



EST I – Literacy Test I

Student's Name _____

National ID _____

Test Center: _____

Duration: 35 minutes

44 Multiple Choice Questions

Instructions:

- Place your answer on the answer sheet. Mark only one answer for each of the multiple choice questions.
- Avoid guessing. Your answers should reflect your overall understanding of the subject matter.

Directions: Questions follow each of the passages below. Some questions ask you how the passage might be changed to improve the expression of ideas. Other questions ask you how the passage might be altered to correct errors in grammar, usage, and punctuation. One or more graphics accompany some passages. You will be required to consider these graphics as you answer questions about editing the passages.

There are three types of questions. In the first type, a part of the passage is underlined. The second type is based on a certain part of the passage. The third type is based on the entire passage.

Read each passage. Then, choose the answer to each question that changes the passage so that it is consistent with the conventions of standard written English. One of the answer choices for many questions is “NO CHANGE.” Choosing this answer means that you believe the best answer is to make no change in the passage.

Questions 1–11 are based on the following passage.

Opportunities in Engineering

by Charles M. Horton

It is becoming more and more an accepted fact that engineers, or physicians, or lawyers—like our poets—are born and not made. I believe this to be true. Educators generally are thinking seriously along these lines, with the result that vocational advisers are springing up, especially in industrial circles, to establish eventually yet another profession. (1) Instinct is defined as a natural and innate inclination towards a certain behavior. Instinct leads young men to enter upon certain callings, unless turned off by misguided parents or guardians, and as a general thing the hunch works out successfully. Philosophers from time immemorial, including Plato and Emerson, have written of this still, small voice within, and have urged that it be (2) heeded. The thing is instinct—cumulative yearnings within man of thousands of his ancestors—and to disobey it is to fling defiance at Nature herself. Personally, I believe that when this law becomes more generally understood there will be fewer failures decorating park benches in our cities and cracker-boxes in our country stores. Every city (3) need an engineer who loves what he does.

1. The author is considering removing the underlined sentence. Should the sentence be kept or deleted?
 - A. Keep it. It serves as an introduction to the next sentence.
 - B. Keep it. It provides a definition for the term most used in the text.
 - C. Delete it. It disrupts the progression of ideas.
 - D. Delete it. It is besides the topic.
2. Which of the following terms best suggests the main idea of the passage?
 - A. NO CHANGE
 - B. disregarded
 - C. accepted
 - D. noted
- 3.A. NO CHANGE
 - B. needs
 - C. are needed
 - D. is needed

The profession of engineering, therefore, has its type. You may be of this type or you may not. The type is quite pronounced, however, and you need not go wrong in (4) ones decision. All professions and all trades have their types. Steel-workers—those fearless young men who balance skillfully on a girder, frequently hundreds of feet in the air—are not to be mistaken. (5) Rough, rugged, gray-eyed; with frames close-knit and usually squat; generous with money, and unconcerned as to the future; living each day regardless of the next, and living it—steel-workers are as distinct from the clerical type—slender, tall, a bit self-conscious, fearful of themselves and of the future—I say, the steel-worker is as different from the clerical worker as the circus-driver is from the (6) cleric. Their work marks them for its own, if a man lack it upon entering the work, just as the school-room marks the teacher in time for its own. The thing is not to be mistaken.

[1] The successful engineer must be possessed of a certain fondness for figures. The subject of mathematics must interest him. [2] He must like to figure, to use a colloquialism, and his fondness for it must be genuine, almost an absorption.

4.A. NO CHANGE

- B. its
- C. his
- D. your

5.A. NO CHANGE

- B. Rough, rugged, gray-eyed, with frames close-knit and usually squat, generous with money, and unconcerned as to the future, living each day regardless of the next, and living it—
- C. Rough rugged gray-eyed; with frames close-knit and usually squat; generous with money and unconcerned as to the future; living each day regardless of the next, and living it—
- D. Rough, rugged, gray-eyed; with frames close-knit and usually squat, generous with money, and unconcerned as to the future, living each day regardless of the next, and living it—

6.A. NO CHANGE

- B. circus man
- C. engineer
- D. worker

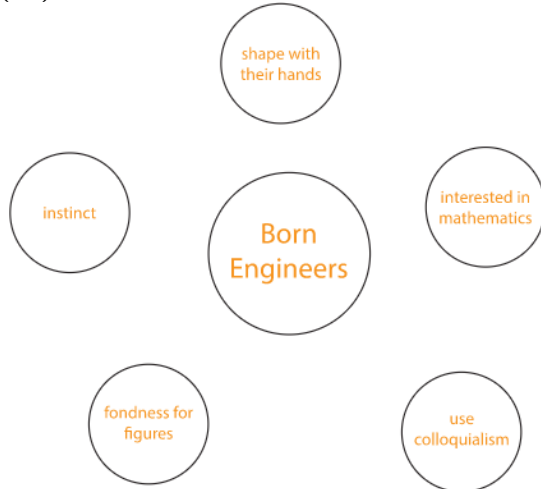
(7) Having this fondness for mathematics, which may be termed otherwise as a curiosity to make concrete ends meet—the working out of puzzles is one evidence of the gift—the young man is well armed for a successful career in the profession. [3] It must reveal itself to him at an early age, too, as early as his grammar-school days, for then it will be known as genuinely a part of him, and the outcropping of seeds correctly sown by his ancestors. [4] He will like mathematics for its own sake, and when, later, in college, and later still, in the active pursuit of his chosen work, he is confronted with a difficult problem covering strains or stress in a beam or lever or connecting-rod, he will attack it (8) neutrally, instead of—as I have seen such problems attacked more than once—irritably and with marked mental effort.

The successful engineer must be a man who likes to shape things with his hands. (9) He need not always do it, and probably will not after he has attained recognition, save only as he supervises or makes the mechanical drawings—the picture—of the thing. But the itch must be present in the man.

7. Where should the author place the underlined sentence for coherency?
 - A. NO CHANGE
 - B. Before sentence 1
 - C. After sentence 3
 - D. After sentence 4
8. Which of the following choices best supports the author’s position on engineering instincts?
 - A. NO CHANGE
 - B. eagerly
 - C. inadequately
 - D. grudgingly
9. Which of the following provides the best sentence structure needed to support the author’s main idea?
 - A. NO CHANGE
 - B. He probably won’t need to do that after he is recognized, save only as he supervises or makes the mechanical drawings, that is, the picture, of the thing.
 - C. Until after he has attained recognition, he need not always do it, and probably will not after save only as he supervises or makes the mechanical drawings of the thing—the picture.
 - D. He need not always do it, save only as he supervises or makes the mechanical drawings—the picture—of the thing, and probably will not after he has attained recognition.

And, like the desire within him to figure, it must make itself manifest within him early in life. If a young man be of those who early like to **(10) crawl in under the family buzz-wagon; tinkering there for half a day at a time; emerging in a thick coating of grease** and dust and with joy in his eye—such a young man has the necessary qualifications for a successful engineer. He may never do this—as I say—in all his engineering career. But the yearning must be as much a part of him as his love for mathematics—so much so that all his engineering days he will feel something akin to envy for the machinist who works over a machine of the engineer's own devising—and it must be vitally a part of him.

(11)



10.A. NO CHANGE

- B.** crawl in under the family buzz-wagon; tinkers there for half a day at a time; emerge in a thick coating
- C.** crawling in under the family buzz-wagon; tinkering there for half a day at a time; emerge in a thick coating
- D.** crawl in under the family buzz-wagon; tinker there for half a day at a time; emerge in a thick coating

11. According to the information in the graphic and the passage, which of the following provides the best concluding sentence as a summary of the graphic?

