

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: Each passage below is accompanied by a number of questions. For some questions, you will consider how the passage might be revised to improve the expression of ideas. For other questions, you will consider how the passage might be edited to correct errors in sentence structure, usage, or punctuation. A passage or a question may be accompanied by one or more graphics (such as a table or graph) that you will consider as you make revising and editing decisions. Some questions will direct you to an underlined portion of a passage. Other questions will direct you to a location in a passage or ask you to think about the passage as a whole. After reading each passage, choose the answer to each question that most effectively improves the quality of writing in the passage or that makes the passage conform to the conventions of standard written English. Many questions include a "NO CHANGE" option. Choose that option if you think the best choice is to leave the relevant portion of the passage as it is.

Questions 1-11 are based on the following passage.

City or Urban Planners

City planners play an essential role in making safe places to live in and visit. Although they'll continue focusing on that goal in the years ahead, tomorrow's city planners will differ from current planners in some significant ways. (1) To ensure buildings are safe during the initial construction process, city planners will depend on new safety assessment options. When each of these specialized testing processes (2) occur, it is likely the result of careful analysis conducted by urban planners.

Currently, city planners tackle safety-related disaster preparation with seismic engineers who use shake tables fitted with models of the buildings to see how they stand up to stress. Those evaluations generally include evaluating the needs, assessing the structures before disasters happen, and (3) they plan for subsequent high-tech tests.

In September 2018, a panel discussed nondestructive testing techniques using technology. As a result, city planners have an array of nondestructive options to pick from when deciding how to verify structural integrity for disaster preparedness (4) and ensure buildings are safe for occupancy during disaster relief efforts.

Another initiative that supports city planners in providing communities with safe places to live is called Vision Zero. This initiative is based on the belief that everyone has the right to move safely in their communities. It encourages collaboration between professionals who historically have not worked together, such as local traffic planners and public health officials. This program and others like it encourage city planners to diversify the strategies they use to maintain or check safety, which might mean improving (5) residents' everyday lives, before and after disasters.

- 1. Which choice best maintains the sentence pattern already established in the paragraph?
 - A. NO CHANGE
 - **B.** To depend on new safety assessment options, city planners will ensure buildings are safe during the initial constructions.
 - C. City planners will depend on new safety assessment options to ensure buildings are safe during the initial construction process.
 - **D.** During the initial construction process, and to ensure buildings are safe, city planners will depend on new safety assessment options.

2.A. NO CHANGE

- **B.** occur, them are
- C. occur, they are
- D. occurs, it is

3.A. NO CHANGE

- **B.** plans
- C. planning
- **D.** to plan
- **4.** Which choice results in the most effective transition to the information that follows in the paragraph?
 - A. NO CHANGE
 - **B.** where buildings are occupied.
 - C. and ensure safety during disasters.
 - **D.** DELETE the underlined portion and end the sentence with a period.

5.A. NO CHANGE

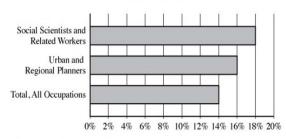
- **B.** residents' everyday lives
- C. residents everyday lives
- **D.** residents everyday lives,

One thing city planners keep in mind is that the growing destruction and frequency of natural disasters make it necessary to (6) use development with emergency plans when creating infrastructures. Today's planners strategically incorporate specific materials that have a beneficial impact in situations of natural disaster. Furthermore, they might use pavement that absorbs water to cope with the aftermath of floods. (8) According to research, asphalt pavement offers high skid resistance and provides high contrast in color between it and road markers.

- **6.A.** NO CHANGE
 - **B.** apply
 - C. change
 - **D.** integrate
- **7.A.** NO CHANGE
 - **B.** For example,
 - C. Next.
 - D. Similarly,
- **8.** The writer is considering deleting the underlined sentence. Should the sentence be kept or deleted?
 - **A.** Kept, because it provides supporting evidence about the benefits of using pavement.
 - **B.** Kept, because it provides an additional example of the importance of using machines.
 - C. Deleted, because it blurs the paragraph's focus on the use of technology to help city planners manage disasters.
 - **D.** Deleted, because it doesn't provide specific examples of what the numerous benefits of pavement are.

