

HCL SAT Entrance Exam Syllabus

HCL SAT Entrance Exam for the TechBee Program is divided into four categories with details as below:

- **Verbal Reasoning:** Verbal reasoning section assess ability to understand and comprehend written passages. They are designed to measure verbal comprehension, reasoning and logic, all through your understanding of language.

Topics covered:

1. Critical reading
2. Paragraph forming
3. Sentence completion
4. Sentence correction

- **Quantitative Reasoning:** Quantitative reasoning is the application of basic mathematics skills, such as algebra, to the analysis and interpretation of real-world quantitative information in the context of a discipline or an interdisciplinary problem to draw conclusions that are relevant to students in their daily lives.

Topics covered:

1. Using arithmetic
2. Using Algebra
3. Using Geometry
4. Using statistics
5. Interpreting quantitative information

- **Logical Reasoning:** Logical reasoning tests (also known as critical reasoning tests) are designed to assess a candidate's ability at skills such as how to interpret patterns, number sequences or the relationships between shapes. Logical reasoning tests are designed to measure non-verbal skills.

Topics covered:

1. Deductive and nonverbal reasoning
2. Odd elements
3. Analytical puzzles
4. Spatial visualization
5. Mechanical reasoning
6. Perspective taking

- **Essay writing:** Candidates will have 15 minutes to write Essay on given topics and the word limit is 200 words.

SAT Structure & Sample Questions

<u>S.NO</u>	<u>SECTIONS</u>	<u>QUESTIONS</u>	<u>TIMING (MINS)</u>
1	REASONING	36	36
2	NUMERICAL OR QUANT	40	40
3	VERBAL APTITUDE	36	36
4	ESSAY WRITTING (200 words)	1	15

1. The number of units of a certain item sold by a company in 2010 was 20% higher than the number of units it sold in 2009. If the number of units of the item sold in 2009 was 3,000 less than that in 2010, how many units did the company sell in 2009?

- A. 12,000
- B. 15,000
- C. 16,000
- D. 18,000
- E. 24,000

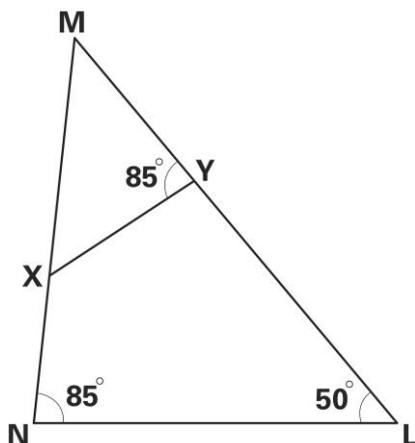
Correct Answer: B

2. In the sequence 2, 6, 12, 20 ..., what is the 7th term?

- A. 42
- B. 56
- C. 58
- D. 60
- E. 64

Correct Answer: B

3. Refer to the triangle LMN given below:



Quantity A: MY/MN

Quantity B: MX/ML

- A. Quantity A is greater
- B. Quantity B is greater
- C. The two quantities are equal
- D. The relationship cannot be determined from the information given

Correct Answer: C

4. For set $A = \{4, 10, x, 12, y, 20\}$, all the elements are positive integers greater than or equal to 4. Also, $x < y$ and $x, y < 10$ and the median of set A is 8. The value of x is 4.

- A. Always
- B. Sometimes
- C. Never

Correct Answer: B

5. The table below gives deposit-related information for a branch of bank XYZ from 2015 to 2019.

Deposits in Bank XYZ

	2015	2016	2017	2018	2019
Total amount of deposits (x 10⁷ Rs)	240	265	285	320	335
Number of account holders (x 10³)	1,200	1,350	1,400	1,500	1,650

Quantity A: Number of times the average amount deposited per account holder decreased between two consecutive years

Quantity B: 2

- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

Correct Answer: C

6-10. There are four questions based on the following passage, one of which is asked alongside.

Most of us aren't morning people. We hit the snooze button time and again, every day. According to a study conducted by a well-known Chinese university, more than 60% of people surveyed admitted to going to sleep late at night and waking up early in the mornings. This tells us that many people across China are sleep deprived to a great extent. But this isn't healthy for us in the long run. The crisp morning air and the first rays of sunshine can do more good for our health than we think. By going to sleep late at night and rising even later in the morning, you are significantly altering your biological sleep cycle which could lead to many health hazards

Rising early in the morning has plenty of verified health benefits. Studies have shown that people who wake up early tend to have increased energy levels and work more quickly in comparison to their late-rising counterparts. Early risers also tend to be better at solving problems. They are more productive and better motivated to take on the tasks of the day. People who go to sleep early and rise early are also observed to have better mental health. Therefore, for better mental health, one must practice rising early. On the other hand, those who rise late tend to suffer from depression caused by insomnia.

