qquad$ of Carthage are stone boulders strewn across an empty field.
A. All that virtually remains
B. All remains that virtually
C. That remains all virtually
D. Virtually all that remains
16. Relatively few marine biologists agree $\qquad$ is an impeding event.
A. that whale extinction
B. whales are extinct
C. that which extinguishes whales
D. which whales are extinct
17. Dextrose is found $\qquad$ and in animals and can be made synthetically through the reaction of sulfuric acid and starch.
A. not only in plants
B. neither in plants
C. either in plants
D. both in plants
18. Carrying money in a concealed pouch $\qquad$ the risk of theft.
A. reducing
B. reduction
C. will have reduced
D. reduces
19. The barometer has proven one of the most useful meteorological tools because of its ability to measure atmospheric pressure and $\qquad$ forecast the weather.
A. although
B. whenever
C. thereby
D. however
20. Myrmecology is the branch of entomology $\qquad$ the physical attributes, life, and behavior of ants.
A. which dealing with
B. it is dealing with
C. whose deal with
D. that deals with

## Part B

Directions. In question 21 to 40 every sentence has four words of phrases that are underlined. The four underlined portions of each sentence are marked (A), (B), (C), and (D). Identify the one word or phrase that should be changed in order for sentence to be correct. Then on your answer sheet, find the number of the question and blacken the space that corresponds to the letter of the answer you have selected.
21. The theory of black holes $\frac{\text { is based largely }}{\text { A }} \frac{\text { onto the work of the noted }}{\mathrm{C}}$ astrophysicist Stephen Hawking.
22. The area of Malang is considerable larger than that of Batu.
A
B C D
23. The telephone line is now being used transmitted internet data instantaneously.

$$
A \quad \bar{C} \quad \bar{D}
$$

24. Chimpanzee babies have shown that they respond to parental facial gestures justly as human

$$
\mathrm{A} \quad \mathrm{~B}
$$

C
babies do.
D
25. During the Prince Diponegoro War (1825-1830), Prince Diponegoro has fought courageously for the destruction of Dutch colonialism.

## C D

26. Jogjakarta once serviced as the capital city of Indonesia.

$$
\mathrm{A} \quad \mathrm{~B} \quad \mathrm{C} \quad \mathrm{D}
$$

27. Even though Mt. Everest is generally conceded to be the highest mountain in the world, a A B growing number of topographers believe that the mountain known as K-2 may be tallest. C
28. Absolute zero remains the known only temperature $\frac{\text { at which }}{\mathrm{A}}$ gases $\frac{\text { such as }}{\mathrm{C}}$ oxygen will solidify.

D
29. Those who make cardiovascular exercise everyday have a greatly reduced incidence of heart disease.
30. New zoning laws require that deciduous trees be planted on the sides of the house what face

$$
\begin{array}{llll}
\mathrm{A} & \mathrm{~B} & \mathrm{C} & \mathrm{D}
\end{array}
$$ east and west.

31. In realization, the Suramadu Bridge in East Java is the Java Island's longest bridge.
A
B C
C D
32. Macaques are short-tailed monkey living in Asia, Africa, and East Indies.

$$
\mathrm{A} \quad \mathrm{~B} \quad \mathrm{C} \quad \mathrm{D}
$$

33. Bagpipe music was used by the British Army to inspire its own troops as well as spreading A B

C D fear in the hearts of the enemy.
34. Alike coffee, some soft drinks and tea contain a substantial amount of caffeine. A

B

## C

D
35. Considerate time should be spent in choosing a college major.
A
B
C D
36. Abraham Lincoln's birthplace in Hodgenville, Kentucky has been designated a national historic site in 1959.