- A.** Therefore, there are five different qualities naturally born engineers must possess: instinct, fondness for figures, ability to shape with one's hands, an interest in mathematics, and the ability to use colloquialism.
- B.** In conclusion, there are five different qualities that any person pursuing engineering as an adult must work on: instinct, fondness for figures, ability to shape with one's hands, an interest in mathematics, and the ability to use colloquialism.
- C.** All in all, any born engineer must possess one of the following qualities: instinct, fondness for figures, ability to shape with one's hands, an interest in mathematics, and the ability to use colloquialism.
- D.** That is to say, engineers are born with certain qualities, just like poets, and their job is to foster them from a young age.

Questions 12–22 are based on the following passage.

Who Was Charles Curtis, the First Vice President of Color?

By Livia Gershon

Next week, when she takes the oath of office, Senator Kamala Harris will make history as the first woman, first African American, and first person of South Asian heritage to become vice president of the United States. But she won't be the first person of color in the office. That honor belongs to Charles Curtis, an enrolled member of the Kaw Nation (12) which served as President Herbert Hoover's vice president for his entire first term from 1929 to 1933. Prejudice against Native Americans was widespread and intense at the (13) time therefore Curtis's ascent to the office speaks of his skillful navigation of the political system. His rise also tells a broader story of how prominent Native Americans viewed how their communities should (14) assimilate within a predominately white society and government. The policies Curtis pursued in Congress and then as vice president, specifically those on Native issues, cloud his legacy today despite (15) its groundbreaking achievements.

Curtis was born in (16) 1860 to a white father from a wealthy Topeka family and a mother who was one quarter Kaw (a tribe also known as Kanza or Kansa). When he was young, Curtis' mother died, and his father fought in the Civil War for the United States. (17) Growing up and with the years that passed by, he spent time living with both his sets of grandparents, and for eight years, he lived on the Kaw reservation. Curtis grew up speaking Kanza and French before he learned English. Mark Brooks, site administrator for the Kansas Historical Society's Kaw Mission site, says Curtis was known for his personal charisma.

12.A. NO CHANGE

- B. who
- C. who's
- D. whose

13.A. NO CHANGE

- B. time; therefore,
- C. time, and
- D. time, but

14. Which word best fits the meaning of the sentence?

- A. NO CHANGE
- B. abstain
- C. accommodate
- D. acquaint

15.A. NO CHANGE

- B. there
- C. his
- D. her

16.A. NO CHANGE

- B. 1860; to a white father
- C. 1860: to a white father
- D. 1860, to a white father

17.A. NO CHANGE

- B. Growing up,
- C. Starting from his youth to his recent years,
- D. As years passed,

“He had a knack for conversation,” Brooks says. “He was just a very likeable person even early on when he was just a young boy in Topeka.”

In 1873, the federal government forced the Kaw south to Indian Territory, which would later become Oklahoma. The adolescent Curtis wanted to move with his community. **(18)** According to his Senate biography, his Kaw grandmother talked him into staying with his paternal grandparents and continuing his education.

“I took her splendid advice and the next morning as the wagons pulled out for the south, bound for Indian Territory, I mounted my pony and with my belongings in a flour sack, returned to Topeka and school,” Curtis later recalled, in a flourish of self-mythologizing. “No man or boy ever received better advice, it was the turning point in my life.”

Curtis gained some fame as a talented horse rider, known on the circuit as “Indian Charlie.” But his grandparents on both sides encouraged him to pursue a professional career, and he became a lawyer and then a politician. Contemporary accounts cite his personal charm and willingness to work hard served him well in politics. Kansas politician and newspaper editor William Allen White described him carrying books with the names of Republicans in each Kansas township, mumbling the names “like a pious worshiper out of a prayer book” so that he could greet each of them by name and ask about their family.

(19) Although the racist treatment of the Kaw by white Kansans—which included land theft and murder—many whites were obviously willing to vote for Curtis.

“The one thing that might have lightened the persecution of Curtis was that he was half white,” Brooks says. “He’s light-complected, he’s not dark-skinned like a lot of Kanza. His personality wins people over. He was a popular kid.”

18. The author is considering deleting the underlined phrase. Should the sentence be kept or deleted?

- A. Keep it. It provides support for the previous claim.
- B. Keep it. It provides a counter-argument for the previous claim.
- C. Delete it. It contradicts the information written in the paragraph.
- D. Delete it. There is redundancy of the main idea.

19.A. NO CHANGE

- B. Despite the racist treatment
- C. However, the racist treatment
- D. Moreover, the racist treatment

(20) Throughout his time in Congress, Curtis also consistently pushed for policies that many Native Americans today say were a disaster for their nations. He favored the Dawes Act of 1887, passed a few years before he entered Congress, which allowed the federal government to divide tribal lands into individual plots, which eventually led to the selling of their land to the public. And in 1898, as a member of the Committee on Indian Affairs, he (21) sketched what became known as the Curtis Act, extending the Dawes Act's provisions to the so-called "Five Civilized Tribes" of Oklahoma. Curtis also supported Native American boarding schools, in which children were taken from their families and denied access to their own languages and (22) cultures, abuse was rampant.

20. Which choice best connects this paragraph to the main idea in the previous paragraph?

- A. NO CHANGE
- B. Skin color was not the real problem since personality played a role too in the making of the congressman.
- C. Unfortunately, racists can like a person of color and still be racist, and that's what happened with Curtis.
- D. His popularity among the white majority continued to increase during Curtis's time in congress as he consistently pushed for policies that many Native Americans today say were a disaster for their nations.

21. Which of the following terms best describes the legal writing of the Curtis Act?

- A. NO CHANGE
- B. wrote
- C. drafted
- D. planned

22.A. NO CHANGE

- B. cultures: abuse
- C. cultures. Abuse
- D. cultures abuse

Questions 23–33 are based on the following passage.

Which Came First: The Brain or Sleep?

by Kanaya HJ et.a.l.

Stay awake too long, and thinking straight can become extremely difficult. Thankfully, a few winks of sleep is often enough to get our brains (23) to assent functioning up to speed again. But just when and why did animals start to require sleep? And is having a brain even a prerequisite?

In a study that could help to understand the evolutionary origin of sleep in animals, an international team of researchers has shown that tiny, water-dwelling hydras not only show signs of a sleep-like state despite lacking central nervous systems but also respond to molecules associated with sleep in more evolved animals.

"We now have strong evidence that animals must have acquired the need to sleep before acquiring a brain," says Taichi Q. Itoh, assistant professor at Kyushu University's Faculty of Arts and Science and leader of the research reported in *Science Advances*.

While sleeping behavior was also recently found in jellyfish, a relative of hydras and fellow member of the phylum Cnidaria, the new study from researchers at Kyushu University in Japan and Ulsan National Institute of Science and Technology in Korea found that several chemicals eliciting drowsiness and sleep even in humans had similar effects on the species *Hydra vulgaris*.

"Based on (24) their findings and previous reports regarding jellyfish, we can say that sleep evolution is independent of brain evolution," states Itoh.

23.A. NO CHANGE

B. to expect

C. to except

D. to accept

24.A. NO CHANGE

B. his

C. our

D. theirs

"Many questions still remain regarding how sleep emerged in animals, but hydras provide an easy-to-handle creature to further investigate the detailed mechanisms (25) produced sleep in brainless animals to help possibly answer these questions one day."

