## CAT 2023 Slot-1 Quantitative Ability Answer Key

- QA was dominated by Algebra with 8 questions on Quadratic equations, Linear Equations, Modulus Functions \& Polynomials
- Arithmetic had 7 questions on SICI, Time and Work, Time-Speed-Distance, Clocks, Averages, Mixtures \& Allegations and Profit \& Loss
- 4 questions on Geometry on Triangle, Coordinate Geometry, Cyclic Quadrilateral
- 2 questions on Modern Math and one on Numbers.
- 1 question was on Indices
- The section was rated a bit mor difficult

| Topics | Number of Questions |
| :--- | :--- |
| Arithmetic | 7 |
| Algebra | 8 |
| Modern Math | 2 |
| Geometry | 4 |
| Number System | 2 |

## CAT 2023 Questions with Answer Key

A few memory based questions that appeared in different slots of CAT 2023 exam with answers are shared below:

## Quantitative Ability (QA) Answer Keys

Q1. Rajendra went from point A to B and Anubha from B to A. They met somewhere between continuing their journey. Rajendra took 6 hours and Anubha took 24 hours to reach the
respective destinations after meeting. If Rajendra traveled 54 Kmph , what is the distance AB .

1. 872 Kms
2. 972 Kms
3. 782 Kms
4. 988 Kms

Ans: $\mathbf{9 7 2}$ Kms
Q 2. Rajesh sold 2 products A and B at the same price. While doing that there was $20 \%$ Profit on A and $10 \%$ loss on B. The products were further sold at the same price but there is $10 \%$ Profit on B this time. What is the approximate profit percentage on A ?

1. 47
2. 37
3. 49
4. 44

## Ans: 47

Q 3. Salaries of A, B and C are in the ratio 5: 6:7. Their salaries are increased in 1st year by 20\%, 25\% and $20 \%$ respectively. In the 2nd year, Then the salaries of A and C are again increased by $40 \%$ and $25 \%$.The new salary of $B$ is equal to the mean of salaries of $A, B$ and $C$. What is the approximate percentage increase in the salary of $B$, in the second year.

1. $23 \%$
2. $26 \%$
3. $29 \%$
4. $24 \%$

Ans: 26\%
Q.4. From a cup of coffee, some coffee is removed and replaced with Coco powder. Thus, Mix P is formed. Again, same amount of mixture is removed from Mix P and replaced with Coco powder. Thus, mix Q is formed. Mix Q has Coffee and Coco powder in the ratio of 16:9. find the ratio of Coco powder in P:Q

1. 5:4
2. $4: 6$
3. 5:6
4. 5:9

Ans: 5:9
Q. 5. Shrishti went on a 8-hour trip in a car, before the trip the car had travelled a total of x kms , where x is a whole number and is palindromic, at the end of her trip the car had travelled a total of 26862 kms . If Shrishti never drove at more than $110 \mathrm{~km} / \mathrm{hr}$, then the greatest possible average speed at which she drove is?

1. 80
2. 90
3. 110
4. 100

Ans: 100
Q. 6 Angle between the hands at 8:48 is x . what is the minimum time in minutes when the angle between them increases by $50 \%$.

1. $24 / 11$ Mins
2. $24 / 9$ Mins
3. $24 / 6$ Mins
4. 24/10 Mins

## Ans: 24/11 Mins

Q. 7. If $x$ and $y$ are real numbers such that $x^{\wedge} 2+(x-2 y-1)^{\wedge} 2=4 y(x+y)$, Find the value $x-2 y$ is

1. 1
2. 2
3. 0
4. -1

## Ans: 1

Q. 8. Find the number of natural numbers less than (or up to) 1000 having different digits.

1. 738
2. 756
3. 657
4. 783

Ans: 738
Q. 9. Let $\alpha$ and $\beta$ be the two distinct roots of $2\left(x^{\wedge} 2\right)-6 x+k=0$, such that $(\alpha+\beta) \&(\alpha * \beta)$ are the distinct roots of the equation $x^{\wedge} 2+p x+p=0$,then, the value of $8(k-p)$

1. 4
2. 5
3. 6
4. 3

## Ans: 6

Q. 10. The number of integer solution of $2|x|\left(x^{\wedge} 2+1\right)=5 x^{\wedge} 2$

1. 5
2. 4
3. 3
4. 2

Ans: 3