D
37.The Rocky Mountains, which stretch from Canada to Mexico is the home of the mountain $\mathrm{A} \quad \overline{\mathrm{B}} \quad \overline{\mathrm{C}} \quad \frac{\mathrm{D}}{}$ goat.
38. Long before the arrival of Europeans, Native American tribes had firmly settled themselves A over a six thousand mile ranging of North America. $\mathrm{C} \quad \mathrm{D}$
39. The invention of the printing press in the fifteenth century make possible the widespread A
dispersion of knowledge.

D
40. A 1992 reenactment of the famous "war of the worlds' broadcast led people once again to A belief that space creature had landed on Earth.

C D

## SECTION 3. READING COMPREHENSION

## DIRECTIONS

In this part, the questions are based on a variety of reading material (single sentences, paragraphs, advertisements, and the like). You are to choose the one best answer, (A), (B), (C), or (D), to each question. Then, on your answer sheet, find the number of the problem and mark your answer. Answer all questions following a passage on the basis of what is stated or implied in that passage.

## Questions 1 through 6 are based on the following reading.

The Stone Age was a period of history which began in approximately 2 million B.C. and lasted until 3000 B.C. Its name was derived from the stone tools and weapons that modern scientists found. This period was divided into the Paleolithic, Mesolithic, and Neolithic Ages. During the first period, ( 2 million to 8000 B.C.) the fist hatchet and use of fire for heating and cooking were developed. As a result of the Ice Age, which evolved about 1 million years into the Paleolithic Age, people were forced to seek shelter in caves, wear clothing, and develop new tools. During the Mesolithic Age (8000 to 6000 B.C.) people made crude pottery and the first fish hooks, took dogs hunting, and developed a bow and arrow, which was used until the fourteenth century A.D.

The Neolithic Age ( 6000 to 3000 B.C.) saw humankind domesticating sheep, goats, pigs, and cattle, being less nomadic than in previous eras, establishing permanent settlements, and creating governments.

1. Into how many periods was the Stone Age divided?
(A) 2
(B) 3
(C) 4
(D) 5
2. Which of the following was developed earliest?
(A) the fish hook
(C) the bow and arrow
(B) the fist hatchet
(D) pottery
3. Which of the following developments is not related to the conditions of the Ice Age?
(A) farming
(C) living indoors
(B) clothing
(D) using fire
4. Which period lasted longest?
(A) Paleolithic
(C) Mesolithic
(B) Ice Age
(D) Neolithic
5. Which of the following periods saw people develop a more communal form of living?
(A) Paleolithic
(C) Mesolithic
(B) Ice Age
(D) Neolithic
6. The author states that the Stone Age was so named because
(A) it was very durable
(B) the tools and weapons were made of stone
(C) there was little vegetation
(D) the people lived in caves

## Questions 7 through 11 are based on the following reading.

Hot boning is an energy saving technique for the meat processing industry. It has received considerable attention in recent years when increased pressure for energy conservation has accentuated the need for more efficient methods of processing the bovine carcass. Cooling of an entire carcass requires a considerable amount of refrigerated space, since bone and trimmable fat are cooled along with the muscle. It is also necessary to space the carcasses adequately in the refrigerated room for better air movement and prevention of microbial contamination, thus adding to the volume requirements for carcass chillers.

Conventional handling of meat involves holding the beef sides in the cooler for 24 to 36 hours before boning. Chilling in the traditional fashion is also associated with a loss of carcass weight ranging from $2 \%$ to $4 \%$ due to evaporation of moisture from the meat tissue.

