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Percentage Questions for SBI PO PRE, IBPS PO Pre, SBI Clerk Mains & IBPS Clerk Mains Exams.

Percentage Quiz 14

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

1. The price of rice has increased by 20%. Lalu has decided to spend only 8% more than what he initially did on buying rice. What is the percentage decrease in Lalu's rice consumption?

A. 10%   B. 13%   C. 18%   D. 14%   E. None of these

2. The production of a company has ups and downs every year. The production increases for two consecutive years consistently by 15% and in the third year it decreases by 20%. Again in the next two years it increases by 25% each year and decreases by 10% in the third year. If we start counting from the year 2014 approximately what will be the effect on the production of the Company in 2018?

A. 22   B. 32   C. 30   D. 20   E. None of these

3. In a village, two contestants (A & B) are contesting in an election. 70% of the registered voters cast their votes in the election and A wins the election by 400 votes. If A had received 12.5% less votes, A's votes would have been equal to B's votes. How many registered voters are there in the village?

A. 4500   B. 4200   C. 4000   D. 4250   E. None of these

4. A person had a certain amount. He invested 5/6th of it in shares, 5% of it in mutual funds, 10% of it in debentures and kept the remaining Rs. 850 with him. If got interest at 10% for a year on debentures, what amount did he get as interest?

A. Rs. 5100   B. Rs. 7650   C. Rs. 510   D. Rs. 765   E. None of these

5. A car costing Rs. 5,00,000 of a person depreciated at the rate of 15% in the first year, 13% in the second year and so on. House of that person, costing Rs. 7,00,000 appreciated at the rate of 10% in the first year, 12% in the second year and so on. What was the change in total value of car, house at the end of 3 years?

A. Decrease of Rs. 1,34,543   B. Increase of Rs. 1,34,543   C. Increase of Rs. 1,12,214
D. Decrease of Rs. 1,12,214   E. Increase of Rs. 1,12,241

6. The ratio of Ashok's to Bhanu's earnings is 4 : 9. If Bhanu's earnings is increased by 45%, then his total earnings becomes Rs. 33930.What is the earning of Ashok?

A. Rs. 5000   B. Rs. 5200   C. Rs. 5500   D. Rs. 8200   E. None of these

7. The marks scored by Prasoon Joshi in three subjects are in the ratio 4 : 5 : 6. Prasoon Joshi scored an overall aggregate of 60% in the exam. If the maximOneum marks in each subject are the same, in how many subjects did Prasoon Joshi score more than 70% marks?

A. One   B. Two   C. Three   D. Zero   E. Can't be determined

8. On reducing the entry fee by 35% in a park, the number of people coming to the park increased by 40%, then the percent increase or decrease in the income from the entry fee is –

A. 7% decrease   B. 9% increase   C. 9% decrease   D. 5% decrease   E. None of these

9. In a coaching there are 3 batches namely lolos,momos and jojos. Out of the total students in the coaching there are 25%, 35% and 40% students in these batches repectively. If 2%, 4% and 5% students of respective batches passes then what is the percentage of failed students?

A. 96.5%   B. 86.1%   C. 39.6%   D. 96.1%   E. None of these

10. In a nuclear reaction, two particles A and B are formed at the different rate every microsecond. When time was 0 microsecond, the ratio of particle A to particle B was 4 : 5 but when t = 1 microsecond, the ratio of particle A to particle B becomes 5 : 7. By what percent above the particle A, particle B is formed?

A. 28%   B. 40%   C. 25%   D. 12%   E. None of these

Correct Answers:

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

Explanations:

1. Let the initial price of Lalu be Rs. 100 per unit and Lalu's consumption be 10 units.

∴ Initial amount spent = 100 × 10 = Rs. 1,000

New price of rice = 120% of 100 = Rs. 120 and new total amount spent = 108% of 1000 = Rs. 1,080

∴ New consumption = $\dfrac{1080}{120}$ = 9 units

∴ Decrease in consumption = 1 unit

∴ % decrease = $\dfrac{1}{10}$ × 100 = 10%

Hence, option A is correct.

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2. Suppose the production of the company in the year 2014 be x.

Then production of the company in year 2018 = $x \times \dfrac{115}{100} \times \dfrac{115}{100} \times \dfrac{80}{100} \times \dfrac{125}{100}$ = 1.32x

∴ Increase % in the production in year 2018 = $\dfrac{(1.32x - x) \times 100}{x}$ = 32%

Hence, option B is correct.

