## Percentage test

Instruction: In the following questions, select the correct choice among the alternatives given below the question.

1. Two successive discounts of $8 \%$ and $12 \%$ are equal to a single discount of:
(a) $20 \%$
(b) $19.04 \%$
(c) $20.36 \%$
(d) $22 \%$
2. P's income has increased by $\mathbf{1 0 \%}$ over last year and will be $\mathbf{2 0 \%}$ higher next year. If his last year's income is Rs. 7,00 per month, what will it be next year?
(a) Rs. 9240
(b) Rs. 7500
(c) Rs. 9000
(d) Rs. 7850
3. A mixture contains sand and gravel in the ratio $1: 4$. The sand has $20 \%$ impurity. If total mixture weights 10 kg , how much impurity is there? (Consider that gravel has no impurity).
(a) 300 g
(b) 450 g
(c) 400 g
(d) 500 g
4. The population of a city is estimated to be $4,32,000$ after 2 years. If the population growth is $\mathbf{2 0 \%}$ per annum. What is the current population?
(a) $3,10,000$
(b) $2,85,000$
(c) $3,80,000$
(d) $3,00,000$
5. The price of a house increased by $25 \%$ after 10 years, reduces by $25 \%$ during the subsequent 10 years. If the present cost is Rs. 10 lakh, what will be its cost after 20 years?
(a) Rs. 9, 37, 500
(b) Rs. 9, 00, 000
(c) Rs. 8, 50, 000
(d) Rs. 7, 25, 000
6. The price of a product of a company increases by $10 \%$ and the turnover increase by $\mathbf{1 0 \%}$. What is the change in quantity sold?
(a) $10 \%$
(b) $8 \%$
(c) $20 \%$
(d) no change
7. An alloy contains 10 g copper, 20 g tin and 20 g silver. What is the percentage of copper in the alloy?
(a) $20 \%$
(b) $25 \%$
(c) $30 \%$
(d) $11 \%$
8. The price of a television includes the manufacturing cost, $10 \%$ sales tax and $10 \%$ profit. What is the manufacturing cost, if the price is Rs. 14, 400? (Sales tax and profit are to be calculated on manufacturing cast.)
(a) 10,000
(b) 12,000
(c) 12,500
(d) 9,000
9. A class has girls and boys in the ratio $4: 5$ among the girls, the ratio of mathematics to physics students in $3: 1$. If the ratio of mathematics and physics students in the entire class is 3:2. What percentage of class comprises girls studying mathematics?
(a) $33.3 \%$
(b) $30 \%$
(c) $25 \%$
(d) 18\%
10.Asha's income is Rs. 12, 000 per month. She pays $20 \%$ tax on monthly income above Rs. $\mathbf{2 , 0 0 0}$ and she spends $\mathbf{3 0 \%}$ of the remaining income. How much does she save annually?
(a) 70, 000
(b) 60,000
(c) 84,000
(d) 50,000
10. A man's income is increased by Rs. 1200 and at the same time, the rate of tax to be paid is reduced from $12 \%$ to $10 \%$. He now pays the same amount of tax as before calculate the man's increased income.
(a) Rs. 7000
(b) Rs. 6500
(c) Rs. 7200
(d) Rs. 8000
12.If $\mathbf{1 0 \%}$ of an electricity bill is deducted, Rs. 45 is still to be paid. How much was the bill?
(a) Rs. 50
(b) Rs. 40
(c) Rs. 35
(d) Rs. 54
13.The tax on a commodity is diminished by $15 \%$ and its consumption increased by $\mathbf{1 5 \%}$. Find the \% decrease in the revenue collected from it
(a) $2 \%$
(b) $2.5 \%$
(c) $2.25 \%$
(d) $2.75 \%$
11. A reduction of Rs. 2 per kg enables a man to purchase 4 kg more sugar for Rs. 16. Find the original price of sugar.
(a) Rs. 4 per kg
(b) Rs. 6 per kg
(c) Rs. 3 per kg
(d) Rs. 4.5 per kg
15.A reduction of $\mathbf{2 5 \%}$ in the price of rice, enables a person to buy 5 kg more for Rs. 120. Find the original price of rice per kg.
(a) Rs. 8
(b) Rs. 10
(c) Rs. 12
(d) Rs. 15
12. A litre of water evaporates from 6 litres of sea water containing $4 \%$ salt. Find the \% of salt in the remaining solution.
(a) $5 \frac{1}{2} \%$
(b) $3 \frac{1}{2} \%$
(c) $3 \%$
$4 \frac{4}{5} \%$
(d)
17.Two numbers are $20 \%$ and $25 \%$ less than the third number. How much $\%$ is the second number less than the first?
(a) $5 \frac{4}{5} \%$
(b) $\frac{20}{3} \%$
(c) $6 \frac{1}{2} \%$
(d) $6 \frac{1}{4} \%$
13. Due to increase of $\mathbf{3 0 \%}$ in the price of a color T.V, the sale is reduced by $40 \%$, and then what will be the \% change in income?
(a) $10 \%$ increase
(b) $10 \%$ decrease
(c) $35 \%$ decrease
(d) $22 \%$ decrease
19.If the length of rectangle is decreased by $60 \%$ and the width is increased by $30 \%$, then what will be the \% change in the area of the rectangle?
(a) $30 \%$ decrease
(b) $45 \%$ decrease
(c) $48 \%$ decrease
(d) $48 \%$ increase
20.Two numbers are respectively $\mathbf{2 0 \%}$ and $\mathbf{5 0 \%}$ more than the third number. What \% is the first number of the second?
(a) $40 \%$
(b) $50 \%$
(c) $80 \%$
(d) $70 \%$

Answers to the above questions

| Questions <br> no. | Answers |
| :--- | :--- |
| 1. | (b) |
| 2. | (a) |
| 3. | (c) |
| 4. | (d) |
| 5. | (a) |
| 6. | (d) |
| 7. | (a) |
| 8. | (b) |
| 9. | (a) |
| 10. | (c) |
| 11. | (c) |
| 12. | (a) |
| 13. | (c) |
| 14. | (a) |
| 15. | (a) |
| 16. | (d) |
| 17. | (d) |
| 18. | (d) |


| 19. | (c) |
| :--- | :--- |
| 20. | (c) |

