



Understanding and Interpreting Written Material

Booklet No. 4



CIVIL SERVICE EMPLOYEES ASSOCIATION, INC. LOCAL 1000, AFSCME, AFL-CIO Danny Donohue, President

Understanding and Interpreting Written Material

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Introduction

Purpose

This booklet is designed to help you prepare for specific New York State civil service exams. The 60 practice questions that follow are examples of the kinds of questions you're likely to encounter on actual exams. The format for this section of the exams is simple. You will be asked to read a paragraph and then answer a question about it. To do well on these questions, you need to read each paragraph carefully and then base your answer on what you have just read, not on what you may happen to know about the subject.

Study Guide Contents

The first part of this study guide is composed of 60 multiple choice questions. An answer key is located on page 39, followed by explanations of the correct answers, beginning on page 40.

How to Use This Booklet

Complete a few questions at a time and then review your answers in the back of the booklet. The explanations in the back of the booklet tell you why the right answer was right and why the wrong answers were wrong. If you answer a question incorrectly, try to analyze why you chose the wrong answer. Use the diagnostic worksheet on the next page to help you decide where you went wrong.

Good luck!

Diagnostic Worksheet for Understanding and Interpreting Written Material

For each question you answered incorrectly, go through the checklist below and place the number of the question missed next to each trait exhibited. This is designed to give you more insight into why you answered a question incorrectly. By working to improve your abilities in these areas, you should notice an improvement in your scores.

| Question Number(s) | | Trait Exhibited |
|--------------------|-------|---|
| | 1. I | jumped to an incorrect conclusion. |
| | 2. I | misinterpreted what the question was asking. |
| | 3. I | I had little confidence I could solve the problem. |
| | | didn't break the reading passage down into more easily understood parts. |
| | | I knew I couldn't solve the problem, so I gave up and guessed. |
| | 6. I | I made a careless error. |
| | 7. I | "followed a hunch" without checking it through. |
| | | didn't step back and evaluate the reasonableness of my solution. |
| | 9. I | worked mechanically because I knew it was hopeless. |
| | 10. I | didn't check my work. |
| | 11. I | became bored or frustrated, and took a guess. |
| | | was inconsistent in my interpretation of parts of the reading passage. |
| | 13. I | didn't try to visualize the problem. |
| | 14. I | misinterpreted part of the reading passage. |
| | r | I tried to answer the question without realizing that my understanding of a section of the reading passage was vague. |

1. Genetic engineering may lead to cures for many common diseases, but it may also create new, potentially deadly hazards. For example, introducing cancercausing genes into a common infectious organism, such as the influenza virus, could be highly dangerous. For this reason, experiments with recombinant DNA are closely regulated in the U.S. Potentially hazardous experiments are reviewed by both the National Institutes of Health (NIH) and the Food and Drug Administration (FDA). The FDA has already approved human drugs and vaccines, diagnostic devices, and food processing enzymes produced through recombinant DNA technology. It is also overseeing the creation of genetically engineered food crops. The U.S. Department of Agriculture (USDA) regulates use of genetically engineered plants, microorganisms, and veterinary biological products.

- a. The dangers of DNA research outweigh the potential benefits.
- b. Government regulation of genetic engineering is not strict enough.
- c. The FDA and the USDA have different views on the safety of genetic engineering.
- d. The potential hazards associated with genetic engineering require careful regulation.
- 2. In thinking about the many barriers to personal communication, particularly those that are due to differences of background, experience, and motivation, it seems to me extraordinary that any two persons can even understand each other. Such reflections provoke the question of how communication is possible when people do not see and assume the same things and share the same values. On this question there are two schools of thought. One school assumes that communication between A and B, for example, has failed when B does not accept what A has to say as being fact, true, or valid; and that the goal of communication is to get B to agree with A's opinions, ideas, facts, or information. The position of the other school of thought is quite different. It assumes that communication has failed when B does not feel free to express his feelings to A because B fears that they will not be accepted by A. Communication is facilitated when on the part of A or B or both there is a willingness to express and accept differences.

According to the author:

- a. Communication is not possible when people do not assume the same things or share the same values.
- b. Communication is facilitated when there is a willingness to express and accept differences.
- c. There are many barriers to personal communication.
- d. Communication is possible only when differences of background, experience and motivation are overcome.
- 3. Freedom of speech was one of the principles established in the 1st Amendment to the Constitution in 1791. Since that time, this basic right has frequently come under attack. In 1798, Congress passed the Alien and Sedition Acts, which made it a criminal offense to foster opposition to the federal government. During World War I, a wave of patriotic sentiment led Congress to pass the Espionage Act of 1917, which restricted the right of free speech of foreigners, labor organizers, pacifists, radicals, and others. The rise of Communism as a threat to democracy led to new questions about the role of free speech. In 1949, eleven American Communist leaders were tried on conspiracy charges because they advocated overthrowing the capitalist system. Since the early 1950s, however, the courts have adopted a more protective approach to free speech. Since 1957, advocating the overthrow of the government has been constitutionally protected speech under the 1st Amendment. In a controversial 1989 decision, the Supreme Court held that the burning of an American flag as an act of political protest is also protected by the 1st Amendment, sparking a public outcry and political efforts to ban desecration of the flag.

- a. Sometimes, freedom of speech must be restricted for the good of the country.
- b. On occasion, Congress has passed laws that have restricted freedom of speech.
- c. The 1st Amendment to the Constitution says nothing about freedom of speech.
- d. The Supreme Court has ruled that burning an American flag as an act of protest is unconstitutional.

4. Heisenberg's Principle of Uncertainty, which states that events at the atomic level cannot be observed with certainty, can be compared to this: in the world of everyday experience we can observe any phenomenon and measure its properties without influencing the phenomenon in question to any significant extent. To be sure, if we try to measure the temperature of a demitasse with a bathtub thermometer, the instrument will absorb so much heat from the coffee that it will change the coffee's temperature substantially. But with a small chemical thermometer we may get a sufficiently accurate reading. We can measure the temperature of a living cell with a miniature thermometer, which has almost negligible heat capacity. But in the atomic world we can never overlook the disturbance caused by the introduction of the measuring apparatus.

Which of the following statements is best supported by the above passage?

- a. There is little we do not alter by the mere act of observation.
- b. It is always a good idea to use the smallest measuring device possible.
- c. Chemical thermometers are more accurate than bathtub thermometers.
- d. It is not possible to observe events at the atomic level and be sure that the same events would occur if we were not observing them.
- 5. Between 1810 and 1816, a group of New York citizens made repeated efforts to get federal funding for a canal that would link Lake Erie and the Hudson River. When the federal government refused to provide any assistance, a group of New Yorkers led by De Witt Clinton proposed that the State fund the canal. Clinton was elected governor in 1817, and work on the Erie Canal, financed by the State, began on July 4 of that year in Rome, New York. A section of the canal, from Rome to Utica, was opened to navigation in 1819. The waterway was completed in 1825, and on October 26 of that year the canal boat Seneca Chief set out from Buffalo to New York City. It arrived with great fanfare on November 4. The high point of the celebration was the dumping of a barrel of Lake Erie water into the Atlantic Ocean.

- a. The federal government opposed construction of the Erie Canal mainly for political reasons.
- b. Construction of the Erie Canal took approximately 15 years.
- c. State funds were used to finance the construction of the Erie Canal.
- d. Construction of the Erie Canal began in Buffalo.

6. The universe is 15 billion years old, and the geological underpinnings of the earth were formed long before the first sea creatures slithered out of the slime. But it is only in the last 6,000 years or so that men have descended into mines to chop and scratch at the earth's crust. Human history is, as Carl Sagan put it, the equivalent of a few seconds in the 15 billion year life of the planet. What alarms those that keep track of the earth's crust is that since 1950 human beings have managed to consume more minerals than were mined in all previous history, a splurge of a millisecond in geologic time that cannot be long repeated without using up the finite riches of the earth.

Of the following, the main idea of the paragraph is:

- a. There is true cause for concern at the escalating consumption of the earth's minerals in recent years.
- b. Human history is the equivalent of a few seconds in the 15 billion year life of the earth.
- c. The earth will soon run out of vital mineral resources.
- d. The extraction of minerals from the earth's crust only began about 6,000 years ago.
- 7. Many economists believe that there are four phases of the business cycle: prosperity, liquidation, depression, and recovery. These terms were originally developed by the American economist Wesley Mitchell, who devoted his career to studying business cycles. During a period of prosperity, there is an increase in industrial production. Employment, wages, and profits increase as well. As the upswing continues, however, obstacles begin to appear. Production costs increase, interest rates rise, prices rise, and consumers react to increased prices by buying less. Manufacturers begin to cut back, laying off workers. These factors lead to a period of liquidation. Business executives become pessimistic as prices and profits drop. Money is hoarded, not invested. Production cutbacks and factory shutdowns occur. Unemployment becomes widespread. A depression is in progress. Recovery from a depression may begin for a variety of reasons, including a resurgence in consumer demand or government action to stimulate the economy. As a recovery picks up speed, consumers buy more and businesses invest in new capital equipment. A new cycle begins.
 - . Which of the following statements is best supported by the above passage?
 - a. Higher prices lead consumers to buy less.
 - b. Government intervention has no effect on the business cycle.
 - c. No one knows what causes an economic depression.
 - d. The idea of the business cycle is no longer relevant in today's economy.

8. In naming intervals that are wider than the octave, musicians follow two practices. The first is simply that of starting all over again; thus the two tones C-D, which frame the nine tones (C-D-E-F-G-A-B-C-D) may be called a second; or one may simply count the full number of tones and call it a ninth. Both terms are used interchangeably. If the two tones are sounded simultaneously, they are commonly called a second, in that the second and the ninth are identical from the point of view of harmony. If they are sounded in succession, they are then called a ninth, inasmuch as there is a great difference in melody between a second and the leap of a ninth.

According to the passage, if the two tones C-D are sounded in succession:

- a. The result is called an octave.
- b. The result is called a second.
- c. The result is called part of a "minor third."
- d. The result is called a ninth.
- 9. Hurricanes consist of high-velocity winds blowing circularly around a low-pressure center, known as the eye of the storm. The strength of a hurricane is rated from 1 to 5. The mildest, Category 1, has winds of at least 74 mph. The strongest (and rarest), Category 5, has winds that exceed 155 mph. Within the eye of the storm, the winds stop and the clouds lift, but the seas remain very violent.

- a. Category 1 hurricanes are the most common type.
- b. The strength of a hurricane is determined by the size of the eye.
- c. It is common for winds in a hurricane to exceed 155 mph.
- d. For a storm to be classified as a hurricane, it must have winds of at least 74 mph.

