Quiz Date: 6ᵗʰ July 2020

Q1. One type of mixture contains 25% of milk the another type of mixture contains 30% of milk. A container is filled with 6 parts of the first mixture and 4 parts of the second mixture. The percentage of milk in the mixture is .
(a) 27%
(b) 31%
(c) 29%
(d) 33%
(e) 30%

Q2. Two gallons of a mixture of spirit and water contains 12% of water. They are added to 3 gallons of another mixture, containing 7% of water, again half of a gallon of water is added to the whole mixture. Find percentage of water in the resulting mixture .
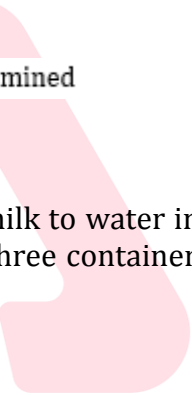(a) $17\frac{3}{11}\%$
(b) $16\frac{12}{11}\%$
(c) $14\frac{1}{11}\%$
(d) Cannot be determined
(e) None of these

Q3. The ratio of milk to water in three containers of equal capacity is 3 : 2, 7 : 3 and 11 : 4 respectively the three containers are mixed together. What is the ratio of water to milk in final mixture?
(a) 38 : 17
(b) 21 : 11
(c) 61 : 29
(d) 29 : 61
(e) 11 : 21

Q4. One test tube contains some acid and another test tube contains an equal quantity of water. To prepare a solution, 20 l of the acid is poured into the second test tube and then two-third of the so formed solution is taken out from the second tube and poured into the first. If the fluid in the first test tube is four times that in the second, what quantity of the water was initially in the test tube?
(a) 80 l
(b) 60 l
(c) 40 l
(d) 100 l
(e) 120 l

Q5. A bottle is full of Dettol. One-third of it is taken out and then an equal amount of water is poured into the bottle to fill it. The operation is done four times. Find the final ratio of Dettol and water in the bottle.
(a) 13 : 55
(b) 10 : 37
(c) 16 : 65
(d) 5 : 24
(e) 65 : 16

Q6. In an examination on which full marks were 500. A got 10% less than B. B got 25% more than C. C got 20% less than D. If A got 360 marks, what percentage of full marks was obtained by D?
(a) 90%
(b) 80%
(c) 50%
(d) 60%
(e) 85%

TEST SERIES
Bilingual
Video Solutions

RBI ASSISTANT
MAINS

25 Total Tests | eBooks

Q7. 8% of the voters in an election did not cast their votes. In this election, there were only two candidates. The winner by obtaining 48% of the total votes defeated his contestant by 2300 votes. The total number of voters in the election was:
(a) 61,000
(b) 63,500
(c) 57,500
(d) 67,500
(e) 65,000

Q8. The petrol prices shot up by 7% as a result of the hike in the price of crudes. The price of petrol before the hike was Rs 28 per litre. Shubham travels 2400 kilometres every month and his car gives a mileage of 18 kilometres to a litre. Find the increase in the expenditure that Shubham has to incur due to the increase in the price of petrol (to the nearest rupee)?
(a) Rs 270
(b) Rs 262
(c) Rs 276
(d) Rs 272
(e) Rs.267

Q9. A boy was asked of his age by his friend. The boy said, 'The number you get when you subtract 25 times my age from twice the square of my age will be thrice your age.' If the friend's age is 14, then the age of the boy is:
(a) 28 years
(b) 21 years
(c) 14 years
(d) 25 years
(e) None of these

Q10. The average weight of 5 men is decreased by 3 kg when one of them weighing 150 kg is replaced by another person. This new person is again replaced by another person whose weight is 30 kg lower than the person he replaced. What is the overall change in the average due to this dual change?
(a) 6 kg
(b) 9 kg
(c) 12 kg
(d) 15 kg
(e)None of these