Only a couple of centimeters long, hydras have a diffuse network of nerves but lack the centralization associated with a brain.

(26) Tiny, brainless animals with no true meaning to their existence give no opportunity to truly test their sleep pattern.

As an alternative, the researchers used a video system to (27) slowly dissect movement to determine when hydras were in a sleep-like state characterized by reduced movement – (28) which could be disrupted by a flash of light.

Instead of repeating every 24 hours like a circadian rhythm, the researchers found that the hydras exhibit a four-hour cycle of active and sleep-like states.

More importantly, the researchers uncovered many similarities related to sleep regulation on a molecular and genetic level regardless of the possession of a brain.

Exposing the hydras to melatonin, a commonly used sleep aid, moderately increased the sleep amount and frequency, while the (29) dull neurotransmitter GABA, another chemical linked to sleep activity in many animals, greatly increased sleep activity.

- 25.A. NO CHANGE
B. will produce
C. has produced
D. producing
26. Which of the following best suits the overall tone of the passage?
A. NO CHANGE
B. Monitoring the marvelous brain waves of different animals provides us with answers to sleep, and yet this isn't possible for small animals.
C. While sleep is often monitored based on the measurement of brain waves, this is not an option for tiny, brainless animals.
D. While sleep is often monitored based on the measurement of brain waves this is not an option for animals with no brains and wits about them.
27. Which of the following terms best describes the delicate scientific process of tracing movement?
A. NO CHANGE
B. carefully track
C. methodically follow
D. unsystematically pursue
28. Which of the following phrases best fits the author's conclusion of possible reduced movement?
A. NO CHANGE
B. which can only be suspended by light.
C. having no effect on their sleep patterns.
D. which is still relatively unknown.
29. Which word choice is most in line with the paragraph?
A. NO CHANGE
B. unrestrictive
C. inhibitory
D. favorable

[1] On the other hand, dopamine, which causes arousal in many animals, actually promoted sleep in the hydras.

(30) Furthermore, the researchers could use vibrations and temperature changes to disturb the hydras' sleep and induce signs of sleep deprivation, causing the hydras to sleep longer during the following day and even suppressing cell proliferation.

[2] "While some sleep mechanisms appear to have been conserved, others may have switched function during evolution of the brain," suggests Itoh.

[3] Investigating more closely, the researchers found that sleep deprivation led to changes in the expression of 212 genes, including one related to PRKG, a protein involved in sleep regulation in (31) a wide range of animals, including mice, fruit flies, and nematodes.

Disrupting other fruit fly genes (32) appearing to share a common evolutionary origin with the sleep-related ones in hydras—altered sleep duration in fruit flies, and further investigation of such genes may help to identify currently unknown sleep-related genes in animals with brains.

"Taken all together, these experiments *provide strong evidence* that animals acquired sleep-related mechanisms before the evolutionary development of the central nervous system and that many of these mechanisms were conserved as brains evolved," says Itoh. (33) That being said, there is still much more to explore in brainless creatures in relation to sleep patterns, but a scientific base has been built for future scientists to build upon.

30. Where in this passage should the underlined sentence be placed?

- A. NO CHANGE
- B. Before sentence [1]
- C. After sentence [2]
- D. After sentence [3]

31.A. NO CHANGE

- B. a wide range of animals, including mice, fruit flies, and nematode.
- C. a wide range of animals', including mice, fruit flies, and nematodes'.
- D. a wide range of animals, including mice, fruit flies, and nematodes.

32.A. NO CHANGE

- B. —appearing to share a common evolutionary origin with the sleep-related ones in hydras— altered
- C. , appearing to share a common evolutionary origin with the sleep-related ones in hydras—altered
- D. (appearing to share a common evolutionary origin with the sleep-related ones in hydras) altered

33. The author wants to conclude the passage by leaving room for future scientists. Which choice best accomplishes this goal while retaining the tone of the text?

- A. NO CHANGE
- B. If future scientists want to continue with the research, they are free to do so.
- C. Though some may find it a waste of time, I believe that research on sleep patterns should be continued into the future.
- D. In conclusion, whenever it may occur in the future, scientists have to continue to fund and cater to this research study.

Questions 34-44 are based on the following passage.

**Effects of Poverty on Childhood
Development Seen in Children as Young
as Five**

By Jane Murcia

In a nationwide study, UCLA researchers have found that health inequities can be measured in children as young as 5 years old. (34) The research, published in *Health Affairs*, contributes to a growing body of literature finding that children of color who are also (35) poor face greater health inequities than their white counterparts. Researchers trained kindergarten teachers in 98 school districts across the United States to administer the Early Development Instrument (EDI), a measure of children's physical, social, emotional and language development. The assessment was administered to more than 185,000 kindergarteners from 2010 to 2017. (36) If analyzing and correlating the results according to where the children lived, the investigators found that 30 percent of children in the lowest-income neighborhoods were vulnerable in one or more domains of health development, compared to 17 percent of children in higher-income settings.

34.A. NO CHANGE

- B.** The research, was published in *Health Affairs*, contributed to a grown body of literature found that children
- C.** The research, publishing in *Health Affairs*, contributing to a growing body of literature finding that children
- D.** The research, had been published in *Health Affairs*, contributes to a growth body of literature finding that children

35. Which of the following words best fits the author's preference for sensitive language?

- A.** NO CHANGE
- B.** penniless
- C.** of lower socioeconomic status
- D.** of substandard status

36.A. NO CHANGE

- B.** But
- C.** After
- D.** Before

The researchers also found that income-related differences in developmental vulnerability varied substantially among children from different ethnic and racial groups. Black children, for example, were at highest risk, followed by Latina/o children. Asian children were at lowest risk. The differences in developmental vulnerability between Black children and white children were most pronounced at the higher socioeconomic levels and tended to narrow for Black and white children from lower-income neighborhoods. Such early disparities can have a profound influence on (37) their long-term development, leading to higher rates of chronic conditions such as diabetes, heart disease, drug use, mental health disorders, and dementia as adults.

"Our findings underscore the pronounced racialized disparities for young children," says lead study author Neal Halfon, MD, director of the Center for Healthier Children, Families, and Communities at UCLA. "Many other studies have highlighted patterns of income and racial inequality in health and educational outcomes.

What this study (38) showing is that these patterns of inequality are clearly evident and measurable before kids start school." (39) Halfon also is a professor of pediatrics, public health, and public policy in the David Geffen School of Medicine at UCLA, the Fielding School of Public Health, and the Luskin School of Public Affairs. The report also (40) underscores the value of understanding child-developmental inequities at the most micro levels. (41) "Because the EDI is not only reported at but also linked to Census-tract-level indices of neighborhood risk, this measurement tool helps cities and local grassroots efforts develop targeted supports and services to address racialized disparities," adds co-author Lisa Stanley, project director for Transforming Early Childhood Community Systems at the UCLA Center for Healthier Children, Families, and Communities.

37. The underlined pronoun refers to which of the following?

- A. children
- B. adults
- C. neighborhoods
- D. black children

38.A. NO CHANGE

- B. will show
- C. shows
- D. showed

39.A. NO CHANGE

- B. Halfon is also: a professor of pediatrics
- C. Also; Halfon is a professor of pediatrics
- D. Halfon is also a professor of pediatrics

40. Which choice best fits the writer's main idea stated in the previous two sentences?

- A. NO CHANGE
- B. lacks
- C. ignores
- D. assesses

41. The author is considering deleting the underlined quote. Should the quote be kept or deleted?

- A. Keep it. The quote supports the main idea in the first paragraph.
- B. Keep it. Quotes are always an added benefit to any text.
- C. Delete it. It is irrelevant.
- D. Delete it. It contradicts the main idea in the following paragraph.