10. "Lack of challenge" and "excessive zeal" are opposite villains. You cannot do your best on a problem unless you are motivated. Professional problem solvers learn to be motivated somewhat by money and future work that may come their way if they succeed. However, challenge must be present for at least some of the time, or the process ceases to be rewarding. On the other hand, an excessive motivation to succeed, especially to succeed quickly, can inhibit the creative process. The tortoise and the hare phenomenon is often apparent in problem solving. The person who thinks up the simple elegant solution, although he or she may take longer in doing so, often wins. As in the race, the tortoise depends upon an inconsistent performance from the rabbit. And if the rabbit spends so little time on conceptualization that the rabbit merely chooses the first answers that occur, such inconsistency is almost guaranteed.

According to the above paragraph:

- a. Excessive motivation to succeed can be harmful in problem solving.
- b. It is best to spend a long time on solving problems.
- c. Motivation is the most important component in problem solving.
- d. Choosing the first solution that occurs is a valid method of problem solving.
- 11. Scientists use two scales of measurement to describe earthquakes. One is the Richter scale, named after the American seismologist Charles Francis Richter (1900-85). The Richter scale increases logarithmically. For example, a magnitude 7 quake is 10 times more powerful than a magnitude 6 quake, 100 times more powerful than a magnitude 5 quake, 1000 times more powerful than a magnitude 4 quake, and so on. Approximately 800 quakes of magnitudes 5 to 6 occur annually worldwide, in comparison with only about one quake of magnitudes 8 to 9.

- a. The Richter scale is the most precise way of measuring the strength of an earthquake.
- b. Earthquakes that measure 5 to 6 on the Richter scale are more common than earthquakes that measure 8 to 9.
- c. A magnitude 8 earthquake is twice as powerful as a magnitude 7 earthquake.
- d. Scientists use two scales of measurement to describe earthquakes because neither one is wholly accurate.

12. No people have invented more ways to enjoy life than have the Chinese, perhaps to balance floods, famines, warlords, and other ills of fate. The clang of gongs, clashing cymbals, and beating of drums sound through their long history. No month is without fairs and theatricals when streets are hung with fantasies of painted lanterns. Night skies are illuminated by fireworks—a Chinese invention—bursting in the form of flowerpots, peonies, fiery devils. The ways of pleasure are myriad. Music plays in the air through bamboo whistles of different pitch tied to the wings of circling pigeons. To skim a frozen lake in an ice sleigh with a group of friends on a day when the sun is warm is rapture, like "moving in a cup of jade." What more delightful than the ancient festival called "Half an Immortal," when everyone from palace officials to the common man took a ride on a swing? When high in the air, one felt like an Immortal, when back to earth once again human—no more than to be for an instant a god.

According to the above passage:

- a. If the Chinese hadn't had so many misfortunes, they wouldn't have created so many pleasurable pastimes.
- b. The Chinese invented flowerpots.
- c. Every month the Chinese have fairs and festivals.
- d. Pigeons are required to play the game "Half an Immortal."
- 13. On January 1, 1863, Abraham Lincoln issued the Emancipation Proclamation. This document declared that all slaves in the Confederate states "shall be then, thenceforward, and forever free." Abolitionists had been urging Lincoln to take this action for several years. Runaway slaves were now free to join the Union army without fear of being returned to their masters. The Proclamation left no doubt that the Civil War, then at its height, was about slavery. Other nations that were friendly to the Confederacy, particularly England and France, decided not to intervene in the conflict because of the strong anti-slavery sentiments of their citizens.

- a. Lincoln issued the Emancipation Proclamation after the Confederacy was defeated in the Civil War.
- b. The Emancipation Proclamation declared that all slaves in the Confederate states were free.
- c. Abolitionists were at first opposed to the Emancipation Proclamation.
- d. England and France considered the Emancipation Proclamation a trick to keep them from providing aid to the Confederacy.

14. Western scientists are now beginning to discover what the philosophers of India have known for millennia: that the entire universe consists of one energy. The ancient Indian philosophers, who were scientists of the spirit, called that energy Consciousness, or God. They felt that this supreme Consciousness created the entire cosmos out of its own being. A builder may use wood, stone, and other materials to construct something, but Consciousness used no existing materials; it brought everything from within itself. They felt we are all portions of this universe of Consciousness. According to the Indian philosophers, we are not different from one another, and we are not different from God. If one sows a mango seed, one will get a mango, never a lemon. In the same way, that which is born of God can never be other than God. They felt that within the human heart dwells a shimmering effulgence whose brilliance surpasses even that of the sun. This inner Consciousness is the same as that which creates and animates the entire universe. But we are not aware of this. Even though we have come from this Consciousness, we have changed our understanding about ourselves.

According to the author:

- a. Physicists are beginning to discover what Indian philosophers have known for many years, that the universe consists of one energy.
- b. Consciousness and God are identical, as are mangos and lemons.
- c. Ancient Indian philosophers knew more than modern scientists.
- d. The Consciousness that created the universe is also inside of us.
- 15. Nearly 50 percent of the world's labor force is employed in agriculture. The percentages vary greatly from one part of the world to another. In Africa approximately 64 percent of the labor force works in agriculture, while in the U.S. and Canada the number is approximately 4 percent.

Farm size also varies widely from region to region. The average for Canadian farms is about 570 acres, and the average for U.S. farms is about 460 acres. The average size of a single landholding in the Philippines, however, is less than 9 acres, and in Indonesia, a little less than 3 acres. Size also depends on the purpose of the farm. Commercial farming, or production for cash, is usually on large holdings. Wheat farms are most efficient when they comprise some thousands of acres and can be worked by teams of people and machines. Australian sheep stations and other livestock farms must be large to provide grazing for thousands of animals. On the other hand, farms that produce mainly fruits and vegetables for local consumption are often small enough to be operated by a single family.

- a. In terms of acreage, Canada has the largest farms in the world.
- b. Farms in the U.S. and Canada are more productive than farms in Africa.
- c. On average, farms in Indonesia are smaller than farms in the Philippines.
- d. Approximately one third of the workforce in Africa is employed in agriculture.
- 16. One of the central issues in the debate over the death penalty is its effectiveness as a deterrent to violent crime. Is the death penalty a more effective deterrent than life in prison? Defenders of the death penalty believe that it is; opponents of the death penalty disagree. Opponents cite the experience of adjacent states in which one has the death penalty and one does not. In these cases, there is no significant difference in murder rates between the states. Opponents also point out that murder rates are higher, not lower, in states that have the death penalty.

- a. Opponents of the death penalty believe that it is not a deterrent to violent crime.
- b. Defenders of the death penalty believe that anyone who commits murder loses the right to live.
- c. Opponents of the death penalty believe that it is no more effective than life in prison as a deterrent to violent crime.
- d. Defenders of the death penalty are not primarily concerned with whether it is an effective deterrent to violent crime.
- 17. Vegetarians have a variety of reasons for their beliefs. Some refuse to eat meat because they believe that the killing of animals is unnecessary or barbaric. They feel that processes such as butchering are degrading to the people who practice them and cruel to the animals slaughtered. Others believe that meat is harmful to the human body and that a purely vegetable diet is more nutritious. Still others choose vegetarianism because they believe that raising animals for meat is an inefficient use of land. They say that farmland could be put to better use growing crops for human consumption.

- a. Some vegetarians choose not to eat meat mainly for health reasons.
- b. A purely vegetable diet is more nutritious than a diet that includes meat.
- c. Vegetarians are opposed to any use of animals for the benefit of humans.
- d. Vegetarians favor laws to reduce the consumption of meat.
- 18. None of this would be worth saying if Descartes had been right in positing a one-to-one correspondence between stimuli and sensations. But we know that nothing of the sort exists. The perception of a given color can be evoked by an infinite number of differently combined wavelengths. Conversely, a given stimulus can evoke a variety of sensations, the image of a duck in one recipient, the image of a rabbit in another. Nor are responses like these entirely innate. One can learn to discriminate colors or patterns which were indistinguishable prior to training. To an extent still unknown, the production of data from stimuli is a learned procedure. After the learning process, the same stimulus evokes a different datum. I conclude that, though data are the minimal elements of our individual experience, they need be shared responses to a given stimulus only within the membership of a relatively homogeneous community—educational, scientific, or linguistic.

- a. One stimulus can give rise to a number of different sensations.
- b. There is a one-to-one correspondence between stimuli and sensations.
- c. It is not possible to produce data from stimuli by using a learned procedure.
- d. It is not necessary for a group to be relatively homogeneous in order to share responses to stimuli.

19. African artists have developed diverse traditions of sculpture, painting, architecture, furniture, pottery, textiles, and jewelry. Artists generally work as specialists, receiving their training from established artists living in the community or wider area. In some places, the artistic profession is seen as hereditary, with talent being passed from generation to generation, and with creativity and success often linked to a divine ancestral endowment.

In some African cultures, artists use deliberate distortion of the human figure to portray undesirable characteristics. The Ibo and Ibibio of Nigeria, for example, carve masks with diseased, horrific, monstrous, or asymmetrical features to represent characters who are evil or dangerous. In Ibo and Ibibio masquerade performances, such masks are often contrasted with other, more beautifully featured and aesthetically pleasing masks that are worn to portray persons who are good, or peaceful.

Which of the following statements is best supported by the above passage?

- a. All African artists follow similar artistic traditions.
- b. Most individual artists work in many different forms, such as sculpture, painting, and pottery.
- c. Some artists deliberately create distorted images to show negative personal characteristics.
- d. All of the masks created by the Ibo of Nigeria have ugly or asymmetrical features.
- 20. During the one second that blood is running through the capillaries of the lungs, the single atom of zinc that is set in the center of the enzyme carbonic anhydrase comes into contact with 600,000 of its target molecules, carbonic acid. As a result, each is broken down into one carbon dioxide and one water molecule. Only because the enzyme acts so quickly is it possible for the carbon dioxide to be freed fast enough from its components to leave the blood during that moment in the alveolus when it is separated from air only by a very thin membrane. So our ability to rid our bodies of CO₂ is totally dependent on these critically located atoms of zinc. Yet, up until a few years ago, zinc was considered to be of little significance in the body's functioning.

The author's main point is

- a. Zinc helps metabolize carbohydrates.
- b. Zinc is less important that it was previously thought to be.
- c. The enzyme carbonic acid has one atom of zinc in the center.
- d. Zinc is essential to the human body's ability to exhale CO_2 .

21. In the nineteenth century, dairy farming was confined to the spring and summer months, when pasturage was plentiful. Cows, calving in the spring, were allowed to become dry in the fall and were poorly fed and sheltered during the winter. Under the present system, dairy farming is not confined to any season; during the winter, cows are fed fodder in the form of silage. The ratio of dairy cows to people in the U.S. has changed from one cow to every four persons in the population of the late 19th century to one cow to every six persons in the present population. One reason for this change is that today less milk is lost to contamination and spoilage. A properly managed dairy farm is extremely efficient. Most of the nutrients taken from the soil by crops may be replaced by the supply of manure provided by the dairy herd.

Which of the following statements is best supported by the above passage?

