Examrace

Aptitude Logical Reasoning Mixtures and Allegations 2020 Competitive Exams Part 2

1. Two vessels P and Q contain 62.5% and 87.5% of alcohol respectively. If 2 litres from vessel P is mixed with 4 litres from vessel Q, the ratio of alcohol and water in the resulting mixture is?

A. 16 : 5

B. 14 : 5

C. 16 : 7

D. 19 : 5

E. None of these

Answer: D

2. A vessel of capacity 90 litres is fully filled with pure milk. Nine litres of milk is removed from the vessel and replaced with water. Nine litres of the solution thus formed is removed and replaced with water. Find the quantity of pure milk in the final milk solution?

A. 72

B. 72.9

C. 73.8

D. 74.7

E. None of these

Answer: B

3. The ratio in which the price 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 is:

A. 1:3

B. 2:3

C. 3:4

D. 4:5

Answer: B

4. In what ratio must a grocer mix teas 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

Answer: A

5. In what ratio must water be mixed with milk to gain 16 2/3 % by selling the mixture at cost price?

A. 1:6

B. 2:3

C. 4:3

D. 6:1

Answer: A

6. Milk and water in two vessels A and B are in the ratio 4:3 and 2:3 respectively in what ratio the liquids in both the vessels should be mixed to obtain a new mixture in vessel C containing half milk and half water?

A. 1:1

B. 1:3

C. 1:2

D. 7:5

Answer: D

7. How much water must be added to a bucket which contains 40 liters of milk at the cost price of Rs.3.50 per litre so that the cost of milk reduces to Rs.2 per litre?

A. 25 liters

B. 28 litres

C. 30 liters

D. 35 liters

Answer: C

8. In what proportion must water be added to spirit to gain 20% by selling it at the cost price?

A. 2:5

B. 1:5

C. 3:5

D. 4:5

Answer: B

9. 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. 1 : 3

B. 2 : 3

C. 3 : 4

D. 4 : 5

Answer: B

10. 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

Answer: A

11. The cost of Type 1 rice is Rs. 15 per kg and Type 2 rice is Rs. 20 per kg. If both Type 1 and Type 2 are mixed in the ratio of 2 : 3, then the price per kg of the mixed variety of rice is:

A. Rs. 18

B. Rs. 18.50

C. Rs. 19

D. Rs. 19.50

Answer: A

12. 8 litres are drawn from a cask full of wine and is then filled with water. This operation is performed three more times. The ratio of the quantity of wine now left in cask to that of water is 16 : 65. How much wine did the cask hold originally?

A. 18 litres

B. 24 litres

C. 32 litres

D. 42 litres

Answer: B

13. Rajesh has a container which has a mixture of wine and water in it. Wine and water are in the ratio 4:1. Rajesh spills some of the mixture by accident. He then replaces the spilled amount with water of same quantity. But now the wine to water ratio became 3:2. How much water did Rajesh add?

A. $\frac{3}{5}$

B. $\frac{1}{2}$

C. $\frac{1}{4}$

D. $\frac{2}{7}$

Answer: C