The EDI tool was developed by Dr. Dan Offord and Dr. Magdalena Janus at the Offord Centre for Child Studies at McMaster University in Ontario, Canada, and has been internationally validated, and used widely in Canada, Australia, and other nations. The EDI was first piloted in 2009 by UCLA in Santa Ana, in partnership with First Five Orange County. (42)

UCLA researchers make this data accessible to local communities to help them develop their own initiatives to address the root causes of inequalities. "These findings not only highlight the equity challenges we face but also reveal the truly inequitable design of all the systems responsible for ensuring that children thrive," says co-author Efrén Aguilar, geographic information systems lead at the Center for Healthier Children, Families, and Communities at UCLA. (43) "However, only by addressing the historical exploitation and exclusion of (44) marginalized communities, can we begin to repair the pains and exploitative practices of the past and redesign our community systems so that all children thrive."

42. Which option, if inserted here, best supports the previous statement on the validated use of EDI?
- A. Over the past 10 years, UCLA has enabled city and school district leaders in over 85 communities, spanning 18 states, to assess the health, development and well-being of more than 350,000 kindergartners across the U.S.
 - B. The piloting of the EDI was a groundbreaking phenomenon that allowed so many new tools to emerge.
 - C. Many schools and districts all over America were supported through the use of the EDI tool and many professionals expect more to come.
 - D. Even though the EDI tool has helped in assessing health, development, and well-being, there is still much more to learn.
43. Which choice provides the best transition?
- A. NO CHANGE
 - B. Thus
 - C. Nevertheless
 - D. Moreover
44. A. NO CHANGE
- B. marginalized-communities, can we begin
 - C. marginalized, communities, can we begin
 - D. marginalized; communities can we begin



EST I - Literacy Test II

Student's Name _____

National ID _____

Test Center: _____

Duration: 65 minutes

52 Multiple Choice Questions

Instructions:

- Place your answer on the answer sheet. Mark only one answer for each of the multiple choice questions.
- Avoid guessing. Your answers should reflect your overall understanding of the subject matter.

The following edited passage is an excerpt from Treasure Island by Robert Louis Stevenson introducing the pirates.

It was not very long after this that there occurred the first of the mysterious events that rid us at last of the captain, though not, as you will see, of his
5 affairs. It was a bitter cold winter, with long, hard frosts and heavy gales; and it was plain from the first that my poor father was little likely to see the spring. He sank daily, and my mother and I had
10 all the inn upon our hands, and were kept busy enough without paying much regard to our unpleasant guest. It was one January morning, very early—a pinching, frosty morning—the cove all
15 grey with hoar-frost, the ripple lapping softly on the stones, the sun still low and only touching the hilltops and shining far to seaward. The captain had risen earlier than usual and set out down the
20 beach, his cutlass swinging under the broad skirts of the old blue coat, his brass telescope under his arm, his hat tilted back upon his head.

Well, mother was upstairs with father
25 and I was laying the breakfast-table against the captain's return when the parlour door opened and a man stepped in on whom I had never set my eyes before. He was a pale, tallowy creature,
30 wanting two fingers of the left hand, and though he wore a cutlass, he did not look much like a fighter. He was not sailorly, and yet he had a smack of the sea about him too.

35 I asked him what was for his service, and he said he would take soda; but as I was going out of the room to fetch it, he sat down upon a table and motioned me to draw near. I paused where I was, with
40 my napkin in my hand.

"Come here, sonny," says he. "Come nearer here." I took a step nearer. "Is this here table for my mate Bill?" he

asked with a kind of leer. I told him I
45 did not know his mate Bill, and this was for a person who stayed in our house whom we called the captain.

"Well," said he, "my mate Bill would be called the captain, as like as not. He has
50 a cut on one cheek and a mighty pleasant way with him, particularly in drink, has my mate Bill. We'll put it, for argument like, that your captain has a cut on one cheek—and we'll put it, if
55 you like, that that cheek's the right one. Ah, well! I told you. Now, is my mate Bill in this here house?" I told him he was out walking. "Which way, sonny? Which way is he gone?"

60 And when I had pointed out the rock and told him how the captain was likely to return, "Ah," said he, "this'll be as good as drink to my mate Bill."

The expression of his face as he said
65 these words was not at all pleasant, and I had my own reasons for thinking that the stranger was mistaken, even supposing he meant what he said. But it was no affair of mine, I thought; and
70 besides, it was difficult to know what to do. The stranger kept hanging about just inside the inn door, peering round the corner like a cat waiting for a mouse. "I have a son of my own," said he, "as like
75 you as two blocks, and he's all the pride of my 'art. But the great thing for boys is discipline, sonny—discipline. Now, if you had sailed along of Bill, you wouldn't have stood there to be spoke to
80 twice—not you. That was never Bill's way, nor the way of such as sailed with him. And here, sure enough, is my mate Bill, with a spy-glass under his arm, bless his old 'art, to be sure. You and
85 me'll just go back into the parlour, sonny, and get behind the door, and we'll give Bill a little surprise—bless his 'art, I say again."

So saying, the stranger backed along
90 with me into the parlour and put me
behind him in the corner so that we
were both hidden by the open door. I
was very uneasy and alarmed, as you
may fancy, and it rather added to my
95 fears to observe that the stranger was
certainly frightened himself. He cleared
the hilt of his cutlass and loosened the
blade in the sheath; and all the time we
were waiting there he kept swallowing
100 as if he felt what we used to call a lump
in the throat.

At last in strode the captain, slammed
the door behind him, without looking to
the right or left, and marched straight
105 across the room to where his breakfast
awaited him. "Bill," said the stranger in
a voice that I thought he had tried to
make bold and big. The captain spun
round on his heel and fronted us; all the
110 brown had gone out of his face, and
even his nose was blue; he had the look
of a man who sees a ghost, or the evil
one, or something worse, if anything
can be; and upon my word, I felt sorry
115 to see him all in a moment turn so old
and sick.

"Come, Bill, you know me; you know
an old shipmate, Bill, surely," said the
stranger. The captain made a sort of
120 gasp. "Black Dog!" said he.

"And who else?" returned the other,
getting more at his ease. "Black Dog as
ever was, come for to see his old
shipmate Billy, at the Admiral Benbow
125 inn. Ah, Bill, Bill, we have seen a sight
of times, us two, since I lost them two
talons," holding up his mutilated hand.

1. The tone of the passage is best described as
 - A. tranquil and calming.
 - B. thrilling and invigorating.
 - C. ambiguous and strange.
 - D. tense and unsettling.

2. As used in line 30, "wanting" most nearly means
 - A. desiring.
 - B. hoping.
 - C. needing.
 - D. lacking.
3. Which of the following can be assumed of Black Dog?
 - A. He has bad intentions for meeting the captain.
 - B. He has never been to that parlour before.
 - C. He enjoys playing tricks on people.
 - D. He has a very easy-going character.
4. Which choice best provides evidence for the answer to the previous question?
 - A. Lines 29-32 ("He ... fighter.")
 - B. Lines 35-36 ("I ... soda;")
 - C. Lines 71-73 ("The ... mouse.")
 - D. Lines 117-119 ("Come ... stranger.")
5. Which of the following best describes the narrator?
 - A. courageous and brave
 - B. naïve and compliant
 - C. otherworldly and strange
 - D. timid and benevolent
6. Which of the following best describes the relationship between the first paragraph and the rest of the passage?
 - A. Main events followed by sub-events.
 - B. A close up of a character followed by the description of a wider setting.
 - C. Introduction followed by characterization.
 - D. Scene setting followed by character development.