Directions (11-15): **The following pie-chart shows the percentage distribution of medals won by six countries in 21st CWG 2018 which is held in Australia.**
Study the pie-chart carefully to answer the following questions.
Note: Some data are in percentage value and some are in total absolute value. Total medals include gold, silver and bronze and each country has won all the three medals.
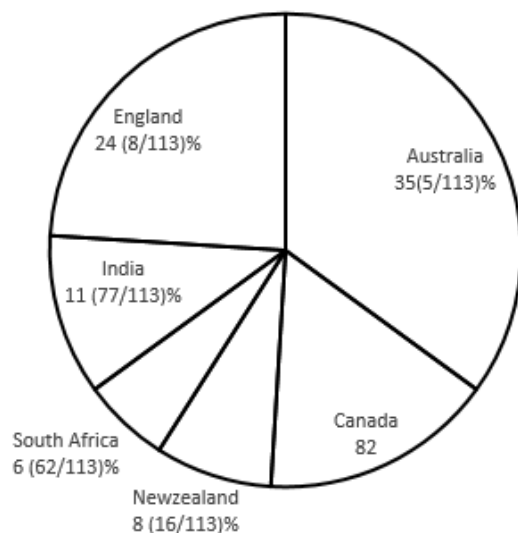
Q11. If ratio of gold medals, silver medals and bronze medals won by India is 13 : 10 : 10 then find the number of gold medals won by India.
(a) 30
(b) 32
(c) 26

(d) 40
(e) 45

Q12. If number of gold medals won by Canada is 65½% less than number of silver medals won by the same country then what is the total number of silver medals won by Canada?
(a) 45
(b) 27
(c) 40
(d) can't be determined
(e) 62

Q13. Find the average number of medals won by Australia, England and India together.
(a) 400/3
(b) 200/3
(c) 500/3
(d) 400/9
(e) 100/3

Q14. If number of gold medals who by South Africa is 1300/11% of number of silver medals won by it and number of bronze medals won by South Africa is equal to the number of gold medals won by it then what is the number of gold medals won by South Africa?
(a) 15
(b) 11
(c) 13
(d) 17
(e) 19

Q15. If number of gold medals won by Australia is $77\frac{7}{9}\%$ more than the number of gold medals won by England and number of gold medals won by England is $33\frac{3}{34}\%$ of total medals won by it then what is the total number of gold medals won by Australia?
(a) 70
(b) 95
(c) 80
(d) 100
(e) 90

Solutions

S1. Ans.(a)
Sol.
Required percentage of milk

$$= \frac{\frac{25}{100} \times 6 + \frac{30}{100} \times 4}{10} \times 100$$
$$= 27\%$$

S2. Ans.(a)
Sol.
Required percentage of water
$$= \frac{\frac{12}{100} \times 2 + \frac{7}{100} \times 3 + 0.5}{5.5} \times 100$$
$$= \frac{95}{5.5}$$
$$= \frac{190}{11}$$
$$= 17\frac{3}{11}\%$$

S3. Ans.(d)
Sol.
Let capacity of each container = V
∴ Total quantity of milk after mixing
$$= \left(\frac{3}{5} + \frac{7}{10} + \frac{11}{15}\right) V$$
$$= \frac{61}{30} V$$
And that of water $= \left(\frac{2}{5} + \frac{3}{10} + \frac{4}{15}\right) V$
$$= \frac{29}{30} V$$
∴ Required ratio $= \frac{29}{61}$

S4. Ans.(d)
Sol.

Since acid in first tube = water in second tube
= x l(let)
ATQ,

$$(x - 20) + \frac{2}{3}(x + 20) = 4\left[(x + 20) - \frac{2}{3}(x + 20)\right]$$
$$\Rightarrow 3x - 60 + 2x + 40 = 4 \times (x + 20)$$
$$\Rightarrow x = 100 \, l$$
∴ Initial quantity of water = 100 l

S5. Ans.(c)
Sol.
Let initially Dettol was 3x
∴ Final quantity of Dettol

$$= 3x\left(1 - \frac{x}{3x}\right)^4$$
$$= 3x \times \frac{16}{81}$$
$$= \frac{16x}{27}$$

∴ Required ratio $= \dfrac{\frac{16x}{27}}{3x - \frac{16x}{27}}$

$$= \frac{16}{65}$$

S6. Ans.(b)
Sol.
A's marks = 360
B's marks = $360 \times \dfrac{100}{90}$
= 400
C's marks = $400 \times \dfrac{100}{125}$
= 320
D's mark = $320 \times \dfrac{100}{80}$
= 400
∴ Required percentage $= \dfrac{400}{500} \times 100$
= 80%

S7. Ans.(c)
Sol.

