SIII

Homework – 11th September

1) By selling 50 items, a shopkeeper lost the amount equal to the selling price of 10 items. His loss percent is —
(a) $\frac{30}{7}$% (b) $\frac{40}{3}$% (c) $\frac{25}{3}$% (d) $\frac{50}{3}$%

2) After allowing a discount of 15% on the marked price of a pendrive, it is sold for ₹680. The marked price of the article is
(a) ₹700 (b) ₹600 (c) ₹800 (d) ₹750

3) If $\frac{22}{7}$% of a number is 308, then the number is
(a) 9600 (b) 9800 (c) 8800 (d) 4900

4) Sachin purchases a bat for ₹660 including sales tax. If the rate of sales tax is 10%, then the selling price of the bat is
(a) ₹580 (b) ₹590 (c) ₹600 (d) ₹610

5) To gain 25% after allowing a discount of 10%, the shopkeeper must mark the price of the article which costs him ₹360 as
(a) ₹500 (b) ₹450 (c) ₹460 (d) ₹486

6) Suppose a certain sum doubles in 2 year at r% rate of simple interest per annum or at R% rate of interest per annum compounded annually, we have
(a) $r < R$ (b) $R < r$ (c) $R = r$ (d) cannot be determined.

7) The buying price of 5 kg guava, at the rate ₹20 per kg with 5% sales tax on the purchase, is
(a) ₹22 (b) ₹23 (c) ₹24 (d) none of these

8) Avinash bought an electric iron for ₹900 and sold it at a gain of 10%. He sold another electric iron at 5% loss which was bought for ₹1200. On the transactions, he has a
(a) profit of ₹75 (b) loss of ₹75 (c) profit of ₹30 (d) loss of ₹30

9) Radhika bought a car for ₹250000. Next year, its price decreased by 10% and further next year it decreased by 12%. In the two years, overall decrease per cent in the price of the car is
(a) 3.2% (b) 22% (c) 20.8% (d) 8%

10) A sum is taken for 2 years at 16% per annum, if interest is compounded after every three months, the no. of times for which interest is charged in 2 years is
(a) 8 (b) 4 (c) 6 (d) 9

11) _____ is a reduction on the marked price of the article
(a) loss (b) profit (c) discount (d) sales tax.

12) Discount = _____
(a) Marked price + S.P (b) Marked price − S.P (c) S.P − Marked price (d) Marked price × S.P

13) _____ = discount % of Marked price
(a) discount (b) C.P (c) S.P (d) loss %

14) The marked price of an article when it is sold for ₹880 after a discount of 12% is ___
(a) ₹1500 (b) ₹2000 (c) ₹2500 (d) ₹1000

15) 3500 is greater than 500 by ____ %
(a) 650% (b) 600% (c) 700% (d) 750%

VIII Homework (11th September)

1) Let the S.P of 1 item be ₹x

Then S.P = 50x

loss = 10x

Then C.P = S.P + loss = 60x

$\therefore$ loss % $= \frac{\text{loss}}{\text{C.P}} \times 100 = \frac{10x}{60x} \times 100^{50}$

$= \frac{50}{3}\%$ (d)

2) discount % = 15%

S.P = ₹680

$\text{M.P} = \frac{\text{S.P} \times 100}{100 - \text{discount}\%} = \frac{680 \times 100}{100 - 15}$

$= \frac{68000}{85} = ₹800$ (c)

3) $\frac{22}{7} \times \frac{1}{100} \times x = 308$

$x = \frac{308 \times 100 \times 7}{22} = 9800$ (b)

4) Let the price of the bat before sales tax added be ₹x

$x + 10\%$ of $x = 660$

$x + \frac{10}{100} \times x = 660$

$\frac{110x}{100} = 660$

$x = \frac{660 \times 100^{60}}{110} = ₹600$ (c)

5) C.P = ₹360

gain % = 25% ; discount = 10%

$\therefore$ S.P $= \frac{100 + \text{gain}\%}{100} \times \text{C.P} = \frac{125}{100} \times 360 = ₹450$

M.P (Bill amt) $= \frac{\text{S.P} \times 100}{100 - \text{discount}\%} = \frac{450 \times 100}{100 - 10} = \frac{45000^{500}}{90}$

$= ₹500$ (a)

6) $R < r$ (b)

Since the C.I on a certain sum is greater than S.I on the same sum for same amount of time at same rate.

7) Cost of 5kg guava = ₹20 × 5 = ₹100.

∴ Buying price = 100 + 5% of 100 = $100 + \frac{5}{100} \times 100^{1}$

= ₹105

∴ Buying price for 1 guava = $\frac{105}{5}$ = ₹21 (d)

8)

Electric iron 1	Electric iron 2
C.P = ₹900	C.P = ₹1200
gain% = 10%	loss% = 5%
$S.P = \frac{100+\text{gain}\%}{100} \times C.P$	$S.P = \frac{100-\text{loss}\%}{100} \times C.P$
$= \frac{100+10}{100} \times 900$	$= \frac{100-5}{100} \times 1200$
$= 110 \times 9 = ₹990$	$= 95 \times 12 = ₹1140$

∴ Total C.P = 900 + 1200 = ₹2100

Total S.P = 990 + 1140 = ₹2130

Profit = 2130 − 2100 = ₹30 (c)

9) Decreased amount = 250000 − 10% of 250000

$= 250000 - \frac{10}{100} \times 250000$

= 250000 − 25000 = ₹225000

Further decreased amount = 2,25,000 − 12% of 2,25,000

$= 2,25,000 - \frac{12}{100} \times 2,25000$

= 225000 − 27000

= ₹1,98000

∴ % decrease in the price $= \frac{2,50000 - 198000}{250000} \times 100$

$= \frac{52,000}{2,50000} \times \frac{2}{100} = \frac{104}{5}$

5

= 20.8% (c)

16) $n = 2$ years
$R = 12\%$
no. of times for which interest is charged in 2 yrs
$= 4 + 4 = 8$ (a)

11) discount (c)

12) Marked price − S.P (b)

13) discount (a)

14) $M.P = \frac{100 \times S.P}{100 - \text{discount}\%} = \frac{100 \times 880}{100 - 12}$

$= \frac{\overset{1000}{\cancel{88000}}}{\underset{1}{\cancel{88}}} = ₹\,1000$ (d)

15) original value = 500
new value = 3500

$\%\ \text{increase} = \frac{\text{new value} - \text{original value}}{\text{original value}} \times 100$

$= \frac{3500 - 500}{500} \times 100$

$= \frac{\overset{600}{\cancel{3000}}}{\underset{1}{\cancel{500}}} \times \cancel{100} = 600\%$ (b)