7. Which of the following literary devices does the author use?
- A. allegory
 - B. irony
 - C. hyperbole
 - D. foreshadowing
8. Which choice best provides evidence for the answer to the previous question?
- A. Lines 1-5 (“It ... affairs.”)
 - B. Lines 24-29 (“Well ... before.”)
 - C. Lines 35-36 (“I ... soda;”)
 - D. Lines 121-127 (“ ‘And ... hand.”)
9. As used in line 35, “service” most nearly means
- A. preference.
 - B. assistance.
 - C. work.
 - D. amenity.
10. The captain’s reaction to Black Dog is similar to the reaction of
- A. a man seeing his favorite long-lost son.
 - B. a cat randomly confronted by a dog in the street.
 - C. a woman seeing a rival co-worker coincidentally after years.
 - D. a businessman coming face to face with the CEO of the company.

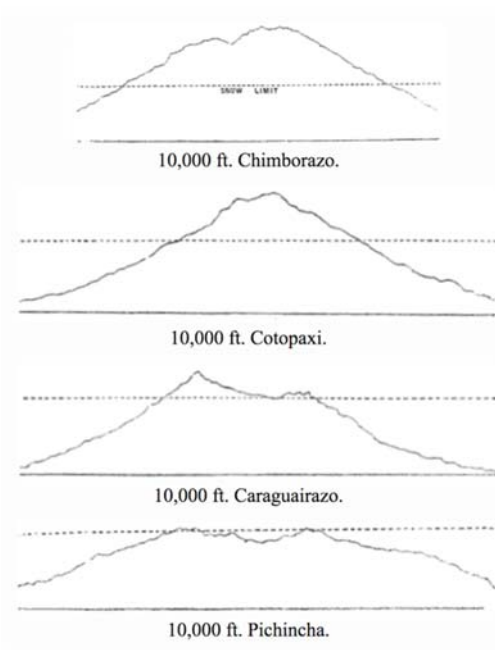
The following passage is taken from The Andes and the Amazon by James Orton on the size of the mountains in the region.

We will now speak more particularly of the Andes of the equator. The mountain chain is built up of granite, gneissoid, and schistose rocks, often in vertical position, and capped with trachyte and porphyry. Large masses of *solid* rock are rarely seen; everything is cracked, calcined, or triturated. While in Bolivia the Eastern Cordillera shows a succession of sharp, ragged peaks, in contrast with the conical summits of the Cordillera of the coast, there is no such distinction in the Andes of the equator. The Eastern Cordillera has a greater mean height, and it displays more volcanic activity. Twenty volcanic mountains surround the valley, of which twelve are in the oriental chain. Three of the twenty are now active (Cotopaxi, Sangai, and Pichincha), and five others are known to have erupted since the Conquest (Chiles, Imbabura, Guamani, Tunguragua, and Quirotoa). The truncated cone of Cotopaxi, the jagged, Alpine crest of ruined Altar, and the dome of Chimborazo, are the representative forms of the volcanic summits. The extinct volcanoes usually have double domes or peaks, while the active peaks are slender cones. Antisana and Cayambi are fashioned after Chimborazo, though the latter is table-topped rather than convex; Caraguairazo, Quirotoa, Iliniza, Sincholagua, Rumiñagui, and Corazon, resemble Altar; Tunguragua, Sangai, Llanganati, Cotocachí, Chiles, and Imbabura, imitate Cotopaxi; Pichincha, Atacatzto, and Guamani are irregular. The Ecuadorian volcanoes have rarely ejected liquid lava, but chiefly water, mud, ashes, and fragments of trachyte and porphyry. Cotopaxi alone produces, foam-like pumice, and glossy, translucent obsidian. The paucity of quartz, and the absence of basalt, are remarkable. Some of the porphyroids are conglomerate, but the majority are true porphyries, having a

homogeneous base. Dr. T. Sterry Hunt calls them porphyroid trachytes. They have a black, rarely reddish, vitreous, or impalpable base, approaching obsidian, with a specific gravity of 2.59 in pure specimens, and holding crystals or crystalline grains of glassy feldspar, and sometimes of pyroxene and hematite. They differ from the Old World porphyries in containing no quartz, and seldom mica. D'Orbigny considers the porphyries of the Andes to have been ejected at the close of the cretaceous period, and formed the first relief of the Cordillera. The prevalence of trachyte shows that the products have cooled under feeble pressure. From the deluges of water lately thrown out have resulted deep furrows in the sides; and from the prevalence of the east wind, which is always met by the traveler on the crest of either Cordillera, there is a greater accumulation of ashes, and less snow on the west slope. Cotopaxi is a fine example of this. In Pichincha, Altar, and Rumiñagua, however, the western wall is lowest, apparently broken down. There is no synchronism in the eruptions of Cotopaxi and Pichincha. The reputed eruptions of Pichincha are dated 1534, 1539, 1566, 1575, 1588, and 1660; that of 1534 resting on the assertions of Checa, Garcilazo, and Herrera, indorsed by Humboldt. Excepting the traditional eruption in 1534, which probably is confounded with that of Pichincha, Cotopaxi did not open till 1742; then followed the eruptions of 1743, 1744, 1746, 1766, 1768, 1803, 1851, and 1855. We must mention, however, that, since the recent awakening of Pichincha, Cotopaxi has been unusually silent. There is also a remarkable coincidence (which may not be wholly accidental) in the renewed activity of Pichincha, and the great eruption of Mauna Loa, both occurring in March, 1868. It is generally believed by the natives that Cotopaxi and Tunguragua are sympathetic.

There are fifty-one volcanoes in the Andean chain. Of these, twenty girdle the Valley of Quito, three active, five
100 dormant, and twelve extinct. Besides these are numerous mountain peaks not properly volcanic. Nowhere on the face of the earth is there such a grand assemblage of mountains. Twenty-two
105 summits are covered with perpetual snow, and fifty are over ten thousand feet high.

All of these would be visible from a single stand-point—the summit of
110 Cotopaxi. The lofty peaks shoot up with so much method as almost to provoke the theory that the Incas, in the zenith of their power, planted them as signal monuments along the royal road to Cuzco. The
115 eastern series is called the *Cordillera real*, because along its flank are the remnants of the splendid highway which once connected Quito and the Peruvian capital. It can also boast of such
120 tremendous volcanoes as Cotopaxi and Sangai. The Western Cordillera contains but one active volcano; but then it can point to peerless Chimborazo and the deep crater of Pichincha. These twenty
125 volcanic mountains rise within a space only two hundred miles long and thirty miles wide. It makes one tremble to think of the awful crevice over which they are placed.



