SHIKSHA CLASSES

Sub. : Maths **Answer Paper** **Marks : 20**

Std. : VIIIth - S.B. **9. Discount and Commission**

Q.1 : **A) Select the most appropriate Alternative.** 02

1) On which price the discount on an article offered ?

Ans : b) Printed price

2) A shopkeeper sold a TV set for ₹ 11,500 after allowing 8% discount. What is the marked price of TV set ?

Ans : b) ₹ 12,500

: B) Solve the following. 01

1) Find the value of 92% of 600.

Ans : 92% of 600

$= \frac{92}{100} \times 600$

$= 92 \times 6$

$= 552$

It is required answer.

Q.2 : **A) Solve any one of the following. (Activity)** 02

1) John sold books worth rupees 4500 for a publisher. For this he received 15 % commission. Complete the following activity to find the total commission John obtained.

Selling price of books = ₹4500, Rate of commission = 15%

Commission obtained = $\frac{15}{100} \times 4500$

Commission = ₹675.

2) Use the given information and fill in the boxes with suitable numbers. Smt. Deepanjali purchased a house for ₹ 7,50,000 from Smt. Leelaben through an agent. Agent has charged 2 % brokerage from both of them.

Ans : 1) Smt. Deepanjali paid

$₹750000 \times \frac{2}{100} = ₹15000$

brokerage for purchasing the house.

2) Smt. Leelaben paid brokerage of ₹ 15000

3) Total brokerage received by the agent is ₹ 30000

4) The cost of house Smt. Deepanjali paid is ₹ 765000

5) The selling price of house for Smt. Leelaben is ₹ 735000.

Explanation:

2) Brokerage is the same from both.

4) The cost of house = purchase price + brokerage

5) The selling price of house = price of house – brokerae

: B) Solve any one of the following. 02

1) If marked price = ₹ 990 and percentage of discount is 10, then find the selling price.

Ans : M.P. = ₹ 990; Discount = 10%; S.P. = ?

Let the discount given be ₹ x.

$$\frac{\text{Discount\%}}{100} = \frac{\text{Discount Given}}{\text{M.P.}}$$

$$\therefore \frac{10}{100} = \frac{x}{990}$$

$$\therefore x = \frac{10 \times 990}{100}$$

$\therefore$ x = ₹ 99

S.P. = M.P. – Discount

= ₹ (990 – 99) = ₹ 891

$\therefore$ The selling price is ₹ 891.

2) A farmer sold foodgrains for 9200 rupees through an agent. The rate of commission was 2%. How much amount did the agent get?

Ans : Selling price of foodgrains = ₹ 9200;

Commission = 2%

commission = percentage commission × selling price

$$= \frac{2}{100} \times 9200 = ₹\ 184$$

$\therefore$ The agent got ₹ 184 as commission.

Q.3 : A) Solve any one of the following.(Activity) 03

1) After offering a discount of 10% on marked price, a customer gets total discount of ₹ 17. To find the cost price for the customer, fill in the following boxes with appropriate numbers and complete the activity.

Ans : Suppose, marked price of the item = 100 rupees

Therefore, for customer that item costs

₹100 – ₹10 = ₹90

Hence, when the discount is ₹10 then the selling price is ₹90.

Suppose when the discount is ₹17 rupees, the selling price is x rupees.

$$\therefore \frac{x}{90} = \frac{17}{10}$$

$$x = \frac{17 \times 90}{10} = 153$$

$\therefore$ The customer will get the item for 153 rupees.

2) A shit was sold for ₹ 425 after allowing 15% discount on marked price. Find the marked price of the shirt. Cmplete the activity by filling the boxes with suitable numbers.

Ans : S.P. of the shirt = ₹ 425

Rate of discount = 15%

Let the M.P. of the shirt be ₹ 100.

$\therefore$ discount = ₹ 15

S.P. = M.P. – Discount

= ₹ 100 – 15 = ₹ 85

When S.P. is ₹ 85, M.P. is ₹ 100.

When S.P. is ₹ 425 M.P. is x.

$$\therefore \frac{85}{425} = \frac{100}{x}$$

$\therefore$ x = 500

$\therefore$ The marked price of the shirt is ₹ 500.

: B) Solve any one of the following. 03

1) Umatai purchased following items from a Khadi - Bhandar.

i) 3 sarees for 560 rupees each.

ii) 6 bottles of honey for 90 rupees each.

