Percentage Questions for CDS, CLAT and SSC Exams.

Percentage Quiz 6

Directions: Kindly study the following Questions carefully and choose the right answer:

1. 38 L of milk was poured into a tub and the tub was found to be 5% empty. To completely fill the tub, what amount of additional milk must be poured?

A. 1 L   B. 2 L   C. 3 L   D. 4 L

2. Water contains $14\frac{2}{7}$ % of hydrogen and the rest is oxygen. In 350 g of water, oxygen will be

A. 300g   B. 250g   C. 200g   D. None of these

3. To an examination, a candidate needs 40% marks. All questions carry equal marks. A candidate just passed by getting 10 answers correct by attempting 15 of the total questions. How many questions are there in the examination?

A. 25   B. 30   C. 40   D. 45

4. The income of 'A' is 20% higher than that of 'B'. The income of 'B' is 25% less than of 'C'. What percent less is A's income from C's income?

A. 7%   B. 8%   C. 10%   D. 12.5%

5. A water pipe is cut into two pieces. The longer piece is 70% of the length of the pipe. By how much percentage is the longer piece longer than the shorter piece?

A. 140%   B. $\frac{400}{3}$%   C. 40%   D. None of these

6. In a certain school, 20% of students are below 8 years of age. The number of students above 8 years of age is 2/3rd of the number of students of 8 years of age which is 48. What is the total number of students in the school?

A. 45   B. 80   C. 85   D. 100

7. In a test, minimum passing percentage for girls and boys is 35% and 40% respectively. A boy scored 483 marks and failed by 117 marks. What are the minimum passing marks for girls?

A. 425   B. 520   C. 500   D. None of these

8. Puneet scored 175 marks in a test and failed by 35 marks. If the passing percentage of the test is 35 per cent, what are the maximum marks of the test?

A. 650   B. 700   C. 750   D. 600

9. In two successive years, 100 and 90 students of a school appeared at the final examination of which 60% and 80% passed respectively. The average rate of students passed (in percent) is

A. 62%   B. $68\frac{7}{19}$%   C. 68%   D. $69\frac{9}{19}$%

10. In what ratio must 20% of Milk be mixed with 60% of Milk of some other mixture to get a new mixture of 45% strength of Milk?

A. 1 : 2   B. 3 : 5   C. 2 : 3   D. 3 : 2

Correct Answers:

1	2	3	4	5	6	7	8	9	10
B	A	A	C	B	D	D	D	D	B

Explanations:

1. Amount of milk in tub = 100 − 5 = 95%

So, 38 L ≡ 95%

    x ≡ 5%

By the cross multiplication, we get

$x = \dfrac{5 \times 38}{95} = 2L$

Hence, option (B) is correct.

2.

Hydrogen in 350 g water = $14\dfrac{2}{7}\% \times 350 = \dfrac{100 \times 350}{7 \times 100} = 50g$

Now, the oxygen in 350 g water = 350g − 50g = 300 g.

Hence, option (A) is correct.

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3. Let the total number of questions be x. then,

10 ≡ 40%

  x ≡ 100%

By the cross multiplication, we get

$x = \dfrac{100 \times 10}{40} = 25.$

Hence, option (A) is correct.

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4. % change in the 1st case = 20% increase = 20% (+)

% change in 2nd case = 25% decrease = 25% (−)

Applying the net% effect formula,

Net% effect = $x + y + \dfrac{xy}{100}\%$

$= 20 - 25 - \dfrac{20 \times 25}{100} = -5 - 5 = -10\%$

Therefore, the resultant % will be 10% less than the base income.

Hence, option (C) is correct.

5. Let's take a pipe length is 100 m. then,

Longer pipe will be 70 and shorter will be 30

Now, increase in % = $\dfrac{70 - 30}{30} \times 100\% = \dfrac{40}{30} \times 100\% = \dfrac{400}{3}\%$

Hence, option (B) is correct.

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6. Let the total students be x

20% students are below 8 years.

i.e. students of above 8 years of age = 80% of total students.

Students above 8 years of age = $\dfrac{2}{3} \times 48 = 2 \times 16 = 32$.

80% of x = 48 + 32 = 80. $\Rightarrow$ x = 100.

Hence, option (D) is correct.

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7. Let the maximum marks be x.

According to the question,

40% of x = 483 + 117

$\Rightarrow \dfrac{40}{100} \times x = 600$

$\Rightarrow x = \dfrac{600 \times 100}{40} = 1500$

Now, passing marks for girls

= 35% of 1500 = $\dfrac{35}{100} \times 1500 = 525$

Hence, option (D) is correct.

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8. Let the maximum marks be x.

According to the question,

35% of x = 175 + 35

$\Rightarrow \dfrac{35}{100} \times x = 210$

$\Rightarrow x = \dfrac{210 \times 100}{35} = 600$ marks

Hence, option (D) is correct.

9.

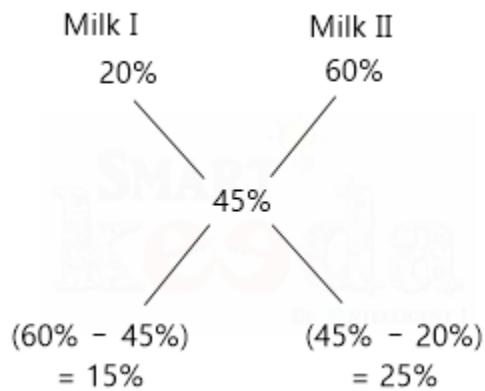Total examinees = 100 + 90 = 190 Total successful examinees ⇒ 60% of 100 + 80% of 90 ⇒ 60 + 72 = 132.

∴ Reqd. % = $\dfrac{132}{190} \times 100 = \dfrac{1320}{19}$
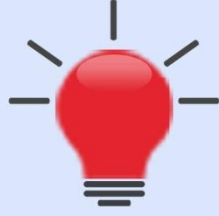
= $69\dfrac{9}{19}$ %

Hence, option D is correct.

10.

$$\begin{array}{ccc}
\text{Milk I} & & \text{Milk II} \\
20\% & & 60\% \\
& 45\% & \\
(60\% - 45\%) & & (45\% - 20\%) \\
= 15\% & & = 25\%
\end{array}$$

Therefore, the required ratio = 15 : 25 = 3 : 5.

Hence, option B is correct.