# LUMS Common Admission Test Sample Questions for Verbal & Math Sections

## **Test Duration: Approximately 3 hours**

All applicants must bring the following two items to the Test Center. Otherwise, they will not be allowed to take the LCAT.

- 1. Printed signed copy of the Test Registration Slip &
- 2. Photo bearing Valid CNIC/Government-issued Juvenile card/ Passport. No other form of identity will be accepted.

The LCAT is a multiple-choice test like the SAT. However, the time duration and test format may vary from the SAT. The sample questions are general guidelines to help test takers prepare for the LCAT.

## General Guidelines for Preparing the Verbal Sections of the LCAT

To excel in the verbal sections, which combine elements of both reading and writing of the LCAT, a comprehensive and strategic approach is crucial. Firstly, immerse yourself in diverse reading materials. This will enhance your understanding of various writing styles, themes, and vocabularies. Practice regularly with sample passages, identifying central ideas, analyzing arguments, and discerning the author's purpose.

For the writing component, hone your skills in constructing clear, coherent arguments and using evidence effectively. Attention to grammar, syntax, and word choice to improve precision and style. Time management is key; practice under timed conditions to develop the ability to quickly comprehend texts and articulate responses.

#### **Verbal Content Domains:**

- **Craft and Structure:** Assess comprehension, vocabulary, and reasoning skills needed to understand and use high-utility words, evaluate texts rhetorically, and make connections between related texts.
- **Information and Ideas:** Measure the ability to locate, interpret, evaluate, and integrate information from texts and informational graphics such as tables and graphs. It focuses on:
- **Standard English Conventions**: Test editing skills to ensure texts conform to the core conventions of standard English sentence structure, usage, and punctuation.

• **Expression of Ideas:** Evaluate the ability to revise texts for clarity, effectiveness, and rhetorical goals.

# **Preparation Tips:**

- Enhance your skills by practicing reading comprehension passages and answering related questions.
- Practice analyzing texts for structure, ideas, and vocabulary.
- Focus on revising and editing texts for clarity and correctness.
- Review SAT practice tests to understand different types of questions.

# **Sample Questions for the Verbal Sections**

**Directions:** The questions in the verbal section address a number of important reading and writing skills. Read each passage and question carefully and then choose the best answer to the question based on the passage(s). For each question read the four choices (A), (B), (C), and (D). Select the letter of the choice which you consider is the correct answer. Then fill in the corresponding circle in your answer sheet.

- 1. A travelogue about exploring Pakistan's diverse landscapes is structured around different regions, each section highlighting the unique\_\_\_\_\_\_of each area, from the bustling streets of Karachi to the serene valleys of Gilgit-Baltistan.
- A) challenges
- B) characteristics
- C) monotony
- D) disadvantages
- 2. In preparation for a presentation on Sadequain, a renowned Pakistani artist, a student compiles the following observations:
  - Sadequain's art frequently explores themes of struggle and transformation.
  - "The Sun" (1962) is characterized by bold calligraphic strokes.
  - "Human Suffering" (1971) depicts figures in distress.

Which statement best synthesizes these observations to link "The Sun" and "Human Suffering"?

- A) Sadequain's "The Sun" and "Human Suffering" both express themes of struggle and transformation through their distinctive styles.
- B) Both "The Sun" and "Human Suffering" showcase Sadequain's expertise in depicting human emotions.
- C) "The Sun" and "Human Suffering" were created in different decades but by the same artist, Sadequain.
- D) "The Sun" uses calligraphy, and "Human Suffering" portrays human figures, illustrating the artist's range.

- 3. A research paper examines the geographical and cultural boundaries within Pakistan, focusing on how these boundaries have \_\_\_\_\_\_over time, influenced by historical, political, and social factors.
- A) diminished
- B) fluctuated
- C) remained static
- D) become indistinct
- 4. Technological advancements have greatly improved life quality. They have led to significant medical breakthroughs and enhanced global communication.

Which transition word or phrase would be most appropriate to link these two ideas?

- A) Nevertheless,
- B) Consequently,
- C) In contrast,
- D) Besides,
- 5. The book 'The Social Fabric: Understanding Community Dynamics' discusses the evolving nature of community structures in modern society. It examines the role of technology, economic shifts, and cultural changes in shaping community interactions. Given the author's exploration of these factors, which of the following would best support the book's analysis of contemporary community dynamics?
- A) Historical accounts of community structures in ancient civilizations.
- B) Statistical data on current trends in community living and interaction.
- C) Predictions about future technological innovations.
- D) Personal anecdotes from individuals about their community experiences.
- 6. In the historical account 'The Age of Exploration,' the author describes the ambitions and challenges faced by explorers during this period. The narrative details the explorers' motivations for undertaking risky voyages, their encounters with new lands and peoples, and the subsequent impact on global trade and cultural exchanges. The author's portrayal of the explorers' perseverance in the face of adversity suggests an admiration for their spirit of adventure and resilience. What can be inferred about the author's perspective on the explorers?
- A) The author disapproves of the explorers' motivations.
- B) The author views the explorers as primarily motivated by greed.
- C) The author admires the explorers' courage and determination.
- D) The author believes the explorers had a negative impact on global trade.