- a. Dairy farming is an efficient type of agriculture.
- b. There are fewer cows in the U.S. today than there were in the 19th century.
- c. Most dairy farms operate only in the spring and summer.
- d. Contamination and spoilage are still common problems in the dairy industry.
- 22. If a car breaks down on a busy highway, hundreds of drivers may go by before anyone stops to help. If a car breaks down on a nearly deserted country road, however, there is a good chance that the first car to come along will stop to offer assistance. The difference is the personal responsibility that a passerby feels. A driver on a little-traveled road knows that if he or she does not stop, the odds are good that the stranded person will not get help. On a busy highway, the same driver will probably feel that he or she is no more personally responsible than any of the many other drivers. Even though the event is an emergency, people in a group will usually feel less responsible than a witness who is alone. In a group, each bystander may feel that all the others are equally responsible for helping.

The main idea of the passage is:

- a. You are more likely to get help on a lonely country road.
- b. People who live in cities are less helpful.
- c. The personal responsibility a passerby feels decreases the smaller the number of people witnessing the event.
- d. The personal responsibility a passerby feels increases the smaller the number of people witnessing the event.

23. Vitamins are organic compounds required by the body in small amounts for metabolism, to protect health, and for proper growth in children. Vitamins also assist in the formation of hormones, blood cells, nervous-system chemicals, and genetic material. Vitamins act as catalysts, combining with proteins to create enzymes that in turn produce hundreds of important chemical reactions throughout the body. Without vitamins, many of these reactions would slow down or cease. Nutrition experts recognize 13 specific vitamins, all of which fall into two broad categories: fat-soluble or water-soluble. The fat-soluble vitamins, including A, D, E, and K, are stored in the body's fat, and therefore they do not have to be consumed every day. The water-soluble vitamins, including the eight B vitamins and vitamin C, cannot be stored and must be consumed frequently, preferably every day. The body can manufacture only vitamin D; all others must be derived from the diet.

- a. Fat-soluble vitamins are more important in preserving health than water-soluble vitamins.
- b. The 13 commonly recognized vitamins should be consumed in some form every day.
- c. Some vitamins can be consumed only from meat and fish.
- d. Water-soluble vitamins are not stored in the body and should be consumed frequently.
- 24. The idea of the sexual division of labor is a changeable concept, subject to the particular needs of segments of society which frequently change. For example, in 1917 the banking community was faced with a shortage of labor. They attracted women into clerical and lower level managerial jobs by arguing that women "are exceptionally fitted for work of this character their neatness, deft handling of money and papers, tact and a certain intuitive judgment all being qualifications that count in their favor." In the early 1930's, there was a very large supply of male workers available because of the Depression. The banking industry changed its mind, and said it could not hire women, even as tellers, because they were poor at figures, and because the public would not accept the notion of handing over their money to women. A few years later, faced with a shortage of labor due to the second world war, banks once again hired women as tellers. Industry journals argued then that women would make ideal tellers because they were so good at dealing with the public.

- a. Female bank tellers are more likely to be good at dealing with the public than male bank tellers.
- b. The kinds of work women are encouraged and expected to perform may depend on the particular needs of an industry.
- c. The banking industry promotes few women into higher management positions.
- d. Women are best suited for lower- and mid-level management positions.
- 25. The modern Olympics were conceived in the spirit of international friendship and cooperation, but conflicts between nations have sometimes interfered with this noble intention. In the 1936 Berlin Olympics, Adolf Hitler refused to recognize the achievements of Jesse Owens, a black American who won four gold medals. At the 1972 games, held in Munich, West Germany, an Arab guerilla organization killed two Israeli athletes and took nine others hostage. Two additional athletes and five of the guerillas were later killed in a gun battle with police. Conflict arose again at the 1976 games, held in Montreal. The host Canadian government refused to allow the team from Taiwan to carry its flag or have its national anthem played at the games. The Taiwanese withdrew from the games. The same year, several African nations demanded that New Zealand be excluded from the Olympics because one of its rugby teams had recently played in South Africa. When their demand was refused, the African nations withdrew from the games.

- a. An Arab guerilla organization carried out an attack on the Israeli team at the 1972 Olympics.
- b. In the 1976 Olympics, the host country, Canada, banned the Taiwanese from competition.
- c. The New Zealand team was banned from the 1976 games because a rugby team from New Zealand had recently played in South Africa.
- d. Adolf Hitler was the first national leader to inject the spirit of nationalism into the Olympics.

26. Plutarch, writing of a great battle that occurred in 102 BC, believed that noise produced rain. Since nature's rain was accompanied by thunder, people might get the same results in the same way. This association of ideas eventually came to link weather control with concussion. In the 16th century, Benvenuto Cellini wrote that he had brought on rain by artillery fire. Church bells have been rung in France and Italy to jar the air and so wring precipitation from the skies. A modern scholar, Clark C. Spence, has noted that "shooting with cannon, handguns, and rockets to produce rain was common in the Beaujolais wine districts almost to the twentieth century."

Which of the following statements is best supported by the above passage?

- a. Benvenuto Cellini proved the skies will give up their moisture after sufficient noise.
- b. Beaujolais wine was improved with shooting cannon, handguns, and rockets.
- c. Studies have never been able to disprove the theory that noise produces rain.
- d. In some cultures people believe that noise and rain are related.
- 27. Parkinson's disease is a slowly progressive disabling ailment, marked by tremor and increasing stiffness of the muscles. It affects more men than women, and it is most likely to develop after the age of 35. About 200,000 cases are recorded annually in the U.S. The disease results from degeneration of the basal ganglia, an area of nerve cells at the base of the brain. Nerve signals are carried through this area by a chemical called dopamine. Patients with Parkinson's disease have a marked shortage of this chemical. The reason for this deficiency is not known. The symptoms of the disease include excessive salivation, poor coordination, faulty body balance, tremors, and muscle rigidity. In some patients, shortening of muscles along the front of the neck tends to bend the head and spine forward. A number of experimental treatments have been used for the symptoms of the disease, but as yet no cure or comprehensive treatment has been developed.

- a. Parkinson's disease is a form of cancer.
- b. Dopamine is a powerful drug that can relieve some symptoms of Parkinson's disease.
- c. Parkinson's disease is more common among men than women.
- d. Approximately 200,000 patients die each year in the U.S. as a result of Parkinson's disease.

28. The instructions for a drain opener read as follows:

For a clogged drain there is no need to remove standing water. Use half of the bottle. Allow to work 30 minutes. Flush with hot water. Repeat application if necessary and let stand for one hour. Then flush with hot water. For severely clogged drains, let stand overnight before flushing with cold water. For slow running drains, use one third of the bottle. Let stand 15 minutes. Repeat application two more times. Flush with hot water after the third application.

Listed below are four statements:

- I. For a slow running drain, it's suggested that you use three applications.
- II. It's recommended that you flush a clogged drain with cold water after the drain opener has stayed in it for one hour.
- III. It's recommended that you let a severely clogged drain stand overnight before flushing with hot water.
- IV. According to the instructions, there's no need to remove standing water before using the drain opener.

Of the above,

- a. Only statements I, III, and IV are correct.
- b. Only statements I and III are correct.
- c. Only statements I and IV are correct.
- d. Only statements I, II, and IV are correct.
- 29. Wastewater is carried from its source to treatment facilities through various types of pipe systems. If the system carries both domestic and storm water sewage, it is called a combined system. Combined systems are usually found in the older sections of urban areas. As the cities expanded and began to provide treatment of sewage, sanitary sewage was separated from storm sewage by a separate pipe network. This arrangement is more efficient because it keeps storm sewage out of the treatment plant. Unlike domestic sewage, storm sewage usually does not need to be treated.

Urban sewer mains generally discharge into interceptor sewers, which join to form a trunk line that discharges into the treatment plant. Trunk lines are sometimes large enough for a truck to drive through them.

- a. Sewage usually flows directly from households into a trunk line
- b. Combined systems are usually found in older urban areas.
- c. Not all domestic sewage needs to go to a treatment plant.
- d. It is more efficient to have domestic and storm sewage flowing through the same pipes.
- 30. Susan B. Anthony and Elizabeth Cady Stanton were early leaders in the struggle for women's rights. From 1854 to 1860 they concentrated on reforming New York State laws discriminating against women. They both believed that women would not gain their rights or be effective in promoting reforms until they had the vote. After the Civil War, they concentrated on this issue. In 1869 they organized the National Woman Suffrage Association to work for a constitutional amendment giving women that right. Although the newly freed slaves were granted the vote by the 15th Amendment, women of all races continued to be excluded. From 1868 to 1870 Anthony and Stanton published a newspaper, Revolution, focused on injustices suffered by women. To dramatize her fight, Anthony defiantly registered and cast a ballot in the 1872 presidential election. She was arrested and convicted, but refused to pay the \$100 fine. She went to Europe in 1883, met women's rights activists there, and in 1888 helped form the International Council of Women, representing 48 countries.

- a. Freed slaves received the right to vote before women did.
- b. After the Civil War, Anthony and Stanton focused on reforming New York State laws that discriminated against women.
- c. Elizabeth Cady Stanton was arrested and convicted for voting in the 1872 presidential election, but she refused to pay the \$100 fine.
- d. Women won the right to vote shortly after the Civil War.

31. Novel or dangerous situations or disturbing thoughts that cause a person to feel frightened, angry, anxious, grief-stricken or depressed can set the body pinging like a pinball machine with a dozen balls in play. The chemicals that trigger the uproar can affect the entire body almost simultaneously. Electrochemical activity in the brain causes the hypothalamus to trigger the release of adrenocorticotropin (ACTH) from the pituitary gland. ACTH, a hormone, travels in the bloodstream. Reaching the kidneys, ACTH prompts the adrenal glands to release hormones like cortisol and epinephrine, which can affect virtually every organ in the body. Epinephrine signals the heart to beat faster, speeding up the response to a crisis. The stomach starts producing the hormone gastrin as part of a general acceleration of metabolism. The kidneys begin to produce renin, provoking the constriction of blood vessels. High cortisol levels may harm organs vital to the production of white blood cells. The spleen and thymus may shrink, weakening the immune system.

According to the passage, the reaction to stress is carried out in which of the following orders?

- I. The adrenal glands release hormones likes cortisol.
- II. The heart beats faster because of epinephrine.
- III. The hypothalamus triggers the release of adrenocorticotropin.
- IV. Adrenocorticotropin travels in the bloodstream.
- a. I, II, III, IV
- b. IV, I, III, II
- c. IV, III, I, II.
- d. III, IV, I, II

32. Wine is classified in three major categories. Table wines, also called still or natural wines, are consumed primarily as complements to food. Sparkling wines, for example champagne, are drunk for the most part on festive occasions. Fortified wines, such as sherry or vermouth, are most commonly drunk before or after meals and are also frequently used in cooking. These wines are called fortified because their alcoholic and sugar content are boosted by the addition of a more potent additive, usually brandy. Fortified wines have an alcohol content of 15 to 22 percent by volume. The alcohol content of table wines is typically 12 to 14 percent.

