Percentage Questions for Bank Clerk Pre Exams.

Percentage Quiz 11

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

1. Manish spends 17% of his monthly income in travelling. He spends 25% of his monthly income on household expenses and spends 36% of his monthly income on families medical expenses. He has remaining amount of Rs. 10032 as cash with him. What is Manish's annual income?

A. Rs. 550300 B. Rs. 536500 C. Rs. 547200 D. Can't be determined
E. None of these

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2. If the numerator of fraction is increased by 200% and the denominator is increased by 350%. The resultant fraction is 5/12. What was the original fraction?

A. $\frac{5}{9}$ B. $\frac{5}{8}$ C. $\frac{7}{12}$ D. $\frac{11}{12}$ E. None of these

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3. In a mixture of milk and water the proportion of water by weight was 75%. If in the 60 gm mixture, 15 gm water was added, what would be the percentage of water? (Weight in gm)

A. 75% B. 88% C. 90% D. 100% E. None of these

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4. Rahul spends 50% of his monthly income on household items, 20% of his monthly income on buying clothes, 5% of his monthly income on medicines and the remaining amount of Rs. 11250 he saves. What is Rahul's monthly income ?

A. Rs. 38200 B. Rs. 34000 C. Rs. 41600 D. Rs. 45000 E. None of these

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5. In a college 12% of total students are interested in sports. 3/4th of total students are interested in dance. 10% of total students are interested in singing and remaining 15 students are not interested in any activity. How many students are there in the college?

A. 450 B. 500 C. 600 D. Can't be determined
E. None of these

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6. Bhargav goes to a shop to buy a radio costing Rs. 2568, the rate of sales tax being 7%. He tells the shopkeeper to reduce the price of the radio to such an extent that he has to pay Rs. 2568, inclusive of sales tax. Find the reduction that Bhargav got.

A. Rs. 168 B. Rs. 179.76 C. Rs. 170 D. Rs. 178 E. None of these

7. In a particular school in a rural area, 80% of the students below 13 are enrolled. Out of them, 85% attend the school regularly. If 340 students are regular, how many students are there in the area who are below 13?

A. 450 B. 400 C. 600 D. 500 E. None of these

8. In an examination, 30% of the total students failed in Hindi, 45% failed in English and 20% failed in both subjects. Find the percentage of those who passed in both subjects.

A. 35.7% B. 35% C. 40% D. 45% E. 44%

9. Two numbers are less than a third number by 30% and 37% respectively. The percent by which the second number is less than the first is:

A. 10% B. 7% C. 4% D. 3% E. None of these

10. Price of a commodity has increased by 60%. By what percent must a consumer reduce the consumption of the commodity so as not to increase the expenditure?

A. 37% B. 37.5% C. 40.5% D. 60% E. None of these

Correct Answers:

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

Explanations:

1. Let Manish's monthly income be Rs. 100.
Total expenditure = (17 + 25 + 36)% = 78%
∴ Savings = (100 – 78)% of 100 = Rs. 22
Now, 22 : 100 : : 10032 : x

$\Rightarrow x = \frac{100 \times 10032}{22}$ = Rs. 45600

Manish's monthly income = Rs. 45600
∴ Manish's annual income = Rs. 12 × 45600 = Rs. 547200
Hence, option (C) is correct.

2.

Let the original fraction be $\frac{x}{y}$

Then, $\frac{300\% \text{ of } x}{450\% \text{ of } y} = \frac{5}{12}$

$\Rightarrow \frac{2x}{3y} = \frac{5}{12}$

$\Rightarrow \frac{x}{y} = \left(\frac{5}{12} \times \frac{3}{2}\right) = \frac{5}{8}$

Hence, option (B) is correct.

3.

Weight of water in the mixture of 60 gm = $60 \times \frac{75}{100}$ = 45 gm

Weight of water in the mixture of 45 gm = 45 + 15 = 60 gm

∴ Percentage of water = $\frac{60 \times 100}{75}$ = 80%

Hence, option (E) is correct.

4. Let the monthly income of Rahul be Rs. x.
Total expenditure = (50 + 20 + 5)% of x = 75% of x
Now, savings = (100 – 75)% of x = 11250
⇒ 25% of x = 11250
⇒ $\frac{x}{4} = 11250$

⇒ x = 4 × 11250 = Rs. 45000

Hence, option (D) is correct.

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5. Let the total students be 100.
Interested in sports = 12% of 100 = 12
Interested in dance = $\frac{3}{4}$th of 100 = 75

Interested in singing = 10% of 100 = 10
∴ Remaining students = 100 – (12 + 75 + 10) = 3
Now, 3 : 100 : : 15 : x
⇒ $x = \frac{100 \times 15}{3} = 500$

There are 500 students in the college.

Hence, option (B) is correct.

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6. Let the price of the radio without tax = x
Therefore, 107% of x = 2568
⇒ $x = \frac{100 \times 2568}{107} = 2400/-$

Reduction amount = 2568 – 2400 = Rs. 168.

Hence, option A is correct.

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7. Let total students below 13 are 100.
100 (Students below 13)
↓ (80% of them)
80 (enrolled)
↓ 85% of 80
68 (regular)
∴ Putting the values in proportion, we get 68 : 100 : : 340 : x
∴ $x = \frac{340 \times 100}{68} = 500$ students
Hence, option D is correct.

8. Let the number of students be 100.

Number of students who failed in Hindi is 30%

∴ n(H) = 30

Number of students who failed in English is 45%

∴ n(E) = 45

Number of students who failed in both the subjects is 20%

$n(H \cap E) = 20$

Applying the set theory rule,

$n(H \cup E) = n(H) + n(E) - n(H \cap E)$

$= 30 + 45 - 20 = 55$

∴ Percentage of students who failed in Hindi or English or both the subjects = 55%

∴ Number of students who passed in both the subjects = 100 – 55 = 45%

Hence, option D is correct.

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9. Let the third number be 100.

∴ First number = 70 ∴ Second number = 63

∴ Reqd. % $= \frac{7}{70} \times 100 = 10\%$

Hence, option A is correct.

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10. Given,

Increase in price = 60% $= \frac{3}{5}$

Applying concept of constancy to get the reduction in consumption, we get

$= \frac{3}{5+3} = \frac{3}{8}$

Reduction in % $= \frac{3}{8} \times 100 = 37.5\%$

Hence, option B is correct.