(9) People who pursue careers in urban planning have a wide variety of educational backgrounds. City and regional planners may specialize in areas such transportation planning, community development, (10) historic preservation, or urban design, among other fields of interest. Planners often collaborate with public engineers, officials, civil environmental engineers, architects, lawyers, and real estate developers. As of 2010, there approximately 40,300 urban and regional planners employed in the United States. The United States Bureau of Labor Statistics forecasts steady job growth in this field, (11) projecting that 16 percent of new jobs in all occupations will be related to urban and regional planning. Population growth and concerns about environmental sustainability are expected to spur the need for urban planners.





Adapted from *United States Bureau of Labor Statistics, Employment Projections Program.*"All Occpuations" includes all occupations in the United States economy.

9.A. No CHANGE

- **B.** People, who pursue careers in urban planning have a wide variety of educational backgrounds,
- C. People who pursue careers in urban planning, have a wide variety of educational backgrounds
- **D.** People who pursue careers in urban planning have a wide variety of educational backgrounds,

10.A. No CHANGE

- **B.** historic preservation or urban design,
- C. historic preservation and urban design,
- **D.** historic preservation, and urban design,
- 11. Which choice completes the sentence with accurate data based on the graph?

A. NO CHANGE

- **B.** warning that job growth in urban planning will slow to 14 percent by 2020.
- C. predicting that employment in urban planning will increase by 16 percent between 2010 and 2020.
- **D.** indicating that 14 to 18 percent of urban positions will remain unfilled.

Questions 12 through 22 are based on the following passage.

Music

Music can bring about a range of emotions locked deep into the recess of our minds that have us break out into a jig, (12) drives us into conflict, or cause a snore none too big. It is paramount that we acknowledge the remarkable power of music and its existence that spans over the entire history of mankind. Through the archaeological anthropological discoveries made in France and Slovenia, we know that Neanderthals (13) as long as 53,000 years ago had created complex, sweet-sounding flutes sculpted from animal bones. With that in mind, it is not surprising that music both enters and affects the limbic system. Some researchers even argue that music prevailed long before the human race ever existed. Take, for example, the commonality of music between humans and whales (14) but our evolutionary paths have not crossed for nearly 60 million years. We are nowhere close to being the inventors of music but rather we are latecomers (15) to the musical scene.

(16) 1. It has been observed that human songwriters tend to (17) recruit many of the same techniques as humpback whale composers. 2. Humpback whales are known for their short musical phrases, musical patterns, and the use of rhythms similar to ones used by humans. 3. Despite the fact that humpback whales can sing over a range of seven octaves, they usually sing on key, keeping adjacent notes within the same scale. 4. Just as human composers mix percussive and pure tones, so do humpback whales in almost the same ratio. They follow ABA form: a theme is presented, elaborated on, and then revisited in a slightly modified form.

What stands out most is the fact that humpback whale songs include rhyming refrains that repeat. Some researches imply that just as humans use rhymes as a device to move information from their short-term memory to their long-term memory, rhymes are used in much of the same way among whales.

- 12.A. No CHANGE
 - **B.** had driven
 - C. drove
 - **D.** drive
- 13.A. NO CHANGE
 - **B.**, as long as 53,000 years ago,
 - C. as, long as 53,000 years ago,
 - **D.** as long as 53,000, years ago
- **14.A.** NO CHANGE
 - **B.** even though
 - C. moreover
 - D. and
- 15.A. NO CHANGE
 - **B.** in the musical scene
 - C. on the musical scene
 - **D.** for the musical scene
- 16. The writer wants to add the following sentence to the paragraph. Whale songs in general are no longer than symphony movements, perhaps because they have a similar attention span. The best placement of this sentence is immediately
 - **A.** before sentence 1.
 - **B.** after sentence 1.
 - C. after sentence 2.
 - **D.** after sentence 3.
- 17.A. NO CHANGE
 - **B.** change
 - C. employ
 - **D.** inspire

