## CAT 2023 Slot-2 Quantitative Ability Answer Key

This section was tougher than last year in terms of level of difficulty compared to CAT 2022. Following was the composition of QA section:

- In Arithmetic, the questions were on SICI, Time and Work, Time-Speed-Distance, Averages, Mixtures \& Allegations and Profit \& Loss
- In Algebra, the questions were dominated by Quadratic equations, Linear Equations, Modulus, Maxima -Minima, Inequality \& Polynomials
- In Modern Math, the questions were on Logarithms, Sequences
- In Geometry, the questions were on Triangle, Rectangle, Coordinate Geometry \& Parallelogram
- In Number system, questions were on indices and number of factors
- Number of MCQs were 14 and TITA questions were 8
- An attempt of 9 to 11 questions with accuracy of approximately $75-80 \%$ will be a good performance.

| Area/Q Type | No of Questions |
| :--- | :--- |
| Quantitative Ability | 14 MCQs, 8 Non MCQs |
| Arithmetic | 7 |
| Algebra | 8 |
| Modern Math | 2 |
| Geometry | 3 |
| Numbers | 2 |

## CAT 2023 Slot-2 Quantitative Ability Answer key (Memory based questions)

Q.1. 40 litres of milk is in a container. 4 ltres of milk is replaced in the container with water. This process is followed till the milk is less than water. How many repetitions are required

1. 7
2.9
2. 4
3. 5

Answer key: 1. (7)
Q. 2 At a certain point, two boats crossed paths; one headed south, the other west. There are 60 kilometres separating them after two hours, If there is a 6 kmph difference in the two boat speeds, find the slower boat's speed

1. 15 kmph
2. 14 kmph
3. 20 kmph
4. 18 kmph

## Answer key: 4. (18)

Q. 3 The polygon's two sides have a ratio of 1:2, and its interior angle has a ratio of 3:4. Determine how many sides the polygon has with the most sides

1. 8
2.10
2. 6
3. 12

## Answer Key: 2. (10)

Q.4. On day one, there are 100 bacteria. On the nth day, one out of every $n$ bacteria produces another bateria.

On which day will there be more bacteria overall—more than or equal to $1,000 ?($

1. 18th day
2. 20th day
3. 19th day
4. 15th day

Answer key: 3. (19th Day)

Q5. Xavier bought a pair of glasses at Rs. 1000 and sold it to Yati at $20 \%$ profit. Yati sold it back to Xavier at $20 \%$ loss. Now, Xavier sold the same glasses to Zenith. What is the percentage of profit when Xavier sold the glasses to Zenith

1. $30.5 \%$
2. $28.6 \%$
3. $25 \%$
4. $31.25 \%$

Answer Key: 4 (31.25\%)

Q 6. Let $a, b, m, n$ are natural numbers, $a$ and $b$ are greater than 1 . Also, $a^{\wedge} m \times b{ }^{\wedge} n=144 \wedge 145$. Find the greatest value of $m$-n.

1. 31
2. 33
3. 29
4. 36

Answer key: 1. (31)

Q 7. Find the number of numbers which are less than 50 and have exactly two factors other than 1 and itself.

1. 8
2. 4
3.6
3. 2

Answer key: 2. (4)

Q8: The average of 5 integers is 38 and all the numbers are between 0 and 50 (both inclusive). In these 5 numbers, a is the minimum. If exactly 3 of them are more than 32 , find the difference between the minimum and the maximum value of a.

1. 14
2. 18
3. 20
4. 16

Answer key: 3. (20)

