



SmartKeeda

The Question Bank

Presents

TestZone

India's least priced Test Series platform

JOIN

12 Month Plan

2017-18 All Test Series

@ Just

₹ 399/-

300+ Full Length Tests

- Brilliant Test Analysis
- Excellent Content
- Unmatched Explanations

JOIN NOW

Percentage Questions for CDS, CLAT and SSC Exams.

Percentage Quiz 3

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

1. In an election between two candidates, 75% of the voters cast their votes, out which 2% of the votes were declared invalid. A candidate got 9261 votes which were 75% of the valid votes. Find the total number of votes enrolled in that election.

- A. 12800 B. 11500 C. 16800 D. 12740

2. Evaluate:

(i) 28% of 450 + 45% of 280

(ii) $16\frac{2}{3}\%$ of 600 gm – $33\frac{1}{3}\%$ of 180 gm

- A. 152 and 54 gm B. 234 and 87 gm C. 328 and 40 gm D. 252 and 40 gm

3. If a number is increased by 25% and the resulting number is decreased by 25%. Then the percentage increase or decrease finally is

- A. No change B. Decreased by $6\frac{1}{4}\%$ C. Increased by $6\frac{1}{4}\%$ D. Increased by 6%

4. The value of a machine depreciates every year by 10%. If its present value is Rs. 50,000 then the value of the machine after 2 years is _____.

- A. Rs. 40,500 B. Rs. 40,050 C. Rs. 45,000 D. Rs. 40,005

5. The price of onions has been increased by 50%. In order to keep the expenditure on onions the same the percentage of reduction in consumption has to be

- A. 50% B. $33\frac{1}{3}\%$ C. 33% D. 30%

6. A man spends 75% of his income. His income increases by 20% and his expenditure also increases by 10%. The percentage of increase in his savings is

- A. 10% B. 35% C. 50% D. 25%

7. A person's salary has increased from Rs. 7200 to Rs. 8100. What is the percentage increase in his salary?

A. 25%

B. 18%

C. $12\frac{1}{2}\%$

D. $16\frac{2}{3}\%$

8. A person could save 10% of his income. But 2 years later, when his income increased by 20%, he could save the same amount only as before. By how much percentage has his expenditure increased?

A. $22\frac{2}{9}\%$

B. $23\frac{1}{3}\%$

C. $24\frac{2}{9}\%$

D. $25\frac{2}{9}\%$

9. In a English examination, the average for the entire class was 80 marks. If 10% of the students scored 95 marks and 20% scored 90 marks. What were the average marks of the remaining students of the class?

A. 55

B. 65

C. 75

D. 85

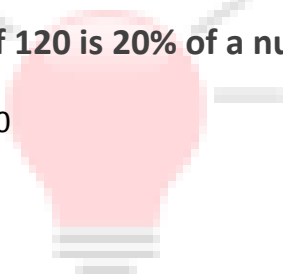
10. If 120 is 20% of a number, then 120% of that number will be

A. 360

B. 720

C. 20

D. 120



SmartKeeda
The Question Bank

Correct Answers:

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

Explanations:

1. Let the total number of votes enrolled be x . then,

Number of votes cast = 75% of x

Now, valid votes = 98% of (75% of x).

So, number of votes the winning candidate got = 75% of [98% of (75% of x)] = 9261.

$$\Rightarrow \left(\frac{75}{100} \times \frac{98}{100} \times \frac{75}{100} \times x \right) = 9261.$$

$$\Rightarrow x = \left(\frac{9261 \times 100 \times 100 \times 100}{75 \times 98 \times 75} \right) = 16800.$$

Hence, option (C) is correct.

2. (i) 28% of 450 + 45% of 280

$$\Rightarrow \left(\frac{28}{100} \times 450 + \frac{45}{100} \times 280 \right) \Rightarrow (126 + 126) = 252.$$

(ii) $16\frac{2}{3}\%$ of 600 gm – $33\frac{1}{3}\%$ of 180 gm

$$\Rightarrow \left[\left(\frac{50}{3} \times \frac{1}{100} \times 600 \right) - \left(\frac{100}{3} \times \frac{1}{100} \times 180 \right) \right] \text{gm}$$

$$\Rightarrow (100 - 60) \text{ gm} = 40 \text{ gm.}$$

Hence, option (D) is correct.

