

1. Discount on any item is calculated on which of the following prices?  
 a Cost price  
 b Selling price  
 c Marked price  
 d Profit
2. A shopkeeper sold an article at 20% profit, that means he has got 20% extra on which of the price?  
 a Cost price  
 b Selling price  
 c Marked price  
 d None of the above
3. The selling price of goods which cost ₹ 10 and sold at a gain of 10%, is  
 a ₹ 12  
 b ₹ 11  
 c ₹ 9  
 d ₹ 11.10
4. A man sells a mare for ₹ 1085 making a profit of  $8\frac{1}{2}\%$ . The cost price of mare is  
 a ₹ 982  
 b ₹ 999.50  
 c ₹ 927.75  
 d ₹ 1000
5. Equivalent discount of 20%, 10% and 10% is  
 a 40%  
 b 35%  
 c 35.2%  
 d 65%
6. A man buys 5 oranges in ₹ 6 and sells 6 oranges in ₹ 5. In this transaction, he experiences loss. To gain 20% profit, what should be the selling rate of oranges?  
 a ₹ 2 per orange  
 b ₹ 1 per orange  
 c ₹ 1.44 per orange  
 d None of the above
7. The marked price of an article is ₹ 500. The shopkeeper gives a discount of 5% and still makes a profit of 25%. Then