7. In the world of modern technology, smartphones have become an indispensable tool for communication and convenience. They have revolutionized the way we connect with others, access information, and perform everyday tasks. Many people rely on them for work, social interaction, and entertainment.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) smartphones, they have
- B) smartphones, which they
- C) smartphones, it has
- D) smartphones, and they
- 8. In the following excerpt, the author discusses the role of smartphones in modern technology. Choose the option that best completes the sentence while maintaining adherence to the conventions of Standard English grammar:

"Excerpt: In the world of modern technology, smartphones have become an indispensable tool for communication and convenience. They have revolutionized the way we connect with others, access information, and perform everyday tasks. Many people rely on them for work, social interaction, and entertainment,\_\_\_\_\_."

- A) making them an integral part of daily life.
- B) therefore, they are seen as essential by many.
- C) which is why they have become so widespread.
- D) and this has led to their widespread use.
- 9. As the debate over the new environmental policy intensified, proponents argued that it was essential for the future sustainability of the planet, while opponents \_\_\_\_\_\_its potential economic impact as overly burdensome and unnecessary.
- A) disregarded
- B) exaggerated
- C) understated
- D) evaluated

# **Comprehension Passage**

**Directions:** Read the passage carefully and thoughtfully and answer the following questions. Remember, some answers may not be directly stated in the text and might require you to draw conclusions based on the information provided. For each question read the four choices (A), (B), (C), and (D). Select the letter of the choice which you consider is the correct answer. Then fill in the corresponding circle in your answer sheet.

In the upcoming national elections, the influence of young voters is anticipated to be more significant than ever. Recent statistics show a remarkable increase in the number of young voters, rising to 56.86 million from 46.43 million in the last six years. This surge represents a substantial 22.5% increase, suggesting a dynamic shift in the electoral landscape.

The total voter count now stands at 128.58 million, with young voters comprising 44.22% of this number. This demographic is not only significant in terms of numbers but also in their potential impact. With the advent of social media, young voters have become more informed and engaged, capable of swaying public opinion and potentially altering election results in key constituencies.

A detailed breakdown reveals a diverse distribution of young voters across provinces. Punjab leads with 31.85 million, followed by Sindh with 11.72 million, Khyber Pakhtunkhwa (KP) with 10.72 million, and Baluchistan with 2.3 million. This distribution indicates a varied political landscape, with different regions possibly showcasing unique voting trends.

Among the young voters, the gender gap is also narrowing, with an increasing number of female voters participating actively in the electoral process. This change is reflective of a broader social transformation, where young individuals, irrespective of gender, are taking a more active role in shaping their political future.

- 10. Based on the passage discussing the impact of young voters in the upcoming national elections, which statement best summarizes the role and potential influence of this demographic group?
- A) Young voters, constituting nearly half of the total voter count, have the potential to significantly influence election outcomes, especially with their increased engagement through social media.
- B) The majority of young voters are located in Punjab and Sindh, indicating a probable focus of election campaigns in these regions.
- C) Young female voters are the majority in the young voter demographic, indicating a shift in gender dynamics within the electoral process.
- D) The rise in young voters is primarily concentrated in urban areas, suggesting a shift in political focus to city-based issues."
- 11. How has social media influenced young voters?
- A) Reduced their number
- B) Increased their political engagement
- C) Decreased voter turnout
- D) Caused a gender gap

- 12. What trend is indicated by the narrowing gender gap among young voters?
- A) Decreased political interest
- B) Increased female voter participation
- C) Unchanged electoral landscape
- D) Decreased male voter participation
- 13. What role are young voters expected to play in the upcoming elections?
- A) Decrease voter turnout
- B) Have no significant impact
- C) Play a crucial role in determining outcomes
- D) Focus only on social media campaigns
- 14. Which statement best summarizes the passage?
- A) The number of young voters has decreased significantly.
- B) Young voters are less informed due to social media.
- C) Young voters are set to have a substantial impact in the upcoming elections.
- D) The gender gap among young voters is increasing.

# **Sample Questions for Math Sections**

### **General Guidelines for Preparing the Mathematics Sections of the LCAT**

To prepare for the LCAT math sections, focus on mastering algebra, linear equations, logarithms, inequalities, data interpretation, ratios, percentages, as well as advanced mathematical concepts like quadratic and exponential functions. Geometry and trigonometry are also important, particularly understanding area and volume. Since calculators are not allowed, practice accuracy in manual calculations. Utilize SAT practice tests and online resources like Khan Academy for comprehensive preparation. These resources provide a good approximation of the test's format and difficulty level, helping you to familiarize yourself with various question types.