Early excision, or hot boning, of muscle prerigor followed by vacuum packaging has several potential advantages. By removing only the edible muscle and fat prerigor, refrigeration space and costs are minimized, boning labor is decreased and storage yields increased. Because hot boning often results in toughening of meat,
a more recent approach, hot boning following electrical stimulation, has been used to reduce the necessary time of rigor mortis. Some researchers have found this method beneficial in maintaining tender meat, while others have found that the meat also becomes tough after electrical stimulation.
7. Which of the following was not mentioned as a drawback of the conventional methods of boning'
(A) storage space requirements
(B) energy waste
(C) loss of carcass weight
(D) toughness of meat
8. Hot boning is becoming very popular because
(A) it causes meat to be very tender
(B) it helps conserve energy and is less expensive than conventional methods
(C) meat tastes better when the bone is adequately seared along with the meat
(D) it reduces the weight of the carcass
9. Carcass chiller means most nearly
(A) a refrigerator for the animal body
(B) a method of boning meat
(C) electrical stimulation of beef
(D)) early excision
10. Early excision means most nearly
(A) vacuum packaging
(C) carcass chilling
(B) hot boning
(D) electrical stimulation
11. The toughening of meat during hot boning has been combatted by
(A) following hot boning with electrical stimulation
(B) tenderizing the meat
(C) using electrical stimulation before hot boning
(D) removing only the edible muscle and fat prerigor

## Questions 12 through 16 are based on the following reading.

In 1920, after some thirty-nine years of problems with disease, high costs, and politics, the Panama Canal was officially opened, finally linking the Atlantic and Pacific Oceans by allowing ships to pass through the fiftymile canal zone instead of traveling some seven thousand miles around Cape Horn. It takes a ship approximately eight hours to complete the trip through the canal and costs an average of fifteen thousand dollars, one-tenth of what it would cost an average ship to round the Horn. More than fifteen thousand ships pass through its locks each year.

The French initiated the project but sold their rights to the United States. The latter will control it until the end of the twentieth century when Panama takes over its duties.
12. Who currently controls the Panama Canal?
(A) France
(C) Panama
(B) United States
(D) Canal Zone
13. In approximately what year will a different government take control of the Panama Canal?
(A) 2000
(B) 2100
(C) 3001
(D) 2999
14. On the average, how much would it cast a ship to travel around Cape Horn?
(A) $\$ 1,500$
(C) $\$ 150,000$
(B) $\$ 15,000$
(D) $\$ 1,500,000$
15. In what year was construction probably begun on the canal?
(A) 1881
(B) 1920
(C) 1939
(D) 1999
16. What can bi inferred from this reading?
(A) This is a costly project which should be reevaluated.
(B) Despite all the problems involved, the project is beneficial.
(C) Many captains prefer to sail around Cape Horn because it is less expensive.
(D) Due to all the problems, three governments have had to control the canal over the years.

## Questions 17 through 21 are based on the following reading.

In 776 B.C. the first Olympic Games were held at the foot of Mount Olympus to honor the Greeks' chief god, Zeus. The Greeks emphasized physical fitness and strength in their education of youth. Therefore, contests in running, jumping, discus and javelin throwing, boxing, and horse and chariot racing were held in individual cities, and the winners competed every four years at Mount Olympus. Winners were greatly honored by having olive wreaths placed on their heads and having poems sung about their deeds. Originally these were held as games of friendship, and any wars in progress were halted to allow the games to take place. The Greeks attached so much importance to these games that they calculated time is four-year cycles called "Olympiads" dating from 776 B.C.
17. Which of the following is not true?
(A) Winners placed olive wreaths on their own heads.
(B) The games were held in Greece every four years.
(C) Battles were interrupted to participate in the games.
(D) Poems glorified the winners in song.
18. Why were the Olympic Games held?
(A) to stop wars
(C) to crown the best athletes
(B) to honor Zeus
(D) to sing songs about the athletes
19. Approximately how many years ago did these games originate?
(A) 776 years
(C) 2,277 years
(B) 1,205 years
(D) 2,760 years
20. Which of the following contests was not mentioned?
(A) discus throwing
(C) skating
(B) boxing
(D) running
21. What conclusion can we draw about the ancient Greeks?
(A) They liked to fight.
(B) They were very athletic.
(C) They liked a lot of ceremony.
(D) They couldn't count, so they used "Olympiads" for dates.