Table wines are classified by color (red, white, or rosé) and by flavor (sweet or dry). Red wines are made from dark grapes. The wine absorbs its color from the skins of the grapes, which are allowed to remain in contact with the juice for a period of two days to three weeks. White wines may be made from "white" (that is, green) grapes or from dark grapes. If dark grapes are used, the skins are not allowed to come in contact with the fermenting juice. True rosé wines are made from dark grapes, but their skins are allowed to stay in contact with the juice for only a short time.

- a. Fortified wines have a higher alcohol content than table wines.
- b. Fortified wines are made by blending two types of table wine.
- c. Fortified wines typically have three times as much alcohol by volume as table wines.
- d. Rosé wines are a mixture of red and white wines.
- 33. There are many ways status manifests itself in this country, depending upon the subculture and the individual's perceptions. One example is our fascination with and elevation of royalty, celebrities, and the rich. Inherent in the taunt, "If you're so smart, why aren't you rich?" is the idea that there is something lacking in those who do not have a lot of money. There is an especially strong tendency to classify people according to the work they perform, and then to accept or dismiss them on that basis. At parties often the first question asked is, "What do you do?" (meaning, "Where do you work, and what do you do there?"). The answer one gives may determine how long the conversation will continue. When people are identified only with the work they do, the other aspects of their existence lose importance, and they are transformed into one-dimensional beings. This can have very negative effects on their self-concepts.

- a. The success of television shows that glamorize wealth is a reflection of our fascination with royalty.
- b. Most Americans would prefer to have a British-style monarchy.
- c. The tendency to classify people solely by the work they do can have harmful consequences.
- d. Most people want to perform meaningful work.
- 34. Niagara Falls consists of two cataracts: the Canadian, or Horseshoe, Falls (161 ft high), on the Canadian side of the river, and the American Falls (167 ft high), on the U.S. side. The waterfalls are separated by Goat Island, N.Y. The Canadian Falls are crescent-shaped. They cover much more area than the American Falls, and about nine times as much water flows over them. A small section of the American Falls near Goat Island is also known as Bridal Veil Falls. Niagara Falls was formed about 12,000 years ago. Since that time, erosion has gradually pushed the falls upstream. At present, the Canadian Falls is receding at a rate of about 5 ft per year, and the American Falls is being cut away at a rate of about 6 inches per year. The Canadian Falls erodes at a faster rate mainly because it carries more water. In 1954 a large part of the American Falls broke off, creating a large slope at the base of the falls.

- a. The Canadian Falls are higher than the American Falls.
- b. The American Falls are also called the Horseshoe Falls.
- c. More water flows over the Canadian Falls than the American Falls.
- d. The American Falls are receding faster than the Canadian Falls.

35. The most astounding and developed symbolic device humanity has evolved is language. By means of language we can conceive the intangible, incorporeal things we call our ideas, and the equally inostensible element of our perceptual world that we call facts. It is by virtue of language that we can think, remember, imagine, and finally conceive a universe of facts. We can describe things and represent their relations, express rules of their interactions, speculate and predict, and carry on a long symbolizing process known as reasoning.

According to the above paragraph, all of the following are true EXCEPT:

- a. Language allows us to think and to imagine.
- b. Although humanity has evolved language, reasoning is still a process that is frequently ignored.
- c. Language gives us the means to describe relationships between things.
- d. Facts and ideas are intangible things we conceive of through language.
- 36. The Iroquois Confederacy was an important group of native Americans living in what is now central New York. Founded in the 16th century, the original confederacy consisted of five tribes: the Mohawk, Onondaga, Cayuga, Oneida, and Seneca. These tribes were known as the Five Nations, or the League of Five Nations. In the early 18th century, the Tuscaroras, a tribe originally from what is now North Carolina, was formally admitted to the confederacy, and the name of the league was changed to the Six Nations, or the League of Six Nations.

The Iroquois economy was based on agriculture. Corn was the main crop, but it was supplemented with pumpkins, beans, tobacco, apples, and peaches. The Iroquois also made fine pottery, splint baskets, and mats of corn husks. Each town had several long, bark-covered communal houses. The families of a clan lived in semiprivate compartments, and the central areas were used as social and political meeting places. The common council of the entire confederacy met in such meeting places. Each town was represented by delegates to the league council. There was no overall leader of the Confederacy. Affairs of state were usually decided by a unanimous vote of the league council.

The stable social and political structures of the Iroquois enabled them to maintain a position of power during the Colonial period. In the conflict between the English and the French, most of the Iroquois sided with the English, because they opposed the spread of French settlements southward from Canada.

- a. At one time, the Iroquois Confederacy controlled most of the land from New York to North Carolina.
- b. In 1650, the Iroquois Confederacy consisted of six tribes or nations.
- c. The Iroquois were basically a nomadic people.
- d. The Iroquois Confederacy survived because of stable political and social structures.
- 37. "It was never assumed in the U.S. that the citizen of a free country has a right to do whatever he pleases; on the contrary, more social obligations were there imposed upon him than anywhere else. No idea was ever entertained of attacking the principle or contesting the rights of society; but the exercise of its authority was divided, in order that the office might be powerful and the officer insignificant, and that the community should be at once regulated and free. In no country in the world does the law hold so absolute a language as in America, and in no country is the right of applying it vested in so many hands. The administrative power in the U.S. presents nothing either centralized or hierarchical in its constitution; this accounts for its passing unperceived. The power exists, but its representative is nowhere to be seen."

The author refers to which of the following in this passage?

- a. The generosity of Americans.
- b. The American system of checks and balances in government.
- c. American idealism.
- d. The greed of the American people.

38. The Supreme Court of the United States operates mainly as an appellate body. This means that it reviews the decisions of the highest state courts and of the lower federal courts. In essence, it has complete authority over all U.S. courts. In addition to its appellate powers, the Supreme Court has jurisdiction in cases involving a public minister, an ambassador, or a consul. The Court's powers extend to all cases in which the U.S. is a party and to cases between governments or citizens of different states.

The Supreme Court consists of eight associate justices and the chief justice, all appointed by the president with the consent of the Senate. Members of the Court are appointed for life terms and can be removed only by resignation or impeachment. Since its establishment, the number of justices on the Supreme Court has varied from five to ten. The size of the Court is not specified by the Constitution; rather it is determined by the U.S. Congress. The Court reaches decisions by majority vote, but any justice may issue a dissenting opinion.

Which of the following statements is best supported by the above passage?

- a. The number of justices on the Supreme Court is specified in the U.S. Constitution.
- b. Currently, there are eight justices on the Supreme Court.
- c. The president has the authority to nominate justices and to remove them from the Supreme Court.
- d. The Supreme Court has authority over all U.S. courts.
- 39. A balloon filled with water reacts differently from a balloon filled with air. If both are dropped on the ground, the one filled with water will probably burst while the one filled with air will bounce. In the water balloon, the force produced when striking the ground breaks the balloon. It is transmitted to all surfaces of the balloon. However, the air balloon bounces because it absorbs the force. The air inside the balloon quickly compresses and then expands again. Pressure on a gas, such as air, causes the volume of the gas to decrease. This is not so with a liquid. Increased pressure does not compress a liquid any significant amount.

Car tires are filled with air instead of water because

- a. Pressure on a gas causes the volume of the gas to increase.
- b. Air can absorb the force of the bouncing tire.
- c. Liquid would freeze in the winter and evaporate in the summer.
- d. Air is cheaper to use.

40. Apple growing in the U.S. is limited to four major areas: the northwestern states, the Shenandoah-Cumberland region, the northeastern states, and the north-central states. The various kinds of Delicious apples are the most widely grown variety in the U.S. They are particularly well adapted to the Northwest but are grown commercially in all apple areas. McIntosh is the leading apple in the Northeast. In the Shenandoah-Cumberland area the most important varieties are York Imperial, Delicious, and Stayman Winesap. In the north-central area, the leading varieties are McIntosh, Jonathan, Rome Beauty, Wealthy, and Cortland.

Apple production in the U.S. is about 9 percent of the world total. Washington produces more apples than any other state. Next ranking in descending order are New York, Michigan, California, Pennsylvania, and Virginia.

Which of the following statements is best supported by the above passage?

- a. Delicious apples are the most widely grown variety in the U.S.
- b. New York produces more apples than any other state.
- c. The various kinds of Delicious apples are the most popular variety in every region of the U.S.
- d. The U.S. is the largest producer of apples in the world.
- 41. In the eighteenth century, medicine was practiced by a hierarchy of practitioners. At the top of the system were the physicians, who were university-educated and who enjoyed high social status. The number of physicians was strictly controlled by the profession's governing bodies. In England, the Royal College of Physicians licensed only 100 physicians in the early eighteenth century. Only licensed physicians could hold medical consultations and receive payment for their advice.

Below the physicians were the surgeons, who were still called barber-surgeons in many places. Their main functions were to bleed patients and to perform surgery. Bleeding (that is, draining a quantity of blood from a patient) was widely thought to cure a variety of ills. Surgery was performed in primitive conditions, without anaesthetic and with no attempt to prevent infection. During the course of the century, surgeons became more knowledgeable about the human body and gained greater prestige. By the end of the century, the distinction between surgeons and physicians began to disappear.

- a. Physicians and surgeons held different positions in the medical hierarchy during most of the eighteenth century.
- b. Surgery was uncommon in the eighteenth century.
- c. Surgeons in the eighteenth century were widely considered to be more knowledgeable about the human body than physicians.
- d. In England, the number of licensed surgeons was strictly controlled by the Royal College of Physicians.
- 42. The Great Lakes are a group of five large lakes in central North America. From east to west, they are Lakes Ontario, Erie, Huron, Michigan, and Superior. Lake Michigan lies entirely within the U.S., but the other lakes straddle the border between the U.S. and Canada. About two-thirds of the surface area is within the boundaries of the U.S. All are jointly controlled by the U.S. and Canada under the Boundary Waters Treaty of 1909. Taken together, the Great Lakes represent the largest body of fresh water in the world.

- a. Lake Michigan is west of Lake Huron.
- b. The Boundary Waters Treaty of 1909 gave sole control of the Great Lakes to the U.S.
- c. The U.S. and Canada have a long history of disputes over control of the Great Lakes.
- d. Most of the area of the Great Lakes falls within the borders of Canada.

43. There are approximately 340 species of sharks, the most feared of all fish. Some sharks are versatile hunters. Many species are able to hunt and eat nearly all the larger marine animals in both shallow and deep seas. Sharks have a long evolutionary history. Many of the shark species living today are quite similar to species that thrived more than 100 million years ago.

Sharks come in many sizes. The whale shark is the largest shark and also the largest fish in the sea, measuring up to 49 ft in length. (Some whales are larger, but they are mammals, not fish.) Sharks are especially abundant in tropical and subtropical waters. Many species migrate up rivers, and in Central America some species have been seen far inland. Sharks are best known as aggressive carnivores (meat eaters) that even attack members of their own species. Surprisingly, two of the largest sharks (the basking shark and the whale shark) are not hunters at all. They feed on plankton, which they strain from the water.