But another point of view is that most people can't help but rise late. If they work night shifts, they don't have an option but to alter their sleep cycle. Also, many people burn the midnight oil because they find that late nights are the best for thinking clearly. While this may be true, it is still not recommended. It is advised that such people can somewhat compensate for doing so by exercising well, eating healthy food and changing their sleeping habits as soon as possible.

6. What does "burning the midnight oil" refer to in the passage?

- A. Staying up late
- B. Going to work at night
- C. Rising late in the morning
- D. Burning lamps at midnight
- E. Using oil lamps to stay up late

Correct Answer: A

7. Rearrange the given sentences in a proper sequence to form a meaningful paragraph.

- A. Everyone should follow this in their lives so that life doesn't get monotonous.
- B. "All work and no play, makes Tom a dull boy" is a wonderful proverb.
- C. Every proverb has a hidden message and we can only see it when applied to our lives.
- D. It helps us take a break from work and focus on other activities like working out, playing or creating a piece of art.

- A. CABD
- B. CBAD
- C. BDAC
- D. BADC
- E. ABDC

Correct Answer: D

8. The following passage has blanks that have been numbered (1) to (4). From the given words, fill in the blanks with the most appropriate words.

A(n) ___(1)___ in autoimmune diseases has been observed. Autoimmune disorder means your own immune system, that ___(2)___ defends you from foreign elements, attacks your body's healthy cells causing various types of ___(3)___ diseases. These diseases are ___(4)___ to diagnose and you may live with one throughout your life without even knowing about it.

- A. rest
- B. swing
- C. spring
- D. upswing
- E. loftiness

Correct Answer: D

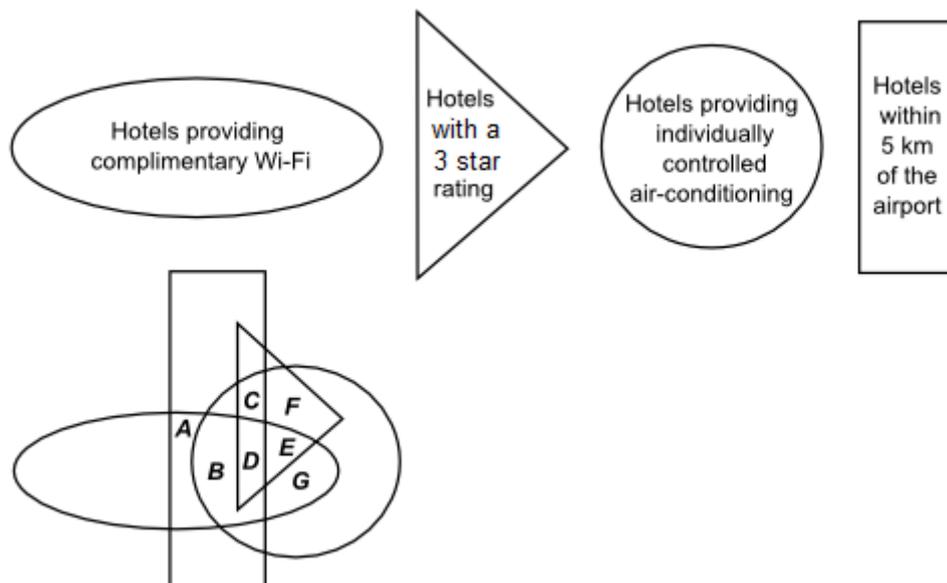
9. Select the word or phrase that is **incorrect** in the sentence below. Select option E if the sentence has no errors.

Bird watching is more than a hobby to Charlene. She especially enjoys bird watching during the migratory period because that is when she gets to watch many exotic birds in action. She also had a book in which she has sketched all her favorite birds.

- A. is
- B. because
- C. gets
- D. had
- E. No error

Correct Answer: D

10. The diagram below represents hotels in a particular city. The shapes in the diagram represent the following types of hotels.



Which of the following types of hotels is represented by the letter C in the diagram?

- A. Hotels within 5 km of the airport that have a 3star rating and provide complimentary Wi-Fi.
- B. Hotels that do not provide complimentary Wi-Fi and individually controlled air-conditioning.
- C. Hotels that do not provide complimentary Wi-Fi and are not located within 5 km of the airport
- D. Hotels with a 3star rating that provide complimentary Wi-Fi and individually controlled air-conditioning.
- E. Hotels within 5 km of the airport that have a 3star rating and provide individually controlled air-conditioning.

Correct Answer: E

11. Out of the five options given below, four are similar in a certain manner. However, one is **not** like the other four. Select the one which is different from the rest.

- A. Hair
- B. Nails
- C. Finger
- D. Eyebrows
- E. Eyelashes

Correct Answer: C

12-16. There are four questions based on the information below, one of which is asked alongside.