## Questions 22 through 24 are based on the following reading.

Tampa, Florida, owes a great deal of its growth and prosperity to a Cuban cigar manufacturer named Vicente Martinez Ybor. When the Cuban Revolution broke out in 1869, he was forced to flee his country and moved his business to south Florida. Sixteen years later, serious problems caused him to seek a better location along the west coast of the state. His original land purchase of sixteen blocks expanded to more than one hundred acres near Tampa. This newly developed area was called Ybor City in his honor. With the demand for factory workers for Ybor's business, the surrounding areas expanded and thrived.
22. Where is Ybor City located?
(A) south Florida
(C) west Florida.
(B) Cuba
(D) in the Florida countryside
23. In what year was Ybor forced to leave south Florida?
(A) 1854
(B) 1869
(C) 1885
(D) 1895
24. Why will people probably continue to remember Ybor's name?
(A) He suffered a great deal.
(B) An area was named in his honor.
(C) He was a Cuban revolutionary.
(D) He was forced to flee his homeland.

Questions 25 through 28 are based on the following reading.

Lichens are a unique group of complex, flowerless plants growing on rocks and trees. There are thousands of kinds of lichens, which come in a wide variety of colors. They are composed of algae and fungi which unite to satisfy the needs of the lichens.

The autotrophic green algae produce all their own food through a process called photosynthesis and provide the lichen with nutritional elements. On the other hand, the heterotrophic fungus, which depends on other elements to provide its food, not only absorbs and stores water for the plant, but also helps protect it. This union by which two dissimilar organisms live together is called "symbiosis."

This sharing enables lichens to resist the most adverse environmental conditions found on earth. They can be found in some very unlikely places such as the polar ice caps as well as in tropical zones, in dry areas as well as in wet ones, on mountain peaks and along coastal areas. The lichen's strong resistance to its hostile environment and its ability to live in harmony with such environments is one example that humanity should consider in trying to solve its own problems.
25. Which of the following is not true?
(A) Lichens are not simple plants.
(B) The lichen habitat is limited to the polar ice caps.
(C) Lichens can resist a hostile environment.
(D) Heterotrophic plants depend on other elements to supply their food.
26. What can be said about autotrophic plants and heterotrophic plants'
(A) They produce their food in the same manner.
(B) Heterotrophic plants produce all their own food.
(C) Autotrophic plants need other elements to supply their food.
(D) Their methods of food production are completely different.
27. Which of the following conclusions could be made about lichens?
(A) They are found worldwide and are complex plants made up of algae and fungi.
(B) They are found worldwide and are simple plants, symbiotic in nature.
(C) They are found worldwide and are compound plants made up entirely of algae.
(D) Although found worldwide, lichens are found mostly as a simple plant form in the tropics.
28. Which of the following directly relates to algae?
(A) It offers protection to lichens.
(B) it supplies water for lichens.
(C) It supplies its own food.
(D) It is dependent on other plants for its food supply.

## Directions for questions 29 and 30

For each of these questions, choose the answer that is closest in meaning to the original sentence. Note that several of the choices may be factually correct, but you should choose the one that is the closest restatement of the given sentence.
29. Even though Julie is a champion swimmer, she still practices every day.
(A) Julie practices swimming every day despite the fact that she's a champion swimmer.
(B) Even though Julie practices every day, she's still a champion swimmer.
(C) If Julie practices every day, she'll be a champion swimmer.
(D) Julie swims every day; consequently she's a champion swimmer.
30. Mrs. Sylvester will retire next month after teaching chemistry for twenty years.
(A) Twenty years after teaching chemistry, Mrs. Sylvester will retire.
(B) After she has finished teaching chemistry for twenty years, Mrs. Sylvester will retire.
(C) Having taught chemistry for twenty years, Mrs. Sylvester will retire next month.
(D) It will be twenty years next month since Mrs. Sylvester retired.

Questions 31 through 37 are based on the following reading.