Which of the following statements is best supported by the above passage?

- a. Shark habitats are not confined to the oceans.
- b. Sharks have a long evolutionary history, but the sharks of today bear little resemblance to their ancient ancestors.
- c. Technically, sharks are mammals, not fish.
- d. Sharks are found only in tropical and subtropical waters.
- 44. President Theodore Roosevelt could best be described as an activist in foreign policy. At times he worked behind the scenes on the world stage. For example, he quietly halted German intervention in Venezuela in 1902, and he mediated several conflicts in Europe in 1904 and 1906. At other times, he acted openly and with considerable fanfare. He supported the revolution in Panama in 1903 that eventually led to U.S. acquisition of land for the Panama Canal. He proclaimed in 1904 that the U.S. had "police power" over all of Latin America, a statement that created great controversy at the time and in years to come.

Despite some of his war-like pronouncements, Roosevelt was also renowned as a peacemaker. His greatest achievement in this area was his mediation of the Russo-Japanese War in 1905. He won the Nobel Peace Prize for his efforts to resolve this conflict, becoming the first American to win the prestigious award. Roosevelt believed that peace must be based on military strength. Throughout his presidency he worked to strengthen and modernize the armed forces.

- a. Theodore Roosevelt was most renowned for his military accomplishments.
- b. Theodore Roosevelt mediated several international conflicts.
- c. Theodore Roosevelt received the Nobel Peace Prize for resolving conflicts in Latin America.
- d. Theodore Roosevelt always worked behind the scenes to resolve international conflicts.
- 45. The first great wave of immigration to the U.S. began early in the 19th century. Many Europeans left their homelands to escape the economic hardship caused by the Industrial Revolution and the change from small-scale to large-scale farming. During the first period, from 1820 to 1860, most of the immigrants came from Great Britain, Ireland, and western Germany. From 1860 to 1890, those countries continued to supply a majority of the immigrants, but a significant number of immigrants also arrived from the Scandinavian countries. After 1890, this pattern changed. The majority of immigrants in the early years of the twentieth century came from southern and eastern Europe. Immigrants from Austria, Hungary, Italy, and Russia constituted more than half of the total. The years from 1905 to 1914 saw an enormous increase in the number of immigrants, with more than one million aliens arriving each year. This number declined sharply during World War I. It increased again for a brief time after the war, but in the 1920's the number declined again, partly because of new restrictions placed on immigration by the U.S. government. In 1924, the government instituted a system of quotas for immigration from various nations. The quotas were higher for the nations of northern and western Europe because immigrants from these countries were supposedly more desirable than immigrants from eastern and southern Europe.

- a. In the early nineteenth century, most immigrants came from eastern and southern Europe.
- b. The number of immigrants declined during World War I.
- c. Immigration peaked during the 1920's.
- d. Restrictions imposed in the 1920's favored immigrants from eastern and southern Europe.

46. During a trial, questions of law are determined by the court and questions of fact are determined by the jury. The court decides whether evidence is admissible. The jury decides on the credibility and significance of evidence. After all the evidence has been presented, the two counsels, first for the defendant and then for the plaintiff or prosecution, summarize their arguments. Each addresses the jury, reviewing the evidence in the case and commenting on it in a manner favorable to that counsel's side of the case. The judge then makes a charge to the jury. The charge is a statement regarding the applicable law and the rules of evidence as they apply to the case. The jury then leaves the courtroom for deliberations. These deliberations continue until the jury reaches a decision or until the judge decides that the jury will not be able to reach a decision, an outcome known as a "hung jury." If the jury cannot reach a decision, a new trial may be ordered. In criminal trials the verdict of the jury must be unanimous. In civil trials in some states, a unanimous vote is not required to decide the outcome of the trial. In a civil trial, the jury also determines the amount of damages to be paid to the winning party.

- a. The rules of evidence are not as strict in a civil trial.
- b. The judge determines the significance of particular items of evidence.
- c. A hung jury represents a victory for the defendant.
- d. The court determines if a particular piece of evidence is admissible.

47. The term "gun control" generally refers to laws that place restrictions on legal ownership of certain firearms. These restrictions involve such things as background checks of gun purchasers, mandatory waiting periods, or banning the sale of some weapons altogether. It is estimated that some 70 million Americans own 200 million rifles and handguns. Since gun ownership is so widespread, the issue has considerable political significance. The basis for the debate is the Second Amendment to the U.S. Constitution, which guarantees that "the right of the people to keep and bear Arms shall not be infringed." Those opposed to controls interpret this to mean that the government does not have the right to limit or ban ownership of guns. Those in favor of controls believe that the Second Amendment refers only to arms to be used by "well regulated militia," not the general population.

Federal laws that were passed in the 1930s prohibited private possession of submachine guns and sawed-off rifles and banned the sale of guns to known criminals. In 1968 Congress passed the federal Gun Control Act, prohibiting interstate retailing of firearms. Many cities and states have banned handguns, or plastic guns, and bullets that can penetrate protective vests. In 1989 California became the first state to prohibit the sale or possession of semiautomatic assault weapons. In November 1993, the Brady Handgun Violence Prevention Act imposed a five-day waiting period on buyers of handguns nationwide.

- a. Gun control laws have been enacted at both the state and national levels.
- b. The Second Amendment imposed mandatory waiting periods on the sale of handguns.
- c. The Gun Control Act of 1968 repealed the Second Amendment.
- d. A majority of Americans own some type of gun.
- 48. When viewed without a telescope, Mars appears to be red. After Venus, it is the brightest object in the night sky. Mars has bright orange regions and darker, less red areas. The outlines and tones of these areas change with the Martian seasons. The reddish color of the planet results from its heavily oxidized, or rusted, surface. The dark areas are thought to consist of rocks similar to basalt. The brighter areas seem to consist of similar but even more weathered and oxidized material that apparently contains more fine, dust-sized particles than do the dark regions.

- a. Mars is the brightest object in the night sky.
- b. The surface of Mars is not really red.
- c. The appearance of Mars changes with the Martian seasons.
- d. Mars appears red because of gases in its atmosphere.
- 49. Heredity and environment interact to form personality. Infants differ widely because of variables that either are inherited or result from conditions of pregnancy and birth. Some infants are more attentive than others, for example, whereas some are more active. These differences can influence how parents respond to the infant. Their response, in turn, influences the infant's development.

Intelligence is widely believed to be influenced by heredity, but there is wide agreement that intelligence is also affected by environmental stimuli, especially in early childhood. Again, heredity and environment interact. Children who display natural intelligence and inquisitiveness are more likely to receive encouragement in their intellectual development.

Listed below are four statements:

- I. Intelligence is determined solely by heredity.
- II. It is difficult to separate the effect of heredity and environment in determining intelligence.
- III. Environmental stimuli are especially important to intellectual development during early childhood.
- IV. All infants begin life with basically the same intellectual capacity.

In the author's view, which of the above statements is correct?

- a. Only statements I and IV.
- b. Only statements II and III.
- c. Only statement I.
- d. Only statements I, II, and IV.

50. Physics is relatively new as a distinct intellectual discipline. It emerged as a separate science only in the early 19th century. Before that, a physicist was often also a mathematician, philosopher, chemist, biologist, or engineer. The field has grown so much in the last two hundred years that today physicists have to limit their work to one or two branches of the science.

The work of the physicist is often taken over by other specialists once it reaches maturity. For example, in the 19th-century electricity and magnetism were two of the main areas of interest for physicists. But as these subjects became widely understood, they were taken over by electrical and communication engineers. Nuclear physics has followed a similar development path. In the first half of the 20th century, physicists made profoundly important discoveries about the basic properties of matter. Their work was subsequently taken over by engineers and applied in the fields of electronics and nuclear energy.

Which of the following statements is best supported by the above passage?

- a. Physics has had few practical applications.
- b. No one was interested in physics before the 19th century.
- c. The work of the physicist is often taken over and put to practical use by engineers.
- d. Today, physics is not really considered a separate science.
- 51. Chronic marijuana users are said to develop an "amotivational syndrome" characterized by passivity, decreased motivation, and preoccupation with drug taking. No one has determined the physical causes of this syndrome. Its relationship to marijuana use has been established by clinical and statistical studies. Like alcohol intoxication, marijuana intoxication impairs reading comprehension, memory, speech, problem-solving ability, and reaction time. The effects on the intellect of long-term use are unknown. Consistent evidence that marijuana induces or causes brain damage does not exist.

- a. There is no evidence that marijuana use affects memory or speech.
- b. The effect of marijuana use are significantly different from the effects of alcohol.
- c. Chronic marijuana users are likely to exhibit violent behavior.
- d. There is no consistent evidence that marijuana use causes brain damage.

52. Glaucoma is the name given to a family of diseases characterized by abnormal pressure within the eyeball leading to declining vision and eventual loss of sight. Approximately one-eighth of all blindness in the U.S. is due to glaucoma. The variety of the disease known as chronic simple glaucoma usually responds well to local medication. If the disease does not respond to medical treatment, laser or mechanical surgery may be needed. Acute glaucoma represents an emergency situation. Unless pressure within the eyeball is lowered within 24 hours, permanent damage may occur.

Which of the following statements is best supported by the above passage?

- a. Most cases of blindness in the U.S. are caused by glaucoma.
- b. All cases of glaucoma eventually require surgery.
- c. Glaucoma is characterized by abnormal pressure in the eyeball.
- d. There is no effective treatment for acute glaucoma.
- 53. Consumer spending was weak in October, but it was not for lack of income growth. Personal income advanced a healthy 0.6% in the month to an annual rate of \$3,085.5 billion, seasonally adjusted. The \$17.6 billion increase in October was close to the \$19.8 billion average monthly gain since June. Income growth has slowed from the exceptionally strong pace in the first half, when incomes advanced \$24 billion per month. The slowing is primarily attributable to a moderation in the rate of gain of factory jobs. Because of a dip in hours worked in October, income from wages and salaries – about 60% of all income – rose only about \$4.2 billion in October, compared with a \$12.3 billion gain in September. But continued strength in interest income – only about 15% of the total – added \$6.8 billion in October. Personal outlays, holding at \$2,469.2 billion, were virtually unchanged in October. But what consumers did not spend they saved: savings as a percentage of after-tax income rose to 6.5% in October, compared with the 6.3% rate in the third quarter and 5.7% in the second. That puts consumers in good shape to boost their spending during the holiday selling season.

According to the passage:

- a. Income from wages and salaries rose \$12.3 billion in October.
- b. Consumer savings resulted in an increase in the number of hours worked in October.
- c. Savings as a percentage of after-tax income was 6.3% in the second quarter.
- d. Income from wages, salaries, and interest comprised about 75% of all income in October.