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3. Let the votes received by A and x & B be y.
Now as per the given statements,

x − y = 400   ....(1)

Also $\left(\dfrac{87.5}{100}\right)x = y + \left(\dfrac{12.5}{100}\right)x$ ...(2)

(The votes lost by A would go into B's account)
solving (2), we get

y = $\left(\dfrac{3}{4}\right)x$ ....(3)

Using (3) to solve (1) we get

x − $\left(\dfrac{3}{4}\right)x$ = 400

x = 1600
And, y = 1200
Now, we know that A & B collectively won 70% of total votes.
If the total number of registered voters in the village be Z,

Then, $\left(\dfrac{70}{100}\right)Z$ = 1600 + 1200 = 2800

Z = 4000
Hence, option C is correct.

4. 5/6 corresponds to 83.33%.

Hence, the amount that he kept with him corresponds to 100 − (83.33 + 5 + 10) = 1.67% of the total amount with him. This corresponds to Rs. 850

Also, because he placed 10% in debentures and he got 10% interest, amount obtained in interest = 10% of 10% of amount with him i.e. 1% of the amount with him.

$$\therefore \text{ Interest earned} = \frac{(850 \times 1)}{1.67} = 850 \times \frac{3}{5} = 510$$

Hence, option C is correct.

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5. Original cost of a car and house = 500000 + 700000 = Rs. 12,00,000

New cost of car = 500000 × 0.85 × 0.87 × 0.89 = Rs. 329077.5

New cost of house = 700000 × 1.1 × 1.12 × 1.14 = Rs. 983136

∴ Total new cost = Rs. 13,12,213.5

∴ Change = increase of Rs. 1,12,213.5 ≈ Rs. 1,12,214

Hence, option C is correct.

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6. Let the salary of Ashok to Bhanu be 4x and 9x respectively.

$$\text{Then, } 9x \times \frac{145}{100} = 33930$$

$$\Rightarrow 9x \times \frac{33930 \times 100}{9 \times 145} = 2600$$

∴ Ashok's salary = 4x = 4 × 2600 = 10400

Hence, option E is correct.

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7. Let the maximum marks in each subject be 100.
∴ Prasoon joshi's total score = 60% of (100 + 100 + 100) = 0.6(300) = 180
Also, 70% marks in a subject correspond to 0.7(100) = 70
Let Prashoon joshi have scored 4x, 5x and 6x in the three subjects.
∴ 4x + 5x + 6x = 180
∴ 15x = 180 i.e. x = 12
Hence, his marks in the three subjects are 48, 60 and 72 .
Hence, he has scored more than 70 in exactly one subject.
Hence, option A is correct.

8. Let the original entry fee be 'a' and number of people initially coming to the park be 'b'.

Total income = a × b = ab

Now, reducing the entry fee by 35% in a park, the number of people coming to the park increased by 40%

∴ New entry fee = a - 35% of a = 0.65a

Number of people = b + 40% of b = 1.4 b

Total income = 0.65a × 1.4b = 0.91 ab

Decrease in income = ab – 0.91ab = 0.09ab

% decrease in income = $\dfrac{0.09\ ab}{ab}$ x 100%

⇒ % decrease in income = 9%

Hence, option (C) is correct.

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9. Let total number of students in the coaching be x

Then number of student in lolos batches = 25% of x = 0.25x

number of student in momos batches = 35% of x = 0.35x

number of student in jojos batches = 40% of x = 0.40x

number of passed students in lolos batches = 2% of 0.25x = 0.005x

number of passed students in momos batches = 4% of 0.35x = 0.014x

number of passed students in jojos batches = 5% of 0.40x = 0.02x

so total number of passed students = 0.005 + 0.014x + 0.02x = 0.039x

therefore number of failed students = Total number of students – total number of passed students

= x – 0.039x = 0.961x

Hence the percentage of failed students

= $\dfrac{0.961x}{X}$ = 96.1%

Hence, option D is correct.

10. Let the particle A is formed at the rate of x% per microsecond and the particle B is formed at the rate of y% per microsecond

Let when T = 0, then number of A particle = 4 then the number of B particle = 5

When T = 1, $\dfrac{x\% \text{ of } 4}{y\% \text{ of } 5} = \dfrac{5}{7}$
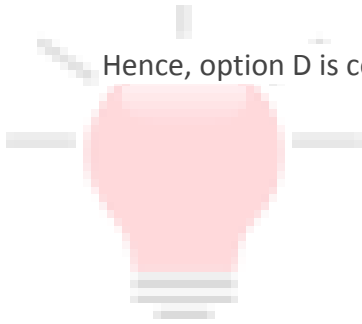
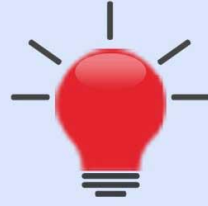$\dfrac{4x}{5y} = \dfrac{5}{7}$

28x = 25y

x : y = 25 : 28

Therefore, let the particle A is formed at the rate of 25x% per microsecond then the particle B is formed at the rate of 28x% per microsecond

The reqd. % = $\dfrac{(28x - 25x) \times 100}{25x} = \dfrac{300}{25} = 12\%$

Hence, option D is correct.