Six professionals, A, B, C, D, E and F, are seated around a circular table, not necessarily in the same order. Each person specializes in one of the following professions: doctor, singer, actor, salesman, lawyer and teacher. It is also known that:

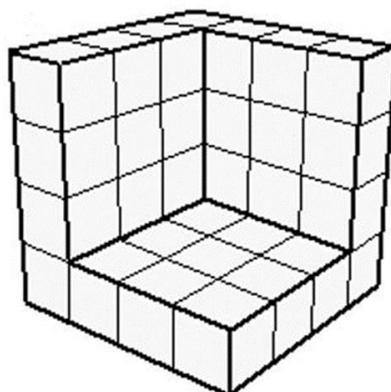
- I. The doctor and the lawyer sit opposite each other.
- II. E, the salesman, sits opposite the actor and two places to the right of the doctor.
- III. D sits between the salesman and the teacher.
- IV. F is not the singer and C is not the doctor.
- V. B sits two places to the left of A.

12. Who is the doctor?

- A. A
- B. B
- C. F
- D. A or F
- E. A or B or F

Correct Answer: D

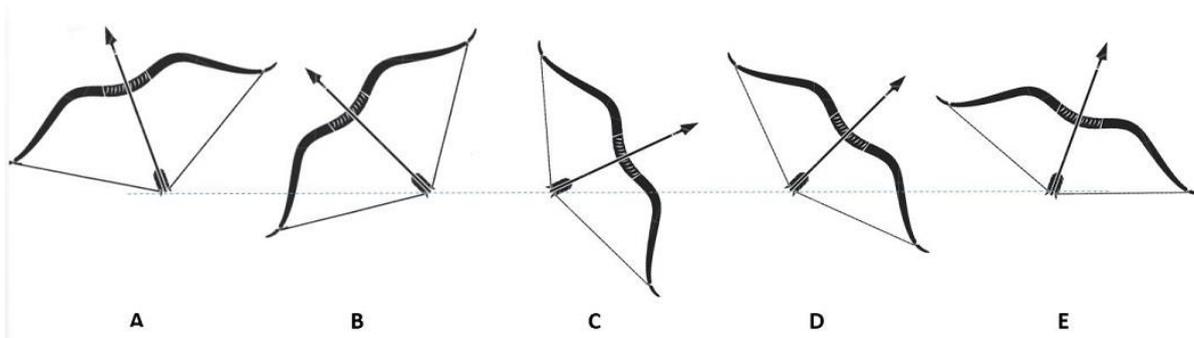
13. What will be the minimum number of cubes that would be required to make this a solid cube, assuming that the new cubes are of the same size as the ones already present?



- A. 9
- B. 16
- C. 22
- D. 27
- E. 32

Correct Answer: D

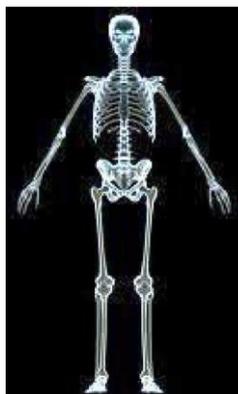
14. Which position ensures the furthest reach of the arrow?

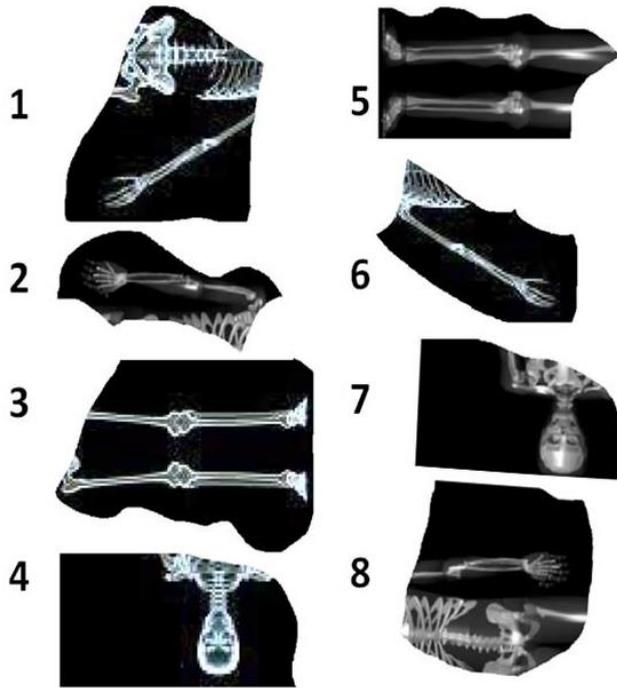


- A. A
- B. B
- C. C
- D. D
- E. E

Correct Answer: B

15. A medical student was asked to form the following X-ray image from the options given below.





Which of these options would form the correct image?

- A. 1, 2, 4 and 5
- B. 1, 3, 4 and 6
- C. 1, 3, 4 and 7
- D. 1, 3, 6 and 7
- E. 2, 5, 7 and 8

Correct Answer: B