54. The most serious conflict in the Constitutional Convention concerned plans for a national government introduced by Virginia and New Jersey. The two plans differed in their approach to the composition of the legislature. The Virginia Plan, supported by the larger states, provided for a bicameral legislature: a House of Representatives elected by popular vote, and a Senate elected by the House. This would have given the more populous states control of the national legislature. The smaller states favored the New Jersey Plan, which provided for a unicameral legislation in which all the states were to have equal representation. The issue threatened to throw the Convention into a hopeless deadlock. The dispute was finally resolved, however, by the Connecticut Compromise (also called the Great Compromise), which established the present arrangement in which the states are equally represented in the Senate and are represented in the House of Representatives in proportion to their populations. In the negotiations that led to this compromise, the larger states won an important concession: revenue bills could originate only in the House, where the larger states had greater representation.

According to the passage:

- a. Connecticut favored the Virginia Plan.
- b. The New Jersey Plan gave greater power to larger states.
- c. The Connecticut Compromise gave all states the same number of representatives in the national legislature.
- d. Smaller states favored the New Jersey Plan.
- 55. The primary reason for the development of a separate administrative division for the direction of human relations is a growing recognition that people are endowed with characteristics different from those of machinery or raw material. If people are to be affected in ways that give best results, that direction must be specialized just as direction in the other major fields of management has been specialized.

Which statement is best supported by the above passage:

- a. Workers need supervision.
- b. It would be best if some organizations established a separate office of human resources.
- c. Workers are more important than machinery or raw materials.
- d. Workers perform best when they receive on-the-job training.

56. The Bauhaus school was based on the belief that art should meet the needs of society and that no distinction should be made between fine arts and practical crafts. Members of the Bauhaus school also believed that modern art and architecture should reflect the modern industrial world and that good designs must pass the test of both aesthetic standards and sound engineering. For this reason, the Bauhaus offered classes in crafts, typography, and commercial and industrial design, as well as in sculpture, painting, and architecture. The Bauhaus style, also known as the International Style, avoided ornament and ostentatious facades. It featured harmony between function and the artistic and technical means employed. The Bauhaus produced a number of influential artists and architects, both in Europe and in the U.S.

Which statement is best supported by the above passage:

- a. Members of the Bauhaus school believed there should be harmony between form and function.
- b. Members of the Bauhaus school believed in the superiority of traditional arts and crafts.
- c. Members of the Bauhaus school resisted the influence of modern industry on architecture.
- d. The Bauhaus movement wanted to return to the artistic values of an earlier era.
- 57. The three species of lobsters are considered to have an excellent flavor and are important to commercial fisheries in North America and Europe. The American and European lobsters have an enlarged, almost bulbous, pair of pincers or claws. The pincers of the Norway lobster are longer and thinner. One claw is usually a heavier crusher claw and the other a smaller biting claw. The lobster's head has two pairs of antennae; the eyes are compound, and the tail is fanlike. The female lays many thousands of eggs, usually once every two years, and the tiny young drift and swim for up to five weeks before settling on the bottom. They grow by molting and may live for about 15 years. All lobsters are primarily scavengers.

Which statement is best supported by the above passage:

- a. Lobsters are found only in waters off the coast of North America and Europe.
- b. Lobsters are unusually aggressive creatures.
- c. "Norway" lobsters are not true lobsters.
- d. One difference between the American and Norway lobster is the size and shape of their claws.
- 58. The charter of the United Nations established six principal UN components: the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the Secretariat. All member states are represented in the General Assembly. The General Assembly meets annually in regular sessions and in special sessions at the request of a majority of its members or of the Security Council. The assembly has no enforcement authority; its resolutions are recommendations to member states that carry the political and moral force of majority approval but lack power of direct implementation.

The Security Council is the UN's central means for maintaining peace. The council has 15 members. Five nations – China, France, Great Britain, Russia, and the U.S. – have permanent seats. Other members serve for two years, with five new members elected by the General Assembly every year. Decisions of the council require nine votes, including the concurring votes of the permanent members. In other words, each of the permanent members (but not the other members) has veto power over any proposed action to be undertaken by the Security Council.

Which statement is best supported by the above passage:

- a. All members of the Security Council have veto power over any proposed action to be undertaken by the Council.
- b. All members of the United Nations have a seat on the Security Council.
- c. There are five permanent members of the Security Council.
- d. To take effect, decisions of the Security Council must be unanimous.

59. Petroleum is formed under the earth's surface by the decomposition of marine organisms. The remains of tiny organisms that live in the sea become mixed with the fine sands and silts that settle to the bottom in quiet sea basins. The sediments grow thicker and sink into the seafloor under their own weight. As additional deposits pile up, the pressure on the ones below increases several thousand times, and the temperature rises by several hundred degrees. The mud and sand harden into shale and sandstone, and the remains of the dead organisms are transformed into crude oil and natural gas. The crude oil and natural gas rise into the microscopic pores of the coarser sediments lying above. Frequently, the rising material runs into a dense layer of rock that prevents further migration; the oil has become trapped, and a reservoir of petroleum is formed.

Which statement is best supported by the above passage:

- a. Petroleum is formed from the remains of marine organisms.
- b. Petroleum is actually a mixture of mud and sand.
- c. Petroleum is usually found in remote areas.
- d. Petroleum is a byproduct of seismic activity.
- 60. The goal of a problem is a terminal expression one wishes to cause to exist in the world of the problem. There are two types of goals: specified goal expressions in proof problems and incompletely specified goal expressions in find problems. For example, consider the problem of finding the value of x, given the expression 4x + 5 = 17. In this problem, one can regard the goal expression as being of the form x = -, the goal expression. The goal expression in a find problem of this type is incompletely specified. If the goal expression were specified completely for example, x = 3 then the problem would be a proof problem, with only the sequence of operations to be determined in order to solve the problem. Of course, if one were not guaranteed that the goal expression x = 3 was true, then the terminal goal expression should really be considered to be incompletely specified something like the statement "x = 3 is ($true\ or\ false$)."

According to the preceding paragraph:

- a. The goal of the equation 4x = 5 = 17 is true, not false.
- b. If the goal expression was specified as being equal to 3, the problem 4x + 5 = 17 would be a proof problem.
- c. If the sequence of operations of the problem given in the paragraph is predetermined, the goal of the problem becomes one of terminal expression, or the number 17.
- d. x cannot be found unless x is converted into a proof problem.

Answer Key

| 1. d | 21. a | 41. a |
|-------|-------|-------|
| 2. c | 22. d | 42. a |
| 3. b | 23. d | 43. a |
| 4. d | 24. b | 44. b |
| 5. c | 25. a | 45. b |
| 6. a | 26. d | 46. d |
| 7. a | 27. c | 47. a |
| 8. d | 28. c | 48. c |
| 9. d | 29. b | 49. b |
| 10. a | 30. a | 50. c |
| 11. b | 31. d | 51. d |
| 12. c | 32. a | 52. c |
| 13. b | 33. c | 53. d |
| 14. d | 34. c | 54. d |
| 15. c | 35. b | 55. b |
| 16. c | 36. d | 56. a |
| 17. a | 37. b | 57. d |
| 18. a | 38. d | 58. c |
| 19. c | 39. b | 59. a |
| 20. d | 40. a | 60. b |
| | | |

Answers and Explanations

- 1. The answer is choice d. Choice a is incorrect because, while the passage speaks extensively about the potential dangers of genetic engineering, nowhere does it say that the dangers outweigh the benefits. Choice b is incorrect because the author expresses no opinion on whether government regulation of genetic engineering is strict enough. Choice c is incorrect because there is no statement or implication in the passage that the FDA and the USDA disagree on the safety of genetic engineering. Choice d is correct because the passage states that the potential hazards of genetic engineering require government regulation.
- 2. The answer is choice c. Choice a is incorrect because it is too sweeping a statement. Nowhere does the author state that "communication is not possible when people don't assume the same things or share the same values." This is too strong a statement. The author does wonder "how communication is possible," but that is not the same as stating that communication is not possible under those circumstances. Choice b is incorrect because you are supposed to choose the answer that corresponds with the phrase "According to the author." When that expression is used in these questions, you need to determine exactly what the author's opinion is. In this case, the author is comparing two schools of thought. While it may seem to us that the author favors the second school (choice b), nowhere does the author say he or she favors one school of thought over the other. Choice b implies too much. Choice d is incorrect because it too implies more than it should. Nowhere does the author state that communication is possible only when differences of background, experience, and motivation are overcome. Choice c is correct because it is the only statement of the four we can be sure the author agrees with, as in the first sentence the author says, "In thinking about the many barriers to personal communication..."
- 3. The answer is choice b. Choice a is incorrect because it is not really supported by the passage. The passage describes several instances in which Congress has passed laws restricting freedom of speech because it believed these laws were necessary for the good of the country, but the passage does not endorse this belief. Choice c is incorrect because, as the passage says, the 1st Amendment does establish freedom of speech as a basic right. Choice d is incorrect because the passage says that the Supreme Court has held that the burning of an American flag is protected speech under the First Amendment. Choice b is correct because it is the only statement that is really supported by the passage.

- 4. The answer is choice d. Occasionally reading passages will appear that contain potentially intimidating material. This is a good example of that type of question. At first glance this question appears to require unusual, specialized knowledge, specifically a knowledge of quantum physics. But you should not allow yourself to be intimidated just by the subject of a question. In fact, no special knowledge is needed to answer this question. It requires only a careful reading of the passage. Choice a is incorrect because it is directly contradicted by the last half of the first sentence. Choice b may look appealing because of the contrast in the paragraph between using a bathtub thermometer and a chemical thermometer to measure the temperature of coffee, but it is too sweeping a statement. Nowhere in the passage does it say that it is always a good idea to use the smallest possible measuring device. Choice c is incorrect because it also assumes too much. In the example given, the chemical thermometer was more accurate than the bathtub thermometer, but that doesn't mean that all chemical thermometers will always be more accurate than all bathtub thermometers, in all situations and applications. Choice d is confirmed by the first and last sentences.
- 5. The answer is choice c. Choice a is incorrect because it assumes more than the passage states. While the passage says that the federal government refused to provide funds for the construction of the Erie Canal, it does not say that the reasons for this decision were political. Choice b is incorrect because the passage clearly states that construction of the Canal began in 1817 and was completed in 1825. That is, construction of the Canal took eight years, not fifteen. It is true, as the passage says, that New Yorkers began to seek funding for the Canal in 1810, but construction did not begin until 1817. Choice d is incorrect because the passage states that construction began in Rome, New York. The first canal boat set sail on the Canal from Buffalo, but construction did not begin there. Choice c is correct because the passage states that work on the Erie Canal was "financed by the State."