Let total no. of votes was 100x

ATQ,

$48x - 44x = 2300$

$X = 575$

∴ Total no. of voters = 57500

S8. Ans.(b)

Sol.

Original price of petrol (per litre) = Rs 28

New price of petrol (per litre) = $28 \times \frac{107}{100}$

= 29.96 rupee

Total petrol consumed by Subham's car

$= \frac{2400}{18} = \frac{400}{3}$ li

∴ Increment in expenditure

$= \frac{400}{3} \times (29.96 - 28)$

$\simeq$ Rs 262

S9. Ans.(c)

Sol.

Let age of boy is x years

∴ $2x^2 - 25x = 14 \times 3$

$\Rightarrow 2x^2 - 25x - 42 = 0$

∴ $x = \frac{25 \pm \sqrt{625 + 336}}{4} = \frac{25 \pm 31}{4}$

Or, $x = \frac{56}{4} = 14$ years

(neglecting –ve value).

S10. Ans.(b)

Sol. The weight of the second man is 135 and that of the third is 105.

Hence, net result is a drop of 45 for 5 people. Hence, 9 kg is the drop.

S11. Ans.(c)
Sol.

$\because (35 + 8 + 6 + 11 + 24) + \left(\frac{5}{113} + \frac{16}{113} + \frac{62}{113} + \frac{77}{113} + \frac{8}{113}\right)$

$= \frac{9660}{113}\%$

$\therefore \left(100 - \frac{9660}{113}\right)\% \rightarrow 82$

$\Rightarrow 100\% \rightarrow 565$ = total medals won by all the six countries.

No. of gold medals won by India

$= \frac{13}{33} \times \frac{1320}{11300} \times 565$

$= 26$

S12. Ans.(d)
Sol.

$\because (35 + 8 + 6 + 11 + 24) + \left(\frac{5}{113} + \frac{16}{113} + \frac{62}{113} + \frac{77}{113} + \frac{8}{113}\right)$

$= \frac{9660}{113}\%$

$\therefore \left(100 - \frac{9660}{113}\right)\% \rightarrow 82$

$\Rightarrow 100\% \rightarrow 565$ = total medals won by all the six countries.

Answer cannot be determined because there is no information about bronze medals.

S13. Ans.(a)
Sol.

$\because (35 + 8 + 6 + 11 + 24) + \left(\frac{5}{113} + \frac{16}{113} + \frac{62}{113} + \frac{77}{113} + \frac{8}{113}\right)$

$= \frac{9660}{113}\%$

$\therefore \left(100 - \frac{9660}{113}\right)\% \rightarrow 82$

$\Rightarrow 100\% \rightarrow 565$ = total medals won by all the six countries.

Average no. of medals who by Australia,

England & India together

$= \frac{1}{3} \times \left(\frac{3960}{11300} + \frac{2720}{11300} + \frac{1320}{11300}\right) \times 565$

$= \frac{400}{3}$

S14. Ans.(c)
Sol.

∵ $(35 + 8 + 6 + 11 + 24) + \left(\frac{5}{113} + \frac{16}{113} + \frac{62}{113} + \frac{77}{113} + \frac{8}{113}\right)$

$= \frac{9660}{113}\%$

∴ $\left(100 - \frac{9660}{113}\right)\% \rightarrow 82$

⇒ 100% → 565 = total medals won by all the six countries.

Let no. of silver medals won by South Africa = x

∴ $x + 2 \times \frac{1300}{1100}x = \frac{740}{11300} \times 565$

⇒ $\frac{37x}{11} = 37$

⇒ x = 11

∴ No. of gold medals won by South Africa

$= \frac{1300}{1100} \times 11$

= 13

S15. Ans.(c)
Sol.

∵ $(35 + 8 + 6 + 11 + 24) + \left(\frac{5}{113} + \frac{16}{113} + \frac{62}{113} + \frac{77}{113} + \frac{8}{113}\right)$

$= \frac{9660}{113}\%$

∴ $\left(100 - \frac{9660}{113}\right)\% \rightarrow 82$

⇒ 100% → 565 = total medals won by all the six countries.

No. of gold medals won by England

$= \frac{1125}{3400} \times \frac{2720}{11300} \times 565$

= 45

∴ No. of gold medals won by Australia

$= \frac{1600}{900} \times 45$

= 80

For any Banking/Insurance exam Assistance, Give a Missed call @ 01141183264