Ecuadorian Volcanoes
Source: James Orton

11. The primary purpose of the passage is to
- A. argue the recent eruptions as harmful to the environment.
 - B. provide a historical record of volcanic eruptions.
 - C. enumerate the number of mountains in the Andes Chain.
 - D. detail the different volcanoes in the Andes chain and their specifications.
12. The overall text structure of the passage is best described as
- A. cause and effect.
 - B. investigation.
 - C. argumentative.
 - D. informative.
13. The author used which of the following to support his text?
- A. a direct quote
 - B. statistics
 - C. authoritative reference
 - D. anecdote

14. Which choice best provides evidence for the answer to the previous question?
- A. Lines 1-2 (“We ... equator.”)
 - B. Lines 44-45 (“The ... remarkable.”)
 - C. Lines 71-72 (“Cotopaxi ... this.”)
 - D. Lines 74-81 (“There ... Humboldt.”)
15. As used in line 5, “capped” most nearly means
- A. topped.
 - B. improved.
 - C. limited.
 - D. surpassed.
16. The author assumes which of the following to be true of the reader?
- A. The reader is familiar with the substance that emits from the Ecuadorian volcano.
 - B. The reader is familiar with the forms of Altar, Chimborazo, and Cotopaxi.
 - C. The reader is familiar with the names of the volcanoes and technical terms of the types of rocks.
 - D. The reader has never heard of volcano tops.
17. What is the relationship between Altar, Chimborazo, and Cotopaxi to the rest of the volcanoes?
- A. They were initially awakened from the rest of the volcanoes.
 - B. They work as prototypes to the rest of the volcanoes.
 - C. They synchronously erupt while the rest of the volcanoes do not.
 - D. They are silent while the rest are constantly erupting.
18. Which of the following is NOT true according to the passage?
- A. Less than half of the volcanoes are active.
 - B. The Ecuadorian volcanoes mainly emit water and liquid lava.
 - C. Cotopaxi has not erupted recently.
 - D. New World porphyries do not contain any quartz and rarely any mica.
19. Which choice best provides evidence for the answer to the previous question?
- A. Lines 17-22 (“Three ... Quirotoa.”)
 - B. Lines 38-41 (“The ... porphyry.”)
 - C. Lines 49-58 (“They ... mica.”)
 - D. Lines 87-89 (“We ... silent.”)
20. The graphic best supports which paragraph within the passage?
- A. First paragraph
 - B. Second paragraph
 - C. Third paragraph
 - D. Fourth paragraph
21. As used in line 64, “feeble” most nearly means
- A. hot.
 - B. timid.
 - C. ineffective.
 - D. weak.

The first passage is from Common Diseases of Farm Animals by R. A. Craig discussing general diseases. The second edited passage is taken from Cattle and their Diseases by Robert Jennings discussing diarrhea.

Passage 1

The importance of recognizing or diagnosing the seat and nature of the morbid change occurring in an organ or group of organs cannot be overestimated. 5 Laymen do not comprehend the difficulty or importance of correctly grouping the signs or symptoms of disease in such a way as to enable them to recognize the nature of the disease. In order to be able 10 to understand the meaning of the many symptoms or signs of disease, we must possess knowledge of the structure and physiological functions of the different organs of the body. We must be familiar 15 with the animal when it is in good health in order to be able to recognize any deviation from the normal due to disease, and we must learn from personal observation the different symptoms that 20 characterize the different diseases. Stockmen should be able to tell when any of the animals in their care are sick as soon as the first symptom of disease manifests itself, by changes in the general 25 appearance and behavior. But in order to ascertain the exact condition a general and systematic examination is necessary. The examiner, whether he be a layman or a veterinarian, must observe the animal 30 carefully, noting the behavior, appearance, surroundings, and general and local symptoms.

Before making a *general examination* of the animal, it is well, if the examiner is 35 not already acquainted with the history of the case (care, feed and surroundings), to learn as much about this from the attendant as is possible. Inquiry should be made as to the feeding, the conditions 40 under which the animal has been kept, the

length of time it has been sick, its actions, or any other information that may be of assistance in forming the diagnosis and outlining the treatment.

45 The *general symptoms* inform us regarding the condition of the different groups of body organs. A careful study of this group of symptoms enables us correctly to diagnose disease and inform 50 ourselves as to the progress of long, severe affections. These symptoms occur in connection with the pulse, respirations, body temperature, skin and coat, visible mucous membranes, secretions and 55 excretions, and behavior of the animal.

The local symptoms are confined to a definite part or organ. Swelling, pain, tenderness and loss of function are common local symptoms. A *direct* 60 symptom may also be considered under this head because of its direct relation to the seat of disease. It aids greatly in forming the diagnosis.

Other terms used in describing symptoms of disease are *objective*, which includes 65 all that can be recognized by the person making the examination; *indirect*, which are observed at a distance from the seat of the disease; and *premonitory*, which 70 precede the direct, or characteristic symptoms. The *subjective* symptoms include such as are felt and described by the patient. These symptoms are available from the human patient only.

Passage 2

75 Cattle are frequently subject to diarrhea, particularly in the spring of the year when the grass is young and soft. Occasionally it assumes a very obstinate form in consequence of the imperfect secretion of 80 gastric juice; the *feces* are thin, watery, and fetid, followed by very great prostration of the animal.

The symptoms of diarrhea are too well
known to require any detailed
85 description.

Treatment.—If in a mild form, the diet
should be low; give two ounces of
Epsom-salts, twice a day. In a more
obstinate form, give two drachms of
90 carbonate of soda in the food. Oak-bark
tea will be found very useful in these
cases; or one of the following powders,
twice a day, will be found very
advantageous: pulverized opium and
95 catechu, each one and a half ounces;
prepared chalk, one drachm; to be given
in the feed.

Calves are particularly subject to this
disease, and it often proves fatal to them.
100 It sometimes assumes an epizoötic form,
when it is generally of a mild character.
So long as the calf is lively and feeds
well, the farmer should entertain no fear
for him; but if he mopes about, refuses
105 his food, ceases to ruminate, wastes in
flesh, passes mucus and blood with the
feces, and exhibits symptoms of pain, the
case is a dangerous one.

In such an emergency, lose no time, but
110 give two or three ounces of Castor-oil
with flour-gruel, or two ounces of salts at
a dose, followed with small draughts of
oak-bark tea; or give, twice a day, one of
the following powders: pulverized
115 catechu, opium, and Jamaica ginger, of
each half an ounce; prepared chalk, one
ounce; mix, and divide into twelve
powders. Bran washes, green food, and
flour-gruel should be given, with plenty
120 of salt.

22. What is the purpose of lines 1-4?
- A. The author seeks to disparage those who are convinced that laymen can properly diagnose diseases.
 - B. The author is attempting to convey a sense of urgency.
 - C. The author is discrediting unprofessionals in the field.
 - D. The author is recognizing that change in the organs is common.
23. Passage 1 is most likely written from the point of view of
- A. an amateur veterinarian.
 - B. a layman.
 - C. a farmer.
 - D. a professional veterinarian.
24. Which of the following does the author of Passage 1 indicate as being important for understanding diseases?
- A. a career as a vet
 - B. making quick and random examinations
 - C. knowledge of the symptoms
 - D. awareness of treatments
25. Which choice best provides evidence for the answer to the previous question?
- A. Lines 14-20 (“We ... diseases.”)
 - B. Lines 25-27 (“But ... necessary.”)
 - C. Lines 28-32 (“The ... symptoms.”)
 - D. Lines 38-44 (“Inquiry ... treatment.”)
26. As used in line 61 “head” most nearly means
- A. skull.
 - B. intellect.
 - C. leader.
 - D. category.