3. To solve this question, we can apply a short trick approach;

$$\text{Net\% effect} = \left(x + y + \frac{xy}{100} \right) \%$$

Increase or decrease, according to the +ve or –ve sign respectively.

Given;

Increased Number = $x = 25\%$

Decreased Number = $y = -25\%$

By the short trick approach, we get

$$= \left(25 - 25 - \frac{25 \times 25}{100} \right) = -\frac{25}{4} = -6\frac{1}{4}\%$$

Hence, option (B) is correct.

4.

$$P\left(1 - \frac{r}{100}\right)^n.$$

Given;

Present value = P = 50,000

Depreciates = r = 10, year = n = 2

By the short trick approach, we get

$$= 50000\left(1 - \frac{10}{100}\right)^2 = 50000\left(\frac{9}{10}\right)^2$$

$$= 50000 \times \frac{9 \times 9}{10 \times 10} = 500 \times 9 \times 9 = 40,500.$$

Hence, option (A) is correct.

5.

If the price of a commodity increases by r%, then the reduction in consumption so as not to

increase the expenditure, is $\left(\frac{r}{100+r} \times 100\right)\%$.

Given;

r is the increased price = 50

By the short trick approach, we get

$$= \left(\frac{50}{100+50} \times 100\right)\% = \frac{50}{150} \times 100\% = 33\frac{1}{3}\%$$

Hence, option (B) is correct.

6. Let's assume the income = 100

Therefore, his expenditure = 75% of 100 = 75

So, the savings will be = 100 - 75 = 25

New income after the increase by 20% = 120

And expenditure after the increase by 10% = 110% of 75 = 82.5

Therefore, new savings = New income - New expenditure = 120 - 82.5 = 37.5

Now, Increase in saving = 37.5 - 25 = 12.5

So, the percent increase in savings = $\frac{12.5}{25} \times 100 = 50\%$.

Hence, option (C) is correct.

7. Percentage increase in salary

$$= \frac{8100 - 7200}{7200} \times 100 = \frac{900}{7200} \times 100 = 12\frac{1}{2}\%$$

Hence, option (C) is correct.

8. Let earlier income be 100/-

$$\therefore \text{Savings} = 10\% \text{ of } 100 = 10/-$$

$$\therefore \text{Expenditure} = 90/-$$

$$\text{New Income} = 120/-$$

$$\text{Savings (same as before)} = 10/-$$

$$\therefore \text{Expenditure} = 120 - 10 = 110/-$$

$$\therefore \text{Increase in Expenditure} = 110 - 90 = 20$$

$$\text{Percentage increase} = \frac{20}{90} \times 100\% = 22\frac{2}{9}\%$$

Hence, option (A) is correct.

9. Suppose there are 100 students then total marks = $100 \times 80 = 8000$.

$$\text{Now, } 10\% \text{ of total students} = 10$$

$$\text{Total marks of these } 10\% \text{ students} = 95 \times 10 = 950$$

$$20\% \text{ of total students} = 20$$

$$\text{Total marks of these } 20\% \text{ students} = 20 \times 90 = 1800$$

$$\text{Now, remaining marks} = 8000 - (950 + 1800) = 5250$$

$$\text{And no. of students left} = 100 - (10 + 20) = 70$$

$$\text{Therefore, average marks of the remaining students} = \frac{5250}{70}$$

$$= 75$$

Hence, option (C) is correct.

10. Let the number be x, then

$$20\% \text{ of } x = 120 \Rightarrow x = \frac{120 \times 100}{20} = 600.$$

$$\therefore 120\% \text{ of } 600 = \frac{600 \times 120}{100} = 720.$$

Hence, option (B) is correct.



SmartKeeda
The Question Bank

प्रस्तुत करते हैं

TestZone

भारत की सबसे क़िफ़ायती टेस्ट सीरीज़

अभी
जुड़ें

12 Month Plan

2017-18 All Test Series

@ Just

₹ 399/-

300+ फुल लेन्थ टेस्ट

- श्रेष्ठ विश्लेषण
- उत्कृष्ट विषय सामग्री
- बेजोड़ व्याख्या

अभी जुड़ें