#### **Math Content Domains:**

- **Algebra:** This domain assesses the ability to analyze, solve, and construct linear equations and inequalities. It includes solving equations and systems of equations using various techniques and understanding linear functions in one and two variables.
- Advanced Mathematics: This domain evaluates understanding of advanced equations, including absolute value, quadratic, exponential, polynomial, rational, and radical equations. It also encompasses working with nonlinear functions and solving systems of nonlinear equations.
- **Problem-Solving and Data Analysis:** This domain measures quantitative reasoning skills in ratios, rates, percentages, and proportional relationships. It involves analyzing and interpreting data through statistical models, scatterplots, probability concepts, and evaluating claims based on sample statistics.
- Geometry and Trigonometry: This domain focuses on concepts related to area, volume, angles, triangles, circles, and trigonometric functions. It includes solving problems involving properties of shapes, right triangles, and trigonometric calculations.

#### **Preparation Tips:**

- Familiarize yourself with the topics mentioned above.
- Work on speed and accuracy, as calculators are not allowed.
- Solve practice problems and review concepts in SAT practice materials.

**Directions:** For each question read the four choices (A), (B), (C), and (D). Select the letter of the choice which you consider is the correct answer. Then fill in the corresponding circle in your answer sheet.

- 1. A company models its profit, P, in thousands of dollars, based on the number of products sold, x, in thousands, with the equation  $P(x) = x^2 3x + 2$ . Determine the number of thousands of products the company must sell to break even, where breaking even refers to achieving a profit of 0.
  - A) 1 thousand products
  - B) 2 thousand products

- C) 3 thousand products
- D) Both options A) and B) are correct
- 2. In a right triangle with legs of a and b, and hypotenuse c, if a = 10 and b = 24, what is the value of c?
  - A) 26
  - B) 28
  - C) 30
  - D) 32
- 3. A car travels at varying speeds. If it covers 120 miles in the first 2 hours and 160 miles in the next 3 hours, what is its average speed over the entire trip?
  - A) 40 mph
  - B) 45 mph
  - C) 50 mph
  - D) 56 mph

| 4. | An arithmetic sequence has a first term of $a_1 = 3$ and a common difference of $d = -2$ . What is the 8th term of the sequence?                           |
|----|--|
|    | A) -11   |
|    | B) -13   |
|    | C) -15<br>D) -17   |
|    |  |
| 5. | A computer's price is reduced by 15% for a sale, and then an additional \$50 off is applied. If the original price is \$800, what is the final sale price? |
|    | A) \$610   |
|    | B) \$630   |
|    | C) \$660   |
|    | D) \$685   |
| 6. | Calculate the area of a trapezoid with bases of lengths $8\ \mathrm{cm}$ and $12\ \mathrm{cm}$ and a height of $5\ \mathrm{cm}$ .                          |
|    | A) $50 \text{ cm}^2$   |
|    | B) 60 cm <sup>2</sup>  |
|    | C) $70 \text{ cm}^2$   |
|    | D) $80  \text{cm}^2$   |
| 7. | What is the sum of the solutions for $2x^2 + 7x - 3 = 0$ ?   |
|    | A) $-\frac{1}{2}$  |
|    | B) $\frac{3}{2}$   |
|    | C) $-\frac{7}{2}$  |
|    | D) $\frac{5}{2}$   |
| 8. | Given that $\log_x 16 = 4$ and $\log_x 2 = y$ , find the value of y.   |
|    | A) 1   |
|    | B) 2   |
|    | C) 3   |
|    | D) 4   |
| 9. | In a circle with radius 5 cm, what is the length of an arc subtending a central angle of $\frac{3\pi}{4}$ ?  |
|    | A) $7.5\pi$ cm   |
|    | B) $20\pi$ cm  |
|    | C) 11.78 cm  |
|    | D) $15\pi$ cm  |
|    |  |

- 10. If  $\tan \theta = \frac{3}{4}$  and  $\sin \theta < 0$ , what is the value of  $\cos \theta$ ?

  - A)  $-\frac{1}{5}$ B)  $-\frac{3}{5}$ C)  $-\frac{4}{5}$

  - D)  $-\frac{2}{5}$

### **Additional Notes**

- Please note that this is a general guideline to assist you in preparing for the test. However, it is not mandatory that the entire test will be based solely on the listed topics, nor is it guaranteed that all topics will be covered in the test.
- Ensure that you have a solid understanding of both verbal and mathematical concepts, as the test assesses a wide range of skills.
- While LCAT may not be identical to the SAT, reviewing SAT practice tests is a helpful way to familiarize yourself with the test format and question styles.