Napoleon Bonaparte's ambition to control all the area around the Mediterranean Sea led him and his French soldiers to Egypt. After losing a naval battle, they were forced to remain there for three years. In 1799, while constructing a fort, a soldier discovered a piece of stele (stone pillar bearing an inscription) known as the Rosetta stone. This famous stone, which would eventually lead to the deciphering of ancient Egyptian hieroglyphics dating to 3100 B.C., was written in three languages: hieroglyphics (picture writing), demotic (a shorthand version of hieroglyphics), and Greek. Scientists discovered that the characters, unlike those in English, could be written from right to left and in other directions as well.

Twenty-three years after discovery of the Rosetta stone, Jean Francois Champollion, a French philologist, fluent in several languages, was able to decipher the first word-Ptolemy-name of an Egyptian ruler. This name was written inside an oval called a "cartouche." Further investigation revealed that cartquches contained names of important people of that period. Champollion painstakingly continued his search and was able to increase his growing list of known phonetic signs. He and an Englishman, Thomas Young, worked independently of each other to unravel the deeply hidden mysteries of this strange language. Young believed that sound values could be assigned to the symbols, while Champollion insisted that the pictures represented words.
31. How many years elapsed between the date of the oldest hieroglyphics deciphered by means of the Rosetta stone and the stone's discovery?
(A) 1,301
(B) 1,799
(C) 3,100
(D) 4,899
32. Which of the following languages was not written on the Rosetta stone?
(A) French
(B) demotic
(C) Greek
(D) hieroglyphics
33. Which of the following statements is not true?
(A) Cartouches contained names of prominent people of the period.
(B) Champollion and Young worked together in an attempt to decipher the hieroglyphics.
(C) One of Napoleon's soldiers discovered the Rosetta stone.
(D) Thomas Young believed that sound values could be assigned to the symbols.
34. When was the first word from the Rosetta stone deciphered?
(A) 3100 B.C.
(B) 1766
(C) 1799
(D) 1822
35. What was the first word that was deciphered from the Rosetta stone?
(A) cartouche
(B) Ptolemy
(C) demotic
(D) Champollion
36. Why were Napoleon's soldiers in Egypt in 1799?
(A) They were celebrating a naval victory.
(B) They were looking for the Rosetta stone.
(C) They were waiting to continue their campaign.
(D) They were trying to decipher the hieroglyphics.
37. Who was responsible for deciphering the first word?
(A) Champollion
(B) Young
(C) Ptolemy
(D) Napoleon

## Questions 38 through 43 are based on the following passage.

Sequoyah was a young Cherokee Indian, son of a white trader and an Indian squaw. At an early age, he became fascinated by "the talking leaf," an expression that he used to describe the white man's written records. Although many believed this "talking leaf" to be a gift from the Great Spirit, Sequoyah refused to accept that theory. Like other Indians of the period, he was illiterate, but his determination to remedy the situation led to the invention of a unique 86 -character alphabet based on the sound patterns that he heard.

His family and friends thought him mad, but while recuperating from a hunting accident, he diligently and independently set out to create a form of communication for his own people as well as for other Indians. In 1821, after twelve years of work, he had successfully developed a written language that would enable thousands of Indians to read and write.

Sequoyah's desire to preserve words and events for later generations has caused him to be remembered among the important inventors. The giant redwood trees of California, called "sequoias" in his honor, will further imprint his name in history.
38. What is the most important reason that Sequoyah will be remembered?
(A) California redwoods were named in his honor.
(B) He was illiterate.
(C) He created a unique alphabet.
(D) He recovered from his madness and helped mankind.
39. How did Sequoyah's family react to his idea of developing his own "talking leaf"?
(A) They arranged for his hunting accident.
(B) They thought he was crazy.
(C) They decided to help him.
(D) They asked him to teach them to read and write.
40. What prompted Sequoyah to develop his alphabet?
(A) People were writing things about him that he couldn't read.
(B) He wanted to become famous.
(C) After his hunting accident, he needed something to keep him busy.
(D) He wanted the history of his people preserved for future generations.
41. The word illiterate means most nearly
(A) fierce
(C) abandoned
(B) poor
(D) unable to read or write
42. How would you describe Sequoyah?
(A) determined
(B) mad
(C) backwards
(D) meek
43. Which of the following is not true?
(A) Sequoyah developed a form of writing with the help of the Cherokee tribe.
(B) Sequoyah was a very observant young man.
(C) Sequoyah spent twelve years developing his alphabet.
(D) Sequoyah was honored by having some trees named after him.