- (18) Moreover, whale songs can be quite memorable and just as you may find yourself repeating the same song over and over in your head, whales also have songs that stick in the mind. Once there were a few humpback whales from the Indian Ocean that had strayed into the Pacific. Some of the whales they met in the Pacific directly altered their (19) tunes singing the new musical piece within three short years.
- (20) Katy Payne studied music and biology in higher education and later became an American zoologist and researcher in the Bioacoustics Research Program at the Laboratory of Ornithology at Cornell University. It was unsurprising, then, that Payne and her husband, Roger, were the first scientists to recognize the complex and (21) mysterious calls of some humpback whales as actual reproducible songs. (22)
 - **18.** Which choice most effectively establishes the main topic of the paragraph?
 - **A.** Katy Payne is considered the pioneer of research conducted on whales.
 - **B.** Katy Payne and her husband tried their best to discover the origin of the tunes.
 - C. Whales are interesting creatures that have caught scientists' attention for the intricate tunes they emit.
 - **D.** Scientists will further study the sounds emitted by whales.

19.A. NO CHANGE

- **B.** tunes
- C. tunes:
- **D.** tunes;
- **20.** Which of the following best provides an introductory sentence to the paragraph?

- **A.** Katy Payne and Roger were well-known researchers that excelled in their careers.
- **B.** Many people believed research in music had to include the music of the animals around us.
- C. Katy Payne was an excellent researcher and was proficient in reading music.
- **D.** There have not been many scientists who have dedicated their research to a cross-disciplinary topic, but Katy Payne was among the few who did.

21.A. NO CHANGE

- **B.** discovered
- C. heard
- D. recorded
- **22.** Which choice best concludes the paragraph?
 - **A.** For the first 30 seconds, there is mumbling, sometimes awkward giggling as the audience gets used to the deep, rumbling groans and high-pitched squeaks
 - **B.** In 1970, Payne led a team that released a five-track, 34-minute album called Songs of the Humpback Whale. To everyone's surprise it became a hit and sold more than 125,000 copies, making it the most popular nature recording of all time.
 - C. Pete Seeger and Judy Collins, superstars at the time, wrote songs inspired by these songs.
 - D. When Nasa launched their Golden Record aboard the Voyager spacecraft in 1977, one of Payne's songs was included on the 12-inch gold-plated disc, along with music from Bach, Mozart and Louis Armstrong.

Questions 23 through 33 are based on the following passage.

Cheese

The manufacturing of cheese (23) <u>initiates</u> documented history. It has been suggested that it was during the accidental movement of fresh milk in the organs of animals such as sheep, cows, and goats, that milk was discovered. Preceding refrigeration, (24) <u>cheese became a way to preserve milk</u>. Yet, despite these discoveries, it is still uncertain where cheese production (25) <u>was first discovered</u> although there is evidence of earlier civilizations in the Middle East, Europe, and Central Asia that produced cheese.

1. Some scientists and researchers believe that it was around 8000 BC, approximately around the same time that sheep were first domesticated, that cheese was first found. 2. There is an enzyme, rennet, used to make cheese that is naturally found in the stomachs of animals such as cows, sheep, and goats. 3. Due to a lack of refrigeration, the residual rennet in the animals' body combined with heat naturally curdled the milk to create the earliest forms of cheese. 4. Humans decided to use the animal organs that naturally stored both the enzyme and curdled milk to (26) store; and transfer milk and other liquids as the organs were both leak-proof and good forms of storage. (27)

What we now find in supermarkets and refer to as "cheese" is the product of the milk curds that were strained and had salt added to. Salt was specifically added to keep the cheese fresh and edible for as long as possible. Even with the addition of salt, areas that hosted warmer climates were forced to make cheese daily in order to always have fresh cheese available for consumption.

- **23.A.** NO CHANGE
 - B. starts
 - C. solidifies
 - **D.** predates
- **24.** Which choice provides the most relevant detail?
 - A. NO CHANGE
 - **B.** cheese is a dairy product, derived from milk and produced in a wide range of flavors.
 - C. cheese became more desirable as a food additive for humans.
 - **D.** cheese became an important element of humans' diet.
- **25.A.** NO CHANGE
 - **B.** had been first discovered
 - C. is being first discovered
 - **D.** is first discovered
- **26.A.** NO CHANGE
 - **B.** store, and
 - **C.** store and
 - **D.** store and,
- **27.** To make this paragraph most logical, sentence 4 should be
 - **A.** placed where it is now.
 - **B.** placed before sentence 1.
 - C. placed after sentence 1.
 - **D.** combined with sentence 1.