- 6. The answer is choice a. This question asks you to choose the "main idea" of the paragraph. To do this, you need to separate incidental information or examples from the main point that the author is trying to make. Often the best way to do this is to examine each possible answer on its merits. Choice b is incorrect because it is too specific. While the thought is contained in the passage, it does not represent the main idea of the paragraph. Choice c is incorrect because it is making an assumption that the earth will soon "run out of vital mineral resources." It's unclear exactly how long a time period is meant by the author in the last sentence. In addition, it does not do as good a job of summarizing the content of the paragraph as choice a. Choice d, while contained in the passage, is too specific to be a "main idea." Choice a is the best of these four choices because it best sums up the passage.
- 7. The answer is choice a. Choice b is incorrect because the passage says that "government intervention to stimulate the economy" may lead to recovery from a depression. Therefore, the author of the passage would not agree that "government intervention has no effect on the business cycle." Choice c is incorrect because the passage offers an explanation of what causes an economic depression. Choice d is incorrect because nothing in the passage suggests that the idea of the business cycle is no longer relevant in today's economy. Choice a is correct because the passage clearly states that "consumers react to higher prices by buying less."
- 8. The answer is choice d. Questions like this may seem intimidating at first, especially if you are not familiar with the subject (in this case, musical notation). But you should not be put off by a question just because the subject seems difficult or unfamiliar. In this case, you need no knowledge of musical notation to answer the question. All you need to do is read the passage. The answer is straightforward. It can be found in the last sentence of the paragraph.
- 9. The answer is choice d. Choice a is incorrect because it is based on an unwarranted assumption: The passage states that Category 5 hurricanes are the rarest, but this does not mean that Category 1 hurricanes are the most common. Choice b is incorrect because nothing in the passage suggests that there is a relationship between the strength of a hurricane and the size of the eye. Choice c is incorrect because the passage says winds that exceed 155 mph occur in Class 5 hurricanes, which are the rarest type; therefore, it is not common to have winds of this speed in a hurricane. Choice d is correct because the passage states that the mildest category of hurricanes has winds of at least 74 mph.

- 10. The answer is choice a. Choice b is incorrect because it is a misinterpretation of the tortoise and hare example given. The passage does not state that it is best to spend a long time on solving problems; rather, it suggests that there is nothing wrong with spending a long time on solving problems. Choice c is a tempting answer. The passage does state that, 'You cannot do your best on a problem unless you are motivated." But nowhere does it say that motivation is the most important component in problem solving. Choice d is somewhat contradicted by the last sentence. Choice a is supported by the fifth sentence of the paragraph, and is the best of the four choices given.
- 11. The answer is choice b. Choices a and d are incorrect because there is nothing in the passage to support either statement. Choice c is incorrect because a magnitude 8 earthquake is ten times as powerful as a magnitude 7 earthquake, not twice as powerful. A careful reading of the paragraph would have given you the information you need to make this calculation. Choice b is correct because it is clearly supported by the last sentence of the paragraph.
- 12. The answer is choice c. Choice a is incorrect because it assumes too much. While the sentiments in choice a are expressed in the first sentence, the word "perhaps" is used. Choice a goes a step further and makes an assumption that is not supported by the paragraph. Choice b is incorrect because it is based on a misreading of information given in the fourth sentence. Choice d is not mentioned anywhere in the paragraph. Choice c is supported by the third sentence.
- 13. The answer is choice b. Choice a is incorrect because the passage states that the Emancipation Proclamation was issued when the Civil War was "at its height," not after the Confederacy was defeated. Choice c is incorrect because the passage states just the opposite: Abolitonists "had been urging Lincoln to take this action for several years." Choice d is incorrect because it is based on a misreading of the last sentence. England and France decided not to intervene in the conflict because their citizens were strongly opposed to slavery, and the Emancipation Proclamation made it clear that slavery was the issue at the heart of the war. But there is nothing in the passage that suggests that France and England considered the Emancipation Proclamation a "trick." Choice b is correct because it is clearly supported by the second sentence of the paragraph.

- 14. The answer is choice d. Choice a is incorrect because the word physicist is used. while the passage says "Western scientists." Choice b is incorrect and is a misinterpretation of sentences six and seven. While it may seem from the first sentence that choice c is a possibility, because philosophers had this knowledge first, it is too sweeping a statement. The author doesn't explicitly state that scientists do not know as much in this area. Also, any expertise that scientists do have, that Indian philosophers do not, is not addressed. Choice d is supported by the last four sentences.
- 15. The answer is choice c. Choice a may look like a good answer because the average farm size for Canada is larger than for any other country mentioned in the passage. But this does not mean that Canadian farms are the largest in the world. There may be other countries, not mentioned in the passage, that have larger farms. Choice b is incorrect because it is too sweeping an interpretation of the last sentence in the first paragraph. The passage does state that a larger percentage of the labor force works in agriculture in Africa than in the U.S. and Canada, but this does not mean that African farms are less productive. Choice d is incorrect because it is contradicted by the last sentence of the first paragraph. Choice c is supported by the third sentence of the second paragraph.
- 16. The answer is choice c. Choice a is incorrect because it misrepresents what the passage says about opponents of the death penalty. According to the passage, opponents believe that the death penalty is no more effective as a deterrent than life in prison. The passage does not say that opponents of the death penalty believe it is not a deterrent at all. Choices b and d are incorrect because they are not supported by anything in the passage. Choice c is supported by the third sentence in the paragraph.
- 17. The answer is choice a. There is nothing in the passage to support choices b, c, or d. Choice a is supported by the fourth sentence in the paragraph.
- 18. The answer is choice a. Choice b is contradicted by the first two sentences. Choice c is directly contradicted by sentence seven. Choice d is not mentioned anywhere in the passage. Although choice d may "look good," it is important to break sentences like this down to see what they are really saying. Choice a is directly supported by sentence four.

- 19. The answer is choice c. Choice a is contradicted by the first sentence in the passage. Choice b is contradicted by the second sentence. Choice d is too sweeping a statement. The passage says that $some not \ all of$ the masks created by the Ibo have ugly or asymmetrical features. In fact, the last sentence in the passage says that the Ibo also create beautiful masks "to portray persons who are good or peaceful." Choice c is more accurate, and is supported by the second sentence of the second paragraph.
- 20. The answer is choice d. Choice a is incorrect because the author talks about the action on carbonic acid and the release of carbon dioxide, not about metabolizing carbohydrates. Choice b is contradicted by the last sentence. Choice c is incorrect because the molecule that zinc is in the center of is carbonic anhydrase; carbonic acid is what is coming into contact with the enzyme. Choice d is supported by the next to last sentence, which acts as a summary of the passage.
- 21. The answer is choice a. Choice b looks like a good choice at first because the passage says that there are fewer cows per person today than in the nineteenth century. But this does not mean that there are fewer cows, as the answer says. The key words here are "per person." Choice c is incorrect because it is contradicted by sentence three. Choice d is incorrect because it is contradicted by sentence five. Choice a is supported by sentence six.
- 22. The answer is choice d. Choices a and b are generalizations that are not supported by the passage. Choice a, for example, states that "you are more likely to get help on a country road." While the passage states that an individual driver is less likely to *stop* on a crowded highway than on a lonely road, this does not necessarily mean that you would be less likely to *get help*. If 250 cars pass you on a city highway in ten minutes and one picks you up, you would be able to say that you were more likely to get help than if you were on a country road and the second car that passed in an hour helped you. Choice b plays on one's tendency to think that if something is true it means that a related idea is also true. It is too much to assume that people in a city are less helpful (choice b) simply because cars on a crowded highway are less likely to stop. Choice c is incorrect because it contradicts the passage. The author says that when there are many people who see an emergency, each person feels less responsible than if he or she were the only one who saw it. This is what choice d says, so choice d is correct.

- 23. The answer is choice d. Choice a is incorrect because it is not supported by anything in the passage. Choice b is incorrect because the passage says that fat-soluble vitamins do not need to be consumed every day. Choice c is incorrect because it is not supported by anything in the passage. Choice d is supported by the second to last sentence of the passage.
- 24. The answer is choice b. Choice a is incorrect because it is not actually stated anywhere in the passage, although you might be tempted to infer it. The last sentence of the passage does say, "women were so good at dealing with the public." But the author is quoting industrial journals, not giving his or her opinion and saying that this is true. He or she is just using this as another example of the different rationales industries have used to back up their policies. Choice c is incorrect because it is not supported by anything in the passage. You might have been tempted to assume that choice c is true because the passage mentions only clerical, teller, and lower management positions. If there weren't a better answer, you might have had to select it. Choice d is incorrect because it too is not supported by the passage. Choice b is supported by the first sentence of the paragraph.
- 25. The answer is choice a. Choice b is incorrect because it is not supported by the passage. According to the passage, Canada "refused to allow the Taiwanese team to carry its flag or have its national anthem." The Taiwanese "withdrew"; they were not banned. Choice c is incorrect because, again, it is not supported by the passage. Several African nations demanded that New Zealand be banned from the games, but their demands were not met. Choice d is incorrect because it, too, is not supported by the passage. Hitler is the first national leader mentioned who injected a spirit of nationalism into the games, but the passage does not say he was the first one to do this. Choice a is supported by sentence three.
- 26. The answer is choice d. Choice b is incorrect because it is not stated anywhere in the passage. The same is true of choice c. Choice a is incorrect because of the key word "proved." The passage states that "Cellini *wrote* he had brought on rain by artillery fire." This is not the same as proving it. You may not have been sure about this, but that shouldn't have been a problem because choice d is a much stronger and safer answer. The whole paragraph is about people relating noise and rain. Again, you need to choose the *best* of the four choices.

- 27. The answer is choice c. Choice a is incorrect because it is not supported by anything in the paragraph. Choice b is incorrect because the paragraph says that dopamine is a chemical in the brain; it says nothing about it being a drug. Choice d is incorrect because the paragraph says that 200,000 cases of Parkinson's disease are recorded annually, not that 200,000 people die of the disease. Choice c is supported by the second sentence of the paragraph.
- 28. The answer is choice c. When answering this type of question, it's best to take the statements one at a time and go back to the paragraph to see which are true. Statement I is correct and can be found in the last two sentences. Statement II is incorrect because the passage states that a clogged drain should be flushed with *hot* water after an hour, not cold water. Cold water is for severely clogged drains in which the liquid has been left standing overnight, not for an hour. Statement III is incorrect because the sixth sentence says that severely clogged drains should be flushed with *cold* water. Statement IV is correct and is stated in the first sentence. Choice c is correct because it states that only I and IV are correct.
- 29. The answer is choice b. Choice a is incorrect because the passage states that in urban areas, sewers generally discharge into interceptor sewers, not directly into a trunk line. Choice c is incorrect because it is not supported by the passage and it is indirectly contradicted by the last sentence of the first paragraph. Choice d is incorrect because it is contradicted by the fifth sentence of the first paragraph. Choice b is supported by the third sentence of the first paragraph.
- 30. The answer is choice a. Choice b is incorrect because it is contradicted by sentence four. Choice b is incorrect because Susan B. Anthony, not Elizabeth Cady Stanton, voted illegally in the 1872 election and refused to pay the \$100 fine. Choice d is incorrect because it is not supported by anything in the passage and is contradicted by sentence five. Choice a is correct because it is supported by sentence five.
- 31. The answer is choice d. An ordering question like this one requires very careful reading. If you break the passage down and take the statements one at a time, you'll find that the order is as follows: First, the hypothalamus triggers the release of adrenocorticotropin from the pituitary gland (III). Then, adrenocorticotropin travels in the bloodstream (IV). Then, adrenal glands release hormones like cortisol (I). And finally the heart beats faster because of epinephrine (II). The order is III, IV, I, II.