## Questions 44 through 46 are based on the following reading.

The mighty, warlike Aztec nation felt that its existence depended upon human sacrifices. The sun would not shine, the crops would not grow, and wars would not be won if the gods were not appeased. As brutal as the ceremonies were, the victims (usually taken from among captives from battles) accepted their fate passively, having been previously indoctrinated and heavily sedated.
44. Why did the Aztecs offer human sacrifices?
(A) They were cruel and inhuman.
(B) They believed they had to pacify the gods.
(C) They wanted to force the citizens to obey.
(D) They wanted to deter crime.
45. Before the sacrifices, the victims were
(A) tortured and harassed
(C) brainwashed and drugged
(B) fed and entertained
(D) interrogated and drugged
46. In what manner did the victims accept their destiny?
(A) submissively
(C) violently
(B) rebelliously
(D) notoriously

## Questions 47 through 51 are based on the following passage.

Petroleum products, such as gasoline, kerosine, home heating oil, residual fuel oil, and lubricating oils, come from one source - crude oil found below the earth's surface, as well as under large bodies of water, from a few hundred feet below the surface to as deep as 25,000 feet into the earth's interior. Sometimes crude oil is secured by drilling a hole through the earth, but more dry holes arc drilled than those producing oil. Pressure at the source or pumping forces crude oil to the surface. Crude oil wells flow at varying rates, from ten to thousands of barrels per hour. Petroleum products are always measured in 42-gallon barrels.

Petroleum products vary greatly in physical appearance: thin, thick, transparent or opaque, but regardless, their chemical composition is made up of only two elements: carbon and hydrogen, which form compounds called hydrocarbons. Other chemical elements found in union with the hydrocarbons are few and are classified as impurities. Trace elements are also found, but these are of such minute quantities that they are disregarded. The combination of carbon and hydrogen forms many thousands of compounds which are possible because of the various positions and joinings of these two atoms in the hydrocarbon molecule.

The various petroleum products are refined from the crude oil by heating and condensing the vapors. These products are the so-called light oils, such as gasoline, kerosine, and distillate oil. The residue remaining after the light oils are distilled is known as heavy or residual fuel oil and is used mostly for burning under boilers. Additional complicated refining processes rearrange the chemical structure of the hydrocarbons to produce other products, some of which are used to upgrade and increase the octane rating of various types of gasolines.
47. Which of the following is not true?
(A) Crude oil is found below land and water.
(B) Crude oil is always found a few hundred feet below the surface.
(C) Pumping and pressure force crude oil to the surface.
(D) A variety of petroleum products is obtained from crude oil.
48. Many thousands of hydrocarbon compounds are possible because
(A) the petroleum products vary greatly in physical appearance
(B) complicated refining processes rearrange the chemical structure
(C) the two atoms in the molecule assume many positions
(D) the pressure deeded to force it to the surface causes molecular transformation
49. Which of the following is true?
(A) The various petroleum products are produced by filtration.
(B) Heating and condensation produce the various products.
(C) Chemical separation is used to produce the various products.
(D) Mechanical means such as the centrifuge are used to produce the various products.
50. How is crude oil brought to the surface?
(A) expansion of the hydrocarbons
(B) pressure and pumping
(C) vacuum created in the drilling pipe
(D) expansion and contraction of the earth's surface
51. Which of the following is not listed as a light oil?
(A) distillate oil
(C) lubricating oil
(B) gasoline
(D) kerosene

## Questions 52 through 57 are based on the following passage.

An election year is one in which all four numbers are evenly divisible by four (1944, 1948, etc.) Since 1840, American presidents elected in years ending in zero have been destined to die in office. William H. Harrison, the man who served the shortest term, died of pneumonia several weeks after his inauguration.

