Q1. A fruit seller had some watermelons. He sells 45% of the watermelons and still has 495 watermelons left. How many watermelons he originally had? [Percentage, Level 2, Capegemini, Wipro]
1) 900 2) 800 3) 400 4) 600
Ans: 1
Let the original number of watermelons as x. Solve 0.55x = 495.

Q2. If the numerator of a fraction is increased by 140% and the denominator of the fraction is decreased by 20%, the resultant fraction is 12/7. Find the original fraction.
1) 4/9 2) 4/7 3) 7/6 4) 8/9 [Percentage, Level 2, Capegemini, Wipro]
Ans: 2
Key Concepts
Assume the original fraction as x/y. Change the numerator and denominator according to the given conditions and equate it with the given value to solve this.

Q3. If 45% of a certain number is equal to (6/5)th of another number, what is the ratio between the numbers? [Percentage, Level 2, Capegemini, Wipro]
1) 9 : 11 2) 8 : 3 3) 1 : 7 4) 7 : 4
Ans: 2
45% of a = 6b/5, then find a : b.

Q4. The marked price of a chair is Rs. 1,650. This chair is sold at two successive discounts of 10% and 20%. What is the selling price of the chair? [Profit and Loss, Level 2, Capegemini, Wipro]
1) Rs. 1,188 2) Rs. 1,288 3) Rs. 1,166 4) Rs. 1,265
Ans: 1
Discout% = 10 + 20 - 10 x 20/100 = 28%
Selling price = Marked price - discount

Q5. Paras sold his goods for Rs. 960 at 33.33% profit. Find the price at which he must sell his goods so that he earns 20% profit. [Profit and Loss, Level 1, Capegemini]
1) Rs. 792 2) Rs. 720 3) Rs. 854 4) Rs. 864
Ans: 4
Key Concepts
Use the formula:
Selling price = Cost price + Profit

Q6.Manoj sold an article at a marked price of Rs. 13,000. Had he offered a discount of 10% on the marked price he would have earned a profit of 30%. What is the cost price? [Profit and Loss, Level 2, Capegemini, Wipro]
1) Rs. 10,000 2) Rs. 9,900 3) Rs. 9,000 4) Rs. 11,000
Ans: 3
Given: Marked price = Rs. 13,000
Discount = 10%
Selling price = 90% of Marked price = Rs 11700
Profit = 30%

Selling price = 130% of the cost price

Q7. Mihir's capital is 5/4 times more than Tulsi's capital. Tulsi invested her capital at 50 % per annum for 3 years (compounded annually). At what rate % p.a. simple interest should Mihir invest his capital so that after 3 years, they both have the same amount of capital? [SI and CI, Level 3, TCS]
a) 20/3 % b) 10 % c) 50/3 % d) 1.728 % e) None of these
Sol : Option C
Explanation: Let, the capital of Tulsi = 4. ∴ Capital of Mihir = 9.

$$4\left(1+\frac{50}{100}\right)^3=\left[9+\left(\frac{9\times R\times 3}{100}\right)\right]\ R = 50/3\ \%$$

Q8. Sahil's capital is 1/6 times more than Chaya's capital. Chaya invested her capital at 20 % per annum for 2 years (compounded annually). At what rate % p.a. simple interest should Sahil invest his capital so that after 2 years, they both have the same amount of capital? [SI and CI, Level 3, TCS, Infosys]
a) 10% b) 11 5/7% c) 20% d) 13 5/7% e) None of these
Sol : Option B
Explanation: Let, the capital of Sahil = 6. ∴ Capital of Chaya = 7

$$6\left(1+\frac{20}{100}\right)^3=\left[7+\left(\frac{7\times R\times 2}{100}\right)\right]\ R = 11\ 5/7\%$$

Q9. 150 litres mixture of milk and water contains 30 percent milk. How much more milk must be added to make the water percentage in the mixture as 40 percent?
1) 120.5 litres 2) 157.5 litres 3) 132.5 litres 4) 112.5 litres [Mixture and Alligation, Level 2, TCS, Wipro]
Ans: 4
The initial volume of the mixture = 150 litres, of which 30% is milk.
The volume of milk in the mixture is = 150 × (30/100) = 45 litres
The volume of water in the mixture is = 150 – 45 = 105 litres
To make the percentage of water 40%, the volume of milk has to be 60%
So, Volume of water in the mixture having 40% of water = 105 litres
Total volume of such a mixture = (105/40)x 262.5 litres
So, we need to add 262.5 – 150 = 112.5 litres of Milk to make the percentage of water in the mixture 40%
Hence, the correct answer is 112.5 litres.

Q10. The cost of two varieties of tea is INR 300 and INR 375 respectively. If both the varieties of tea are mixed together in the ratio 3 : 2, then what should be the price of mixed variety of tea per kg?
[Mixture and Alligation, Level 2, TCS, Infosys]
1) INR 340 2) INR 330 3) INR 350 4) INR 360
Ans: 2
Solution
Given,
The cost of two varieties of tea is INR 300 and INR 375, respectively.
Both varieties of tea are mixed together in a ratio 3 : 2.
So, the cost of the (3 + 2) i.e., 5 kg of the mixed tea = (3 × 300) + (2 × 375) = 900 + 750 = INR 1650

The cost of the mixed tea per kg = 1650/5 = INR 330

Q11. A sum of Rs. 1,248 is to be distributed among Ridhaan and Vihaan in the proportion of 2 : 3. What is the share of Vihaan? [Ratio, Level 2, Capegimini, Wipro]
1) Rs. 684.20 2) Rs. 776.40 3) Rs. 748.80 4) Rs. 874.50
Ans: 3
The total sum is distributed in the ratio 2 : 3. Calculate the total parts (2 + 3). Vihaan's share is 3 out of the total parts multiplied by the total sum. This gives Vihaan's share of Rs. 1,248.

Q12. The ratio of the angles of a triangle is 2 : 2 : 5. What is the largest angle? [Ratio, Level 1, Capegimini, Wipro]
1) 120 2) 80 3) 110 4) 100
Ans: 4
5/9 of 180 = largest angle

Q13. 10 consecutive numbers are given. If the average of the two numbers given in the middle is 13.5, then what is the sum of the first 6 numbers? [Average, Level 2, Capegimini, Wipro]

1) 58 2) 55 3) 67 4) 69
ans: 4

Solution
Given that the average of two middle numbers in a list of 10 consecutive numbers is 13.5.
Let the smaller one be x.
Therefore, the next number is (x+1).
The average of these two numbers is given by:(2x+1)/2 = 13.5
So, x = 13
Therefore, the two middle numbers are 13 and 14.
Since these are the 5th and 6th numbers in the list of 10 consecutive numbers.
The first number in the list will be 13 – 4 = 9
The sum of the first 6 numbers in this list = 9 + 10 + 11 + 12 + 13 + 14 = 69
Hence, the correct answer is 69.

Q14. The average of 10 numbers is 42. If each number is increased by 5, then what will be the new average? [Average, Level 1, Capegimini, Wipro]

1) 42 2) 47 3) 92 4) 57
Ans: 2
Key Concepts
If each number is increased by 5, then the average will also increase by 5.

Q15. TWO + TWO = FOUR find the value of F+O+U+R. (Infosys)
A) 26
B) 23
C) 22
D) None of these
Answer – C

Hint – use hit and trail method and crypt concept