

## Ratio and Proportion Questions and Answers for Bank Exams Pdf

1. A company blends two varieties of tea from two different tea gardens, one variety costing Rs. 20 per kg and the other Rs. 25 per kg in the ratio 5 : 4. He sells the blended tea at Rs. 23 per kg. Find his profit or loss percent.

- a. Profit of 3.5%
- b. No profit, no loss
- c. Profit of 5%
- d. Loss of 5%

Ans: A

Let 5 kg of the first variety be mixed with 4 kg of second variety.

Then, C.P. of 9 kg of tea = ₹ (20 × 5 + 25 × 4) = ₹ 200.

S.P. of 9 kg of tea = ₹ (23 × 9) = ₹ 207.

Profit = ₹ (207 - 200) = ₹ 7.

∴ Profit % =  $\left(\frac{7}{200} \times 100\right)\% = 3.5\%$ .

2. A and B are two alloys of gold and copper prepared by mixing metals in the ratio 7 : 2 and 7 : 11 respectively. If equal quantities of the alloys are melted to form a third alloy C, then the ratio of gold and copper in alloy C will be

- a. 5 : 7
- b. 5 : 9
- c. 7 : 5
- d. 9 : 5

Ans: C

$$\text{Gold in C} = \left(\frac{7}{9} + \frac{7}{18}\right) \text{ units} = \frac{7}{6} \text{ units.}$$

$$\text{Copper in C} = \left(\frac{2}{9} + \frac{11}{18}\right) \text{ units} = \frac{5}{6} \text{ units.}$$

$$\therefore \text{Gold : Copper} = \frac{7}{6} : \frac{5}{6} = 7 : 5.$$

3. Rs. 2010 are to be divided among A, B, C in such a way that if A gets Rs. 5, then B must get Rs. 12 and if B gets Rs. 4, then C must get Rs. 5.50. The share of C will exceed that of B by

- a. Rs. 270
- b. Rs. 360
- c. Rs. 430
- d. Rs. 620

Ans: A

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$$A : B = 5 : 12,$$

$$B : C = 4 : 5.50 = 12 : 16.5 = 12 : \frac{33}{2}.$$

$$A : B : C = 5 : 12 : \frac{33}{2} = 10 : 24 : 33.$$

$$\text{Sum of ratio terms} = 10 + 24 + 33 = 67.$$

$$C's \text{ share} = ₹ \left(2010 \times \frac{33}{67}\right) = ₹ 990.$$

$$B's \text{ share} = ₹ \left(2010 \times \frac{24}{67}\right) = ₹ 720.$$

$$\text{Required difference} = ₹ (990 - 720) = ₹ 270.$$

4. The sum of three numbers is 116. The second number and the third number are in the ratio of 9 : 16 while the first number and the third number are in the ratio of 1 : 4. Find the second number.

- a. 8
- b. 36
- c. 64
- d. Cannot be determined

Ans: B

Second : Third = 9 : 16, Third :

First = 4 : 1 = 16 : 4.

∴ Second : Third : First = 9 : 16 : 4.

$$\text{Second number} = \left( 116 \times \frac{9}{29} \right) = 36.$$

5. In an innings of a cricket match, three players A, B and C scored a total of 361 runs. If the ratio of the number of runs scored by A to that scored by B and also number of runs scored by B to that scored by C be 3 : 2, the number of runs scored by A was

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- a. 161
- b. 171
- c. 181
- d. 185

Ans: B

$$A : B = 3 : 2, B : C = 3 : 2 = \left( 3 \times \frac{2}{3} \right) : \left( 2 \times \frac{2}{3} \right) = 2 : \frac{4}{3}.$$

$$A : B : C = 3 : 2 : \frac{4}{3} = 9 : 6 : 4.$$

$$\therefore A's \text{ score} = \left( 361 \times \frac{9}{19} \right) = 171.$$