27. Which of the following is NOT mentioned in the passage?
- A. Diarrhea most frequently affects young cows.
 - B. Diarrhea in cows is exhibited in an unyielding manner.
 - C. Carbonate of soda is given in all cases of diarrhea.
 - D. Critical cases of diarrhea include blood in the stool of the animal.
28. Which choice best provides evidence for the answer to the previous question?
- A. Lines 77-80 (“Occasionally ... juice;”)
 - B. Lines 88-90 (“In ... food.”)
 - C. Lines 98-99 (“Calves ... them.”)
 - D. Line 104-108 (“but ... one.”)
29. In Passage 2, the author discusses diarrhea as a common disease for cattle. Which of the following best provides evidence for the author’s credibility?
- A. The author is a well-known veterinarian.
 - B. The author defines diarrhea and its symptoms.
 - C. The author uses specific references to treatments in all cases of diarrhea.
 - D. The author uses technical terms to prove his credence.
30. Which of the following best describes a similar aspect of both passages?
- A. Both passages discuss diseases found in cattle.
 - B. Both passages discuss detailed cures for diseases.
 - C. Both passages discuss symptoms as the essential element.
 - D. Both passages are based on technical terms.
31. Which of the following best describes the difference between the two passages?
- A. Passage 1 explores the downfalls of a wrong diagnosis while Passage 2 attempts to enlighten the reader on diarrhea.
 - B. Passage 1 focuses on symptoms while Passage 2 specifically tackles a disease and its treatments.
 - C. Passage 1 argues the different types of symptoms while Passage 2 only discusses one disease with one symptom.
 - D. Passage 1 focuses on grouping symptoms while Passage 2 haphazardly discusses treatments.
32. As used in line 105, “wastes” most nearly means
- A. deteriorates.
 - B. misuses.
 - C. fades.
 - D. splurges.

The following edited passage is taken from The Treasury of Ancient Egypt by Arthur Weigall on the excavation of tombs.

There came to the camp of a certain professor, who was engaged in excavating the ruins of an ancient Egyptian city, a young and faultlessly-attired Englishman, whose thirst for dramatic adventure had led him to offer his services as an unpaid assistant digger. This immaculate personage had read in novels and tales many an account of the wonders which the spade of the excavator could reveal, and he firmly believed that it was only necessary to set a man of lower status to dig a little hole in the ground to open the way to the treasuries of the Pharaohs (as one would expect). Gold, silver, and precious stones gleamed before him, in his imagination, as he hurried along subterranean passages to the vaults of long-dead kings. He expected to slide upon the seat of his very well-made breeches down the staircase of the ruined palace which he had entered by way of the skylight, and to find himself, at the bottom, in the presence of the bejeweled dead. In the intervals between such experiences he was of opinion that a little quiet gazelle shooting would agreeably fill in the swiftly passing hours; and at the end of the season's work he pictured himself returning to the bosom of his family with such a tale to tell that every ear would be opened to him.

On his arrival at the camp he was conducted to the site of his future labors; and his horrified gaze was directed over a large area of mud-pie, knee-deep in which a few bedraggled natives slushed their way downwards. After three weeks' work on this distressing site, the professor announced that he had managed to trace through the mud the outline of the palace walls, once the feature of the city, and that the work here might now be regarded as finished. He was then conducted to a desolate spot in the desert, and until the

day on which he fled back to England he was kept to the monotonous task of superintending a gang of natives whose sole business it was to dig a very large hole in the sand, day after day and week after week.

It is, however, sometimes the fortune of the excavator to make a discovery which almost rivals in dramatic interest the tales of his youth. Such an experience fell to the lot of Emil Brugsch Pasha when he was lowered into an ancient tomb and found himself face to face with a score of the Pharaohs of Egypt, each lying in his coffin; or again, when Monsieur de Morgan discovered the great mass of royal jewels in one of the pyramids at Dachour. But such "finds" can be counted on the fingers, and more often an excavation is a fruitless drudgery. Moreover, the life of the digger is not often a pleasant one.

It will perhaps be of interest to the reader of romances to illustrate the above remarks by the narration of some of my own experiences; but there are only a few interesting and unusual episodes in which I have had the peculiarly good fortune to be an actor. There will probably be some drama to be felt in the account of the more important discoveries (for there certainly is to the antiquarian himself); but it should be pointed out that the interest of these rare finds pales before the description, which many of us have heard, of how the archeologists of a past century discovered the body of Charlemagne clad in his royal robes and seated upon his throne,—which, by the way, is quite untrue. In spite of all that is said to the contrary, truth is seldom stranger than fiction; and the reader who desires to be told of the discovery of buried cities whose streets are paved with gold should take warning in time and return at once to his novels.

If the dawning interest of the reader has now been thoroughly cooled by these

words, it may be presumed that it will be
95 utterly annihilated by the following
narration of my first fruitless excavation;
and thus one will be able to continue the
story with the relieved consciousness that
nobody is attending.

100 In the capacity of assistant to Professor
Flinders Petrie, I was set, many years
ago, to the task of excavating a supposed
royal cemetery in the desert behind the
ancient city of Abydos, in Upper Egypt.

105 Two mounds were first attacked; and
after many weeks of work in digging
through the sand, the superstructure of
two great tombs was bared.

33. According to the first two paragraphs, the professor can best be described as
- A. ignorant of reality.
 - B. lacking in diligence.
 - C. realistic and wary.
 - D. stubborn and obstinate.
34. Which choice best provides evidence for the answer to the previous question?
- A. Lines 16-19 (“Gold ... kings.”)
 - B. Lines 25-28 (“In ... hours;”)
 - C. Lines 38-44 (“After ... finished.”)
 - D. Lines 44-51 (“He ... week.”)
35. As used in line 58, “score” most nearly means
- A. result.
 - B. plenty.
 - C. grudge.
 - D. grade.

36. Which of the following best summarizes lines 92-108 (“If ... bared.”)?
- A. The author is preparing the reader for the disappointment of an excavation and the beginning of his experience as an excavator.
 - B. The author is finalizing his previous claims and preparing to discuss Professor Flinders Petrie’s experience.
 - C. The author is complaining about his fruitless excavation and begins to propose his first experience as an assistant to Professor Flinders Petrie.
 - D. The author is redirecting the reader’s attention to his ambitious and successful adventures.
37. The use of parentheses in line 15 “(as one would expect)” conveys a tone of
- A. merriment.
 - B. sarcasm.
 - C. disdain.
 - D. indifference.
38. The perspective from which the author writes influences the style of text so that it resembles
- A. a dissertation.
 - B. a report.
 - C. a narrative.
 - D. a fairy tale.
39. As used in line 101, “set” most nearly means
- A. directed.
 - B. prepared.
 - C. assigned.
 - D. hardened.

- 40.** The author claims which of the following?
- A.** Archeologists in Egypt have found a lot of gold so they keep returning.
 - B.** The discovery of artifacts takes thousands of long years full of labor.
 - C.** The reality of the discoveries is unlike the exaggerated tales.
 - D.** Anyone can become an archeologist if they have the necessary skill set.
- 41.** The author is most likely
- A.** a novel writer.
 - B.** an actor.
 - C.** an international history student at Cairo University.
 - D.** an experienced archeologist.
- 42.** Which choice best provides evidence for the answer to the previous question?
- A.** Lines 66-67 (“Moreover ... one.”)
 - B.** Lines 68-74 (“It ... actor.”)
 - C.** Lines 87-91 (“and ... novels.”)
 - D.** Lines 100-104 (“In ... Egypt.”)