Much of the opposite is true in cooler climates. As cheese production made its way to Northern Europe, elements in its overall production changed. One of the main alterations was the decrease in the use of salt resulting in creamier yet milder forms of cheese. Some examples of those cheeses are gouda, cheddar, and parmesan. Cheese in Europe in the Middle Ages was perceived as a great source of calcium. Low-fat cheese works (28) to be a digestive aid, and (29) it is full of sodium. (30) The first factory in Switzerland was built in 1815 as scientists at the time discovered how to mass-produce the enzyme, causing industrial cheese production to quickly become (31) widespread. Many benefits arose from the pasteurization of soft cheeses such as reducing the risk of spreading tuberculosis, listeriotic, salmonellosis, and brucellosis. That didn't, however, completely protect everyone from such risks. Pregnant women are advised against certain cheeses (such as blue-veined cheeses) as they are risky to both the mother and her child.

The significance of cheese becomes more apparent when reviewing texts of ancient civilizations. Researchers have found early Roman texts that outline the method used to produce cheese and how they enjoyed it. (32) In fact, the Romans enjoyed a wide selection of cheese and viewed cheese making as a form of art.

In more recent times, the process of cheese making seems to have lost its artisitic quality with the emergence of industries and mass-production. In America, for instance, the method of processing cheese involves combining natural cheese with emulsifiers, milk, coloring, stabilizers (33) and flavoring. As a result, Americans have come to eat less natural cheese with time and the appreciation of traditional cheese making is now simply a rarity.

- **28.A.** NO CHANGE
 - B. as
 - C. like
 - **D.** for
- **29.A.** NO CHANGE
 - **B.** it may be
 - C. is
 - **D.** it will be
- **30.A.** NO CHANGE
 - **B.** Also
 - **C.** Therefore
 - **D.** For instance
- 31.A. NO CHANGE
 - **B.** rare
 - C. allowed
 - **D.** controlled
- **32.** The writer is considering deleting the underlined sentence. Should the writer do this?
 - **A.** Yes, because it does not relate to the main idea of this paragraph.
 - **B.** Yes, because it fails to support the main argument of the passage.
 - C. No, because it talks about the history of cheese.
 - **D.** No, because it clarifies the argument for the importance of cheese for the early Romans.
- **33.A.** NO CHANGE
 - **B.**, and flavoring
 - C.; and flavoring
 - **D.**: and flavoring

Questions 34 through 44 are based on the following passage.

Quality of trees: Trees grown in a nursery are preferable for transplanting to trees grown in the forest. Nursery-grown trees possess a well-developed root system with numerous fibrous rootlets, a straight stem, a symmetrical crown (34), and a well-defined leader. Trees grown in neighboring nurseries are preferable to those grown at great distances (35), yet they will be better adapted to local climatic and soil conditions. The short distances over which they must be transported also will entail less danger to the roots through drying. For lawn planting, the branches should reach low to the ground, while for street purposes the branches should start at about seven feet from the ground. (36) For woodland planting, the form of the tree is of minor consideration, though it is better to have the leader well defined here as well as in the other cases.

When and how to procure the trees: The trees should be selected in the nursery (37) on your own terms. Some people prefer to secure the more valuable specimens with leaden seals. Fall is the best time to make the selection, because at that time one can have a wider choice of material. Selecting this early will also prevent delay in delivery at the time when it is desired to plant.

When to plant: The best time to plant trees is early spring, just before growth begins, and after the frost is out of the ground. The planting period in the Eastern States is generally from the latter part of March to the early part of May.

