$SP = MP \times \left(\frac{100 - D\%}{100} \right)$

SEVEN STAR INTERNATIONAL SCHOOL BANI.

Class 8- Mathematics

Maximum Marks:30 **Time:**1 hour

Section A – Multiple Choice Questions (1× 6 = 6 marks)

1. The ratio 50 : 200 expressed as a percentage is –
   a) 10% b) 20% c) 25% d) 40%
2. If the cost price of a pen is Rs.20 and it is sold at Rs.25, the profit percent is –
   a) 10% b) 20% c) 25% d) 30%
3. The marked price of a shirt is Rs.800. A discount of 10% is given. The selling price is –
   a) Rs.700 b) Rs.720 c) Rs.740 d) Rs.760
4. Simple Interest on Rs.5000 at 8% per annum for 2 years is – $\frac{PRT}{100} = SI$
   a) Rs.400 b) Rs.500 c) Rs.600 d) Rs.800
5. The population of a town increases from 20,000 to 24,000 in one year. The percentage increase in population is –
   a) 10% b) 15% c) 20% d) 25% $\frac{4000}{20000} \times 100\%$
6. The formula of Discount % is...... $\frac{\text{Discount}}{MP} \times 100$

Increase % = $\frac{\text{Increase}}{\text{original value}} \times 100$

Section B – Short Answer Questions (2× 4 = 8 marks)

7. Find the compound interest on Rs.10,000 for 2 years at 5% per annum compounded annually. $A = 11025$, $CI = A - P = 1025$
8. A shopkeeper buys an article for Rs.600 and sells it at a gain of 12%. Find the selling price of the article. 672

   $SP = \left(\frac{100 + P\%}{100}\right) \times CP$
9. A bottle is marked at Rs.200. A discount of 5% is offered. Find the selling price and the amount of discount. $SP = 190$ — $D = MP - SP = 200 - 190 = 10$

   $MP\left(\frac{100 - D\%}{100}\right)$
10. An article was purchased for Rs.1239 including GST of 18 % . Find the price of the article before GST was added?

$CP = 1239$, $GST = 18\%$, Price before GST $= \frac{100}{100 + GST\%} \times CP = 1050$

Section C – Long Answer Questions (4× 3 = 12 marks)

11. The cost of an article was Rs.15,500. Rs.450 were spent on its repairs . If it is sold for a profit of 15 % , find the selling price of the article.

Total Cost $= 15500 + 450 = 15950$, $P\% = 15\%$

$SP = CP \times \left(\frac{100 + 15}{100}\right)$

$= 15950 \left(\frac{115}{100}\right) = 18342.50$

5

$\frac{PRT}{100} = SI$

11. A man borrowed Rs.12,000 from a bank at 10% per annum simple interest. After how many years will the interest amount be Rs.4,800? SI $T = 4$

12. A scooter was bought at Rs.42000 .It's value depreciated at the rate of 8 % per annum. Find its value after one year. $A = P\left(1 - \frac{R}{100}\right)$

$42000\left(1 - \frac{8}{100}\right) = 38640$

13. Solve:
1. If 12.5 % of 192 = 50 % of x , than find the value of x. $x = 48$
2. Find the ratio of 75 paise to Rs.3 $1:4$

(SECTION- D)

Q14. CASE STUDY (1 × 4 = 4)

A person deposited Rs.40,000 with a bank that gives a simple interest at the rate of 12.5% per annum. He also deposited the same amount for 5 years at the rate of 11% per annum compounded annually. After 5 years, he wanted to take out that cash and use it. Based on the above information, answer the following: a) $\frac{40000 \times 12.5 \times 5}{100} = 25000$

a) What is the simple interest he will get after 5 years?

b) What is the total amount he will be getting after 5 years? b) $40000 + 25000 = 65000$

c) What is the compound interest he will get after 5 years?

d) What is the difference between compound interest and simple interest?

c) $A = 40000\left(\frac{111}{100}\right)^5 = 67402.32$

$CI = 67402.32 - 40000 = \boxed{27402.32}$

d) $27402.32 - 25000 = \boxed{2402.32}$