The following edited passage is taken from The Chemistry, Properties and Tests of Precious Stones by John Mastin on imitations of precious stones.

With regard to diamonds, the manufacture of these has not as yet been very successful. It is generally admitted that these beautiful and valuable minerals are caused by chemically-charged water and occasionally, though not always, high temperature, but invariably beautified and brought to the condition in which they are obtained by the action of weight and pressure, extending unbroken through perhaps ages of time.

In these circumstances, science, though able to give chemical properties and pressure, cannot, of course, maintain these continuously for "ages"; therefore the chemist must manufacture the jewels in such manner that he may soon see the results of his labours, and though real diamonds may be made, and with comparative ease, from boron in the amorphous or pure state along with aluminium, fused in a crucible at a high temperature, these diamonds are but microscopic, nor can a number of them be fused, or in any other way converted into a large single stone, so that imitation stones, to be of any service must be made of a good clear glass. The glass for this purpose is usually composed of 53.70 per cent. of red lead, 38.48 per cent. of pure quartz in fine powder, preferably water-ground, and 7.82 per cent. of carbonate of potash, the whole coloured when necessary with metallic oxides of a similar nature to the constituents of the natural stones imitated. But for colourless diamonds, the glass requires no such addition to tint it. From the formula given is made the material known as "strass," or "paste," and stones made of it are mostly exhibited under and amongst brilliant artificial lights. The mere fact that they

are sold cheaply is *primâ facie* proof that the stones are glass, for it is evident that a diamond, the commercial value of which might be £50 or more, cannot be purchased for a few shillings and be genuine. So long as this is understood and the stone is sold for the few shillings, no harm is done; but to offer it as a genuine stone and at the price of a genuine stone, would amount to fraud, and be punishable accordingly. Some of these "paste," or "white stones," as they are called in the trade, are cut and polished exactly like a diamond, and with such success as occasionally to deceive all but experts. Such imitations are costly, though, of course, not approaching the value of the real stones; it being no uncommon thing for valuable jewels to be duplicated in paste, whilst the originals are kept in the strong room of a bank or safe-deposit.

In all cases, however, a hard file will abrade the surface of the false stone. In chapter VII, we found that quartz is in the seventh degree of hardness, and an ordinary file is but a shade harder than this, so that almost all stones higher than No. 7 are unaffected by a file unless it is used roughly, so as to break a sharp edge. In order to prepare artificial diamonds and other stones for the file and various tests, they are often what is called "converted" into "doublets" or "triplets." These are made as follows: the body of the glass is of paste, and on the "table" and perhaps on the broader facets, there will be placed a very thin slab of the real stone, attached by cement. In the case of the diamond, the body is clear, but in the coloured imitations the paste portion is made somewhat lighter in shade than the real stone would be, the portion below the girdle being coloured chemically, or mounted in a coloured backing. Such a stone will, of course, stand most tests, for the parts usually tested are genuine.

A stone of this nature is called a "doublet," and it is evident that when it is tested on the underside, it will prove too soft, therefore the "triplet" has been introduced. This is exactly on the lines of the doublet, except that the collet and perhaps the pavilions are covered also, so that the girdle, which is generally encased by the mounting, is the only surface-portion of paste. In other cases the whole of the crown is genuine, whilst often both the upper and lower portions are solid and genuine, the saving being effected by using a paste centre at the girdle, covered by the mounting.

	<i>Hardness.</i>	<i>Specific Gravity.</i>
	(See Chapter VII.)	(See Chapter VIII.)
Beryl	7-3/4	2.709-2.81
Corundum	9	3.90-4.16
Diamond	10	3.502-3.564
Jade	7	3.300-3.381
Opal	5-1/2-6-1/2	2.160-2.283
Phenakite	7-3/4	2.965
Quartz	7	2.670
Rock-crystal	7	2.521-2.795
Sapphire	9	4.049-4.060
Spinel	8	3.614-3.654
Topaz	8	3.500-3.520
Tourmaline	7-1/4	3.029
Zircon	7-1/2	4.700-4.880

White or Colourless Stones
Source: John Mastin

43. The main idea of the passage is to
- discuss characteristics of diamond manufacturing and their imitations.
 - explore the risks of selling imitation diamonds.
 - argue against buying diamonds since imitation diamonds are cheaper.
 - introduce hardness of different stones.

44. What does the author state about the creation of a diamond?
- They have found a successful way to create a diamond.
 - Artificial color enhances an imitation diamond's shine.
 - Since diamonds take time to form, glass that resembles diamonds can be made quickly instead.
 - Weight and pressure are two out of five main components of creating a diamond.
45. Which choice best provides evidence for the answer to the previous question?
- Lines 1-3 ("With ... successful.")
 - Lines 3-12 ("It ... time.")
 - Lines 16-29 ("therefore ... glass.")
 - Lines 29-38 ("The ... imitated.")
46. As used in line 69, "found" most nearly means
- gathered.
 - recovered.
 - located.
 - discovered.
47. According to the passage, a chemist cannot create a diamond ring because
- "stress" only gives off brilliance to the stone.
 - a diamond's appearance cannot be replicated.
 - the diamonds forged are too tiny and cannot be joined into one large stone.
 - the chemist must use colourless glass which cannot be imitated.

48. As used in line 91, “stand” most nearly means
- A. rise.
 - B. endure.
 - C. sustain.
 - D. exist.
49. Which of the following is the best and most precise method to test a stone?
- A. Rub it against another hard stone.
 - B. Use a file against a false stone.
 - C. Use “doublets” for testing.
 - D. Use “triplets” for testing.
50. Which choice best provides evidence for the answer to the previous question?
- A. Lines 67-68 (“In ... stone.”)
 - B. Lines 75-79 (“In ... triplets.”)
 - C. Lines 90-92 (“Such ... genuine.”)
 - D. Lines 93-97 (“A ... introduced.”)
51. According to the passage and the graph, which of the following would be affected by a file?
- A. an opal
 - B. a spinel
 - C. a beryl
 - D. a sapphire
52. What is the purpose of the final paragraph?
- A. to discredit “doublets”
 - B. to introduce “triplets”
 - C. to explain the role of the paste
 - D. to discuss the presence of the girdle

EST I – Literacy Test I

Answer Key

(Writing Section)

Passage 1

1. C
2. A
3. B
4. D
5. A
6. A
7. C
8. B
9. A
10. D
11. A

Passage 2

12. B
13. B
14. A
15. C
16. A
17. B
18. A
19. B
20. D
21. C
22. C

Passage 3

23. D
24. C
25. D
26. C
27. B
28. A
29. C
30. C
31. D
32. B
33. A

Passage 4

34. A
35. C
36. C
37. A
38. C
39. A
40. A
41. A
42. A
43. B
44. A

24 questions expression of ideas

20 words standard English conventions

EST I - Literacy Test II

Answer Key

(Reading Section)

Passage 1

1. D
2. D
3. A
4. C
5. B
6. D
7. D
8. A
9. A
10. B

Passage 2

11. D
12. D
13. C
14. D
15. A
16. C
17. B
18. B
19. B
20. A
21. D

Passage 3

22. B
23. D
24. C
25. A
26. D
27. C
28. B
29. C
30. A
31. B
32. A

Passage 4

33. A
34. A
35. B
36. A
37. B
38. C
39. C
40. C
41. D
42. D

Passage 5

43. A
44. C
45. C
46. D
47. C
48. B
49. D
50. D
51. A
52. B