- 32. The answer is choice a. Choice b is contradicted by the fifth sentence in the first paragraph. Choice c is incorrect because the numbers in the last two sentences of the first paragraph do not support it. According to the passage, the least amount of alcohol in typical table wine is 12 percent. The greatest amount of alcohol in fortified wine is 22 percent. Therefore, at most, fortified wine has less than twice as much alcohol as table wine, not three times as much, as choice c says. Choice d is contradicted by the last sentence in the second paragraph. Choice a is supported by the last two sentences of the first paragraph.
- 33. The answer is choice c. Choice a is incorrect because it is not stated in the passage, and because it assumes too much. The same is true of choice b. Choice is also not stated anywhere in the passage. Choice c is supported by the last two sentences of the passage.
- 34. The answer is choice c. This question requires nothing more than a careful reading of the passage. Choices a and b are both contradicted by the first sentence. Choice d is incorrect because it is contradicted by the seventh and eighth sentences of the passage. Choice c is supported by the seventh sentence.
- 35. The answer is choice b. This question is different from the others you have seen so far because it asks you to find the one statement that is untrue. Choices a, c, and d are all supported by the passage. Choice a can be found in the third sentence, choice c in the fourth, and choice d in the second. Choice b is unsupported by the passage, which does not state anywhere that reasoning is still frequently ignored.
- 36. The answer is choice d. Choice a is incorrect because it is not supported by anything in the passage. Choice b is incorrect because its timing is off. According to the passage, the sixth tribe, the Tuscaroras, were not added to the Confederacy until the 18 century. In 1650, there were only five tribes in the Confederacy. Choice c is incorrect because it is not supported by anything in the passage. Choice d is supported by the first sentence of the third paragraph.

- 37. The answer is choice b. The passage is difficult to read because it was written by Alexis de Tocqueville, a Frenchman, in 1835. However, you don't need to understand all of it. You can just go through the choices and eliminate them. The passage does not say that Americans are generous (a), idealistic (c), or greedy (d). But it does refer to the system of checks and balances (b) which was built into the American system of government. ("The exercise of its authority was divided," and "in no country is the right of applying it vested in so many hands.") Again, you did not need to know this to answer correctly—you just had to pick the one choice you could not rule out.
- 38. The answer is choice d. Choice a is incorrect because it is contradicted by the fourth sentence of the second paragraph. Choice b is incorrect because the first sentence of the second paragraph says that there are currently eight associate justices and a chief justice, for a total of nine, not eight. Choice c is incorrect because the second sentence of the second paragraph says that justices "can be removed only by resignation or impeachment." Choice d is supported by the third sentence of the first paragraph.
- 39. The answer is choice b. The passage describes why balloons that are filled with water are more likely to burst when dropped than balloons that are filled with air. Sentence 5 states that "the air balloon bounces because it absorbs the force." You can infer that tires would be filled with air for a similar reason. Choice a is incorrect because the paragraph states that pressure on a gas such as air causes the volume of the gas to decrease, not increase. It's also incorrect because if choice a were true, tires would be more inclined to burst as the air expanded. This would make air a poor substance for tire filling. Choice c is incorrect primarily because choice b is a much better answer, and because not all liquids will freeze and evaporate according to the climate. Antifreeze, for instance, could perhaps be put into the liquid. Choice c is also incorrect because the passage explains that water balloons burst because the force of the impact is transmitted to the entire surface of the balloon when it is filled with water. Gases absorb the force of the impact because they compress and then expand again. The passage states that liquids do not compress when under pressure, and thus do not absorb the pressure. It is transmitted to the rest of the surface. This would make liquids a poor choice for filling tires. Choice d is incorrect because it is not implied or supported anywhere in the passage.

- 40. The answer is choice a . Choices b and d are incorrect because they are not supported by anything in the passage. Choice c is incorrect because it is a more sweeping generalization than the passage supports. The passage does say that Delicious apples are the most widely grown variety in the U.S., but this does not mean that they are "the most popular variety in every region in the U.S." In fact, the last three sentences of the first paragraph suggest that other varieties are more popular in specific regions. Choice a is supported by the second sentence of the passage.
- 41. The answer is choice a. Choice b is incorrect because there is nothing in the passage to support it. Choice c is incorrect because it is based on a misreading of the fifth sentence of the second paragraph. The sentence says that during the course of the eighteenth century, surgeons became more knowledgeable about the human body. It does not say that they became more knowledgeable than physicians. Choice d is incorrect because the passage says that the Royal College of Physicians controlled the number or *physicians*, not the number of *surgeons*. Choice a is supported by the second sentence of the first paragraph and the first sentence of the second paragraph.
- 42. The answer is choice a. Choice b is incorrect because it is contradicted by the fifth sentence of the passage. Choice c is incorrect because it is not supported by anything in the passage. Choice d is incorrect because it is contradicted by the fourth sentence of the passage. Choice a is supported by a careful reading of the second sentence of the paragraph.
- 43. The answer is choice a . Choice b is incorrect because it is contradicted by the last sentence of the first paragraph. Choice c is incorrect because it is not supported by anything in the passage. (The passage says that whales, not sharks, are mammals.) Choice d is incorrect because it is a more sweeping generalization than the passage will support. The passage says that sharks are "especially abundant" in tropical and subtropical waters, but it does not say that they are found only there. Choice a is correct because it is supported by the fifth sentence of the second paragraph.
- 44. The answer is choice b. Choice a is incorrect because it is not supported by anything in the passage. Choice c is incorrect because Roosevelt won the Nobel Peace Prize for his mediation of the Russo-Japanese War, not for his efforts to resolve conflicts in Latin America. Choice d is incorrect because it is contradicted by the fourth sentence of the first paragraph. Choice b is supported by the entire passage.

- 45. The answer is choice b. Choice a is incorrect because it is contradicted by the third sentence. To realize this, you would have to know that Great Britain, Ireland, and Germany are not in eastern or southern Europe. But there is also another way to eliminate choice b as a possible answer. A little later in the passage, you are told that "After 1890, this pattern shifted. The majority of immigrants in the early years of the twentieth century came from southern and eastern Europe." If this is how the pattern shifted after 1890, then before 1890 most of the immigrants must not have come from southern and eastern Europe. Choice c is incorrect because the passage says that the number of immigrants declined in the 1920's. Choice d is incorrect because it is contradicted by the last sentence of the passage. Choice b is supported by sentence nine.
- 46. The answer is choice d. Choice a is incorrect because, while it is generally true, it is not supported by anything in the passage. Choice b is incorrect because it is contradicted by sentence three. Choice c is incorrect because it is not supported by anything in the passage. Choice d is supported by the second sentence of the passage.
- 47. The answer is choice a. Choices b, c, and d are incorrect because they are not supported by anything in the passage. Choice a is supported by the first three sentences of the second paragraph.
- 48. The answer is choice c. Choice a is incorrect because it is contradicted by sentence two. (Venus, not Mars, is the brightest object in the night sky.) Choice be is incorrect because it is contradicted by sentence five. Choice d is incorrect because there is nothing in the passage to support it and it is contradicted by sentence five. Choice c is supported by sentence four.
- 49. The answer is choice b. The way to approach questions like this is to consider each of the statements one at a time. Statement I is incorrect because it is contradicted by the first sentence of the second paragraph. Statement II is correct. It is supported by the last two sentences of the second paragraph. Statement III is also correct. It is directly supported by the first sentence of the second paragraph. Statement IV is incorrect because it is contradicted by the second sentence of the first paragraph. So in the author's view, only statements II and III are correct.

- 50. The answer is choice c. Choice a is incorrect because there is nothing in the passage to support it. Choice b is incorrect because it is a broader generalization than the passage justifies. The passage says that physics did not emerge as a separate discipline until the 19th century. It does not say that no one was interested in physics before that. Choice d is incorrect because it is not supported by anything in the passage. Choice c is supported by all of the second paragraph.
- 51. The answer is choice d. Choices a and b are incorrect because they are both contradicted by sentence four. Choice c is incorrect because it is not supported by anything in the passage. Choice d is supported by the last sentence of the passage.
- 52. The answer is choice c. Choice a is incorrect because the passage says that glaucoma is responsible for only about one-eighth of all blindness in the U.S. not "most cases of blindness." Choices b and d are incorrect because they are not supported by anything in the passage. Choice c is supported by the first sentence in the passage.
- 53. The answer is choice d. A tricky question. Choice a is incorrect because the increase was in September, not October. Choice b is incorrect because the sixth sentence states that there was a "dip in hours worked in October," and no connection between savings and hours worked in October was established. Choice c is incorrect because savings as a percentage of after-tax was 6.3% in the *third* quarter, not the second. While on first reading, choice d may appear to be incorrect, closer study will show that combining the income from wages and the salaries mentioned in the sixth sentence (60%) with interest (15%) will total 75% of all income. You also could have selected choice d by the process of elimination.
- 54. The answer is choice d. Choice a is incorrect because it is not supported by anything in the passage. Choice b is contradicted by sentence five. Choice c is incorrect because it is contradicted by sentence seven. Choice d is supported by sentence five.

- 55. The answer is choice b. Choice a is incorrect because it is not stated anywhere in the passage. The same is true of choices c and d. You may have liked choice c, but the passage doesn't say that people are more important, only that they have different characteristics. Although this passage was rather difficult to read, you probably could have answered correctly by the process of elimination. Incidentally, the point of this passage is that, since humans are a special case, the management of human resources should be specialized to meet their needs.
- 56. The answer is choice a. Choices b and d are incorrect because there is nothing in the passage to support them. Choice c is incorrect because it is contradicted by sentence two. Choice a is supported by sentence five.
- 57. The answer is choice d. Choices a, b, and c are not supported by anything in the passage. Choice d is supported by the second and third sentences.
- 58. The answer is choice c. Choice a is incorrect because, according to the last two sentences of the passage, only the permanent members of the Security Council have veto power. Choice b is incorrect because it is contradicted by the first three sentences of the second paragraph. Choice d is incorrect because it is contradicted by the last two sentences of the second paragraph. Choice c is supported by the second sentence of the second paragraph.
- 59. The answer is choice a. The other choices are incorrect because there is nothing in the passage to support them. Choice a is supported by the first sentence of the passage.
- 60. The answer is choice b. This is another example of intimidating material that is really not as difficult as it first appears. You don't need to know algebra to answer this question. Careful reading is all that is required. Many people pick choice a because it "sounds good." Yet, if you carefully ready through the passage, you would see that it is gibberish, and makes no sense. Choice b is correct, and this is stated clearly in sentence six, with help from sentences three, four, and five. Choices c and d are also gibberish, intended to impress. This is a difficult question because it is easy to lose confidence when confronted with a subject matter and a vocabulary you are unfamiliar with.