Abraham Lincoln was one of four presidents who were assassinated. He was elected in 1860, and his untimely death came just five years later.James A. Garfield, a former Union army general from Ohio, was shot during his first year in office (1881) by a man to whom he wouldn't give a job.

While in his second term of office (1901), William McKinley, another Ohioan, attended the PanAmerican Exposition at Buffalo, New York. During the reception, he was assassinated while shaking hands with some of the guests. Three years after his election in 1920, Warren G. Harding died in office. Although it was never proved, many believe he was poisoned.

Franklin D. Roosevelt had been elected four times (1932, 1936, 1940, and 1944), the only man to serve so long a term. He had contracted polio in 1921 and died of the illness in 1945. John F. Kennedy, the last of the line, was assassinated in 1963, only three years after his election. Will 1980's candidate suffer the same fate?
52. Which of the following was not an election year?
(A) 1960
(B) 1930
(C) 1888
(D) 1824
53. Which president served the shortest term in office?
(A) Abraham Lincoln
(C) William McKinley
(B) Warren G. Harding
(D) William H. Harrison
54. Which of the following is true?
(A) All presidents elected in years ending in zero have died in office.
(B) Only presidents from Ohio have died in office.
(C) Franklin D. Roosevelt completed four terms as president.
(D) Four American presidents have been assassinated.
55. How many presidents elected in years ending in zero since 1840 have died in office?
(A) 7
(B) 5
(C) 4
(D) 3
56. In this reading, what does inauguration mean?
(A) election
(C) swearing-in ceremonies
(B) acceptance speech
(D) campaign
57. Which of the following was not assassinated?
(A) John F. Kennedy
(C) Abraham Lincoln
(B) Franklin D. Roosevelt
(D) James A. Garfield

## Directions for questions 58 through 60

For each of these questions, choose the answer that is closest in meaning to the original sentence. Note that several of the choices may be factually correct, but you should choose the one that is the closest restatement of the given statement.
58. Unintentionally, some cities are squeezing out the middle class by forcing them to support the poor.
(A) Unintentionally the poor are supporting a movement to squeeze the middle class out of some cities.
(B) The middle class in some cities is unfortunately squeezing out the support of the poor.
(C) In some cities, the middle class is forcing the poor to support them.
(D) By being forced to support the poor, the middle class is unintentionally being squeezed out of some cities.
59. The current was black and mindless, with a beauty that almost masked its danger.
(A) Although it appeared dangerous, the current had a beauty that was only black and mindless.
(B) The current was black and mindless but not as dangerous as it seemed.
(C) Although the current was black and mindless, its beauty nearly disguised the danger.
(D) Despite its danger, the blackness and mindlessness of the current made it more beautiful.
60. Despite the breathtaking natural beauty of the crystalline Great Lakes during the winter, man is reluctant to venture into this snowy wonderland.
(A) Even though the crystalline Great Lakes are breathtaking in the winter, man is afraid to explore this snowy wonderland.
(B) Man is reluctant to venture into the snowy wonderland in the winter because of the breathtaking natural beauty of the crystalline Great Lakes.
(C) Man is reluctant to venture into the crystalline Great Lakes during the winter because it makes breathing difficult.
(D) Although reluctant to venture into the crystalline Great Lakes, man does so to appreciate their breathtaking natural beauty.

STOP. THIS IS THE END OR THE EXAMINATION. IF YOU FINISH BEFORE TIME IS UP, CHECK YOUR WORK ON READING COMPREHENSION AND VOCABULARY SECTION ONLY. DO NOT RETURN TO ANY OTHER SECTION OF THE TEST.

