

INEQUALITY + DATA SUFFICIENCY

- Q.1 Quantity I: Rs.11700 was lent in two parts by Swati. One part was lent at 4.5% simple interest per annum (p.a.) and the rest was lent at 11% simple interest p.a. The total interest received from both the parts is Rs.1053 per year. What was the amount lent at 11%p.a?
Quantity II: Rs.12000 was lent in two parts by Swati. One part was lent at 5% simple interest per annum (p.a.) and the rest was lent at 10% simple interest p.a. The total interest received from both the parts is Rs.960 per year. What was the amount lent at 10%p.a?
- Q.2 Quantity I : No. of days in which A will work alone, given A and B can complete work in 8 days, B and C can complete work in 12 days, C and A can complete work in 8 days.
Quantity II : No. of days in which A will work alone, given A and B can complete work in 18 days, they started work together and after working for 6 days A left and B completed remaining work in 24 days.
- Q.3 Quantity I: Two equal amounts are invested for 2 years at 9% per annum by Virat, one at simple interest and the other at compound interest. If the difference in the interests for the two years on the two amounts is 162, then what is the amount ?
Quantity II: Two equal amounts are invested for 2 years at 11% per annum by Virat, one at simple interest and the other at compound interest. If the difference in the interests for the two years on the two amounts is 242, then what is the amount ?
- Q.4 Quantity I: P can complete a piece of work in 37.5 hrs and Q can complete the same work in 15hours. If P and Q start working together and after 5 hours Q left the work and R joins to P. If P and R together complete remaining work in 8 hours, then in what time R can complete this work alone?
Quantity II: Pipe A can fill a tank in 24 hours and pipe B can fill the same tank in 30 hours, a empty pipe C can empty the tank in 20 hours. If pipe A and B opened together and after four hours pipe C also opened, then find time taken to fill the tank?
- Q.5 A box contains 50 tiles, in which 5 are red tiles, 6 are green tiles, 9 are blue tiles and remaining are yellow tiles.
Quantity I: Probability of picking 2 tiles such that one is green and the other is blue
Quantity II: Probability of picking 3 tiles such that at least one of them is red
Quantity III: Probability of picking 3 tiles such that at least one of them is blue
- Quantity III < Quantity II < Quantity I
 - Quantity II < Quantity III < Quantity I
 - Quantity II > Quantity III > Quantity I
 - Quantity I < Quantity II < Quantity III
 - Quantity I > Quantity III < Quantity II
- Q.6 Is $a > 0$?
I: $(a+b)^2 < (a-b)^2$
II: $2a+2b < 2a-2b$
- Q.7 Is the average of the largest and the smallest of four given numbers greater than the average of four numbers
- The difference between the largest and the second largest number is less than the difference between the second largest and the second smallest number.
 - The difference between the largest and the second largest number is greater than the difference between the second smallest and the smallest number
 - The difference between the largest and the second smallest number is greater than the difference between the second largest and the smallest number.
- Only Statement I 2. Either II or III
 3. I and Either II or III 4. Only Statement II
 5. Can not be determined
3. I and Either II or III
Four consecutive numbers – A, B, C and D.
From Statement I,
 $D - C < C - B$
 $B + D < 2C$; From Statement II, $D - C > B - A$
 $A + D > B + C$
 $A + D/2 > A + B + C + D / 4$
From Statement III,
 $D - B > C - A$
 $D + A > C + B$
- Q.8 Reena and Meera bought and sold some sarees. What is the cost price of each saree?
- The selling price of 29 sarees is 7395.
 - They had sold N sarees, where the difference between N and the number obtained by interchanging its digits is 9.
 - Even though they spent 150 on packaging, they made a total profit of 20%.
 - The number of sarees sold is the first two digit number which is preceded and followed by prime numbers.
- I, II, III 2. All the four 3. I, III and II or IV
 4. I, III and IV 5. None of the above
4. I, III and IV
 $I \rightarrow \text{sp of one saree} = 255$
 $III \rightarrow \text{sp} = ((N * \text{cp}) + 150) / N * 120\%$
 $IV \rightarrow 2,3,4,5,6,7,8,9,10,11,12,13$. 12 is the first two digit number followed and preceded by prime numbers.
Therefore , $CP = 200$
- Q.9 The total surface area of a cube, sphere and cylinder are same. The height of the cylinder is double of its radius.
Quantity I: Volume of Cube
Quantity II: Volume of Sphere
Quantity III: Volume of Cylinder
- Quantity III < Quantity II < Quantity I
 - Quantity II < Quantity III < Quantity I
 - Quantity II > Quantity III > Quantity I
 - Quantity I < Quantity II < Quantity III
 - Quantity I > Quantity III < Quantity II

CLICK ON THIS VIDEO