- **34.A.** NO CHANGE
 - **B.**, a well-defined leader.
 - C.; and a well-defined leader.
 - **D.** –and a well-defined leader.
- **35.** What is the best way to combine the two sentences?
 - A. NO CHANGE
 - B. because
 - **C.** therefore
 - D. despite
- **36.** Which of the following sentences can be added for detail and coherency?
 - **A.** Some people disregard how short or long the branches should fall.
 - **B.** Street planting also prefers the stem to be straight.
 - C. For street planting, it is also important that the stem should be perfectly straight and about two inches in diameter.
 - **D.** For street planting, it is very similar to lawn planting.
- **37.A.** NO CHANGE
 - **B.** personally
 - **C.** on a one to one basis
 - **D.** individually

Where (38) she has to plant both coniferous and deciduous trees, it is best to get the deciduous in first, and then the conifers.

How to plant: (39) The location of the trees in relation to each other should be carefully considered. On the lawn, they should be separated far enough to allow for the full spread of the tree. On streets, trees should be planted thirty to thirty-five feet apart and in case of the elm, forty to fifty feet. In woodlands, it is best to plant as close as six feet apart where small seedlings are used and about twelve feet apart in the case of trees an inch or more in diameter. An abundance of good soil (one to two cubic yards) is essential with each tree where the specimens used are an inch or two in diameter. A rich mellow loam, such as one finds on the surface of a well-tilled farm, is the most ideal. (40) Manure placed in direct contact with the roots or stem of the tree.

Protecting the roots from drying is the chief precaution to be observed during the planting process, and for this reason a cloudy day is preferable to a sunny day for planting. Regarding evergreens, the least exposure of the roots is liable to result in disaster, even more so than in the case of deciduous trees. This is why evergreens are lifted from the nursery with a ball of soil around the roots. All bruised roots should be cut off before the tree is (41) planted, and the crowns of deciduous trees should be slightly trimmed in order to equalize the loss of roots by a corresponding decrease in leaf surface.

38.A. NO CHANGE

- B. it
- C. he
- D. one
- **39.** Which of the following best begins the paragraph?
 - **A.** Usually, there are a few steps to be taken before planting a tree.
 - **B.** Planting a tree, as many may know, takes careful time and consideration including many variable steps.
 - C. There are necessary steps that need to be taken before planting a tree.
 - **D.** A tree can be planted in either a lawn or the street.

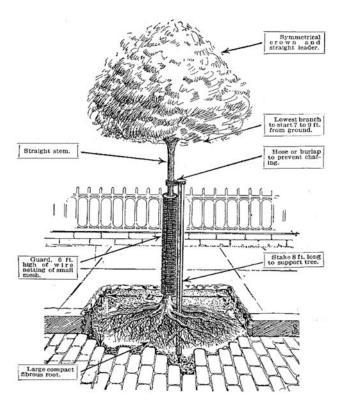
40.A. NO CHANGE

- **B.** Manure, when wet, placed in direct contact with the roots or stem of the tree.
- C. Manure should be placed in direct contact with the roots or stem of the tree
- **D.** Manure placed in direct contact with the roots or stem of the tree every day when planting.

41.A. NO CHANGE

- **B.** planted and, the
- C. planted. The
- **D.** planted and the

The tree should be set into the tree hole at the same depth that it stood in the nursery. Its roots, where there is no ball of soil around them, should be carefully (42) detached and good soil should be worked in carefully with the fingers among the fine rootlets. (43) The rootlets anchor the tree to the ground and absorb water. Every root fibre is thus brought into close contact with the soil. More good soil should be added (in layers) and firmly packed about the roots. The last layer should remain loose so that it may act as a mulch or as an absorbent of moisture. The tree should then be thoroughly watered. (44) In order to support the tree, the lowest branch should be at least 7 feet from the ground.



- **42.A.** NO CHANGE
 - **B.** spread out
 - C. morphed
 - D. attached
- **43.** What should be done with the underlined portion?
 - **A.** Keep it, it provides a necessary definition to help the reader understand botany terminology.
 - **B.** Keep it, it ties together the supporting details before and after the sentence.
 - C. Delete it, it distracts the reader from the process being outlined.
 - **D.** Delete it, it is unrelated to the rest of the passage.
- **44.** Which choice most closely relates the last paragraph to the graphic?
 - A. NO CHANGE
 - **B.** An 8-foot long stake will guide in supporting the tree.
 - C. A straight stem is important for street planting.
 - **D.** The water will be drained through the large compact fibrous root.