ALLIGATION AND MIXTURE

1.In a mixture of milk and water of the volume of 60 litre the ratio of milk to water is 7:5.How much quantity of water will be added to make mixture of equal ratio?

(a)8litre   (b)10 litre   (c)15litre   (d)20 litre

2.In a mixture of milk and water of the volume of 30 litre,the ratio of milk and water is 8:7.How much water should be added in mixture to make ratio 4:5 ?

(a)6 litre   (b)4.5litre   (c)5litre   (d)5.5litre

3.600 gm of Sugar solution has 40% sugar in it.How much sugar should be added to make it 50% in the solution?

(a)60   (b)90   (c)120   (d)150

4.I have 100 books of English.I sold some of these at a profit of 12% and rest at 8%loss.On the whole I got a profit of 11%.How many books were sold at 12% profit by me?

(a)50   (b)56   (c)60   (d)95

5.There are 3 tub which contain mixture of milk and water in the ratio of 5:2,4:3 and 3:1 respectively .If the mixtures be poured in a single tub.Find the ratio of milk and water

(a)13:3   (b)19:9   (c)17:9   (d)CND.

6.If 2 kg of metal,of which 1/3 is zinc and the rest is copper,be mixed with 3 kg of metal,of which ¼ is zinc and the rest is copper,What is the ratio of zinc to copper in the mixture?

(a)13:42   (b)17:43   (c)19:43   (d)15:42

7.A sum of Rs. 6.40 is made up of 80 coins which are either 10 –paise or 5-paise coins.How many are coins of 5-paise?

(a)24   (b)28   (c)32   (d)36

8.Gold is 19 times as heavy as water and copper is 9 times as heavy as water.In what ratio should these metals be mixed so that the mixture may be 15 times as heavy as water?

(a)2:3   (b)3:2   (c)2:4   (d)4:2

9. How much water be added to 14 litres of milk worth Rs 5.40 a litre so that the value of the mixture may be Rs 4.20 a litre?

(a) 7 litres   (b) 6 litres   (c) 5 litres   (d) 4 litres

10. 729 ml of a mixture contains milk and water in the ratio 7 : 2. How much more water is to be added to get a new mixture containing milk and water in the ratio 7 : 3?

(a) 600 ml   (b) 710 ml   (c) 520 ml   (d) None of these

11. A person has chemical of Rs 25 per litre. In what ratio should water be mixed in that chemical so that after selling the mixture at Rs 20 per litre he may get a profit of 25 percent?

(a) 13 : 16   (b) 16 : 9   (c) 12 : 15   (d) 19 : 22

12. A milk vendor has 2 cans of milk. The first contains 25% water and the rest milk. The second contains 50% water. How much milk should he mix from each of the containers so as to get 12 liters of milk such that the ratio of water to milk is 3 : 5?
(a) 4 lit, 8 lit   (b) 6 lit, 6 lit   (c) 5 lit, 7 lit   (d) 7 lit, 5 lit

13. In what ratio must a grocer mix two varieties of pulses costing Rs. 15 and Rs. 20 per kg respectively so as to get a mixture worth Rs. 16.50 kg?
(a) 3 : 7   (b) 5 : 7   (c) 7 : 3`      `   (d) 7 : 5

14. A dishonest milkman professes to sell his milk at cost price but he mixes it with water and thereby gains 25%. The percentage of water in the mixture is:
(a) 4%   (b) $6\frac{1}{4}$%   (c) 20%   (d) 25%

15. How many kilogram of sugar costing Rs. 9 per kg must be mixed with 27 kg of sugar costing Rs. 7 per kg so that there may be a gain of 10% by selling the mixture at Rs. 9.24 per kg?
(a) 36 kg   (b) 42 kg   (c) 54 kg   (d) 63 kg

16. A container contains 40 liters of milk. From this container 4 liters of milk was taken out and replaced by water. This process was repeated further two times. How much milk is now contained by the container?
(a) 26.34 lit   (b) 27.36 lit   (c) 28 lit   (d) 29.16 lit

17. A jar full of whisky contains 40% alcohol. A part of this whisky is replaced by another containing 19% alcohol and now the percentage of alcohol was found to be 26%. The quantity of whisky replaced is:
(a) $\frac{1}{3}$ (b) $\frac{2}{3}$ (c) $\frac{2}{5}$ (d) $\frac{3}{5}$

18. In what ratio must water be mixed with milk to gain $16\frac{2}{3}$% on selling the mixture at cost price?

(a) 1 : 6   (b) 6 : 1   (c) 2 : 3   (d) 4 : 3

19. Find the ratio in which rice at Rs. 7.20 a kg be mixed with rice at Rs. 5.70 a kg to produce a mixture worth Rs. 6.30 a kg.
(a) 2 : 3   (b) 3 : 4   (c) 3 : 5   (d) 4 : 5

20. In what ratio must a grocer mix two varieties of tea worth Rs. 60 a kg and Rs. 65 a kg so that by selling the mixture at Rs. 68.20 a kg he may gain 10%?
(a) 3 : 2   (b) 3 : 4   (c) 3 : 5   (d) 4 : 5