On the purchase, she received a rebate of 12%. How much total amount did Umatai pay ?

Ans : i) The cost of 3 sarees = $3 \times 560 = ₹ 1680$.

ii) The cost of 6 bottles of honey

$= 6 \times 90$

$= ₹ 540$.

The total cost = $₹ (1680 + 540)$

... [From (i)and (ii)]

$= ₹ 2220$

Rebate = cost × rate of rebate

$= ₹ 2220 \times \frac{12}{100} = ₹ 266.40$

Amount paid = total cost – rebate

$= ₹ (2220 - 266.40)$

$= ₹ 1953.60$

Thus, Umatai paid ₹ 1953.60

2) Rajabhau sold his flat to Vasantrao for ₹88,00,000 through an agent. The agent charged 2 % commission for both of them. Find how much commission the agent got.

Ans : The price of the flat = ₹88,00,000.

The rate of commission = 2%

Commission = Price × rate of commission

$= 8800000 \times \frac{2}{100}$

$= 176000$

Commission ₹ 1,76,000 from each

$\therefore$ total commission = × ₹ 176000×2

$= ₹ 352000$

$\therefore$ The agent got ₹ 3,52,000 as commission.

Q.4 : Solve any one of the following. 04

1) A shopkeeper offers his customers 10% discount and still makes a profit to 26%. What is the actual cost to him of an article marked Rs. 280 ?

Ans : We have,

Marked price = ₹ 280, Discount = 10%

$\therefore$ S.P. = M.P. $\times \left(\frac{100 - \text{Discount}\%}{100}\right)$

$\therefore$ S.P. = ₹ $\left\{280 \times \left(\frac{100-10}{100}\right)\right\}$

$= ₹ \left\{\frac{280 \times 90}{100}\right\}$

$= ₹ 252$

Now, S.P. = ₹ 252 and Gain = 26%

$\therefore$ C.P. $= \frac{100}{100 + \text{gain}\%} \times \text{S.P.}$

$= ₹ \left(\frac{100}{100+26}\right) \times 252$

$= ₹ \frac{100}{126} \times 252$

$= ₹ 200$

Hence, the actual cost of two article is ₹ 200.

2) A cycle merchant allows 25% commission on his advertised price and still makes a profit of 20%. If he gains ₹60 over the sale of one cycle. Find his advertised price.

Ans : Let the advertised price be ₹100

commission on advertised price = 25%

$= ₹25$

$\therefore$ S.P. = Advertised price - commission

$= ₹ 100 - ₹25$

$= ₹ 75$

We have profit = 20%

$\therefore$ C.P. $= \frac{100}{100 + \text{Gain}\%} \times \text{S.P.}$

$\text{CP} = \frac{100}{100+20} \times 75$

C.P. $= ₹ \left(\frac{100}{120} \times 75\right)$

$= ₹ 62.5$

$\therefore$ Gain = S.P. - C.P. = ₹ 75 - ₹ 62.5

$= ₹ 12.5$

Now, If the gain is ₹ 12.5, advertised Price = ₹ 100.

If the gain is ₹ 1. advertised price = ₹ $\frac{100}{12.5}$

If the gain is ₹ 60, advertised price

$$= ₹ \frac{100}{12.5} \times 60$$

$$= ₹ 480.$$

Q.5 : Solve any one of the following. 03

1) If the cost price of 18 mangoes is the same as the selling price of 16 mangoes. Find the gain percent.

Ans : Let the cost price of each mango be ₹ 1.

Then,

C.P. of 16 mangoes = ₹ 16

S.P. of 16 mangoes = ₹ 18

∴ Gain = S.P. - C.P. = ₹ (18 - 16) = ₹ 2

Now Gain % = $\left(\frac{\text{Gain}}{\text{C.P.}} \times 100\right)\%$

$$= \left(\frac{2}{16} \times 100\right)\%$$

$$= 12.5\%$$

Hence, gain% = 12.5%

2) The marked price of a T. V. Set is ₹ 50000. The shop keeper sold it at 15% discount. Find the price of it for the customer

Ans : M.P. = ₹ 50,000.

discount = 15%; S.P. = ?

Discount = M.P. × Percentage of discount

$$= 50000 \times \frac{15}{100} = 75000$$

Discount = ₹ 7500

S.P. = M.P. - Disount

= ₹ (50000 - 7500) = ₹ 42500

∴ The price of a TV set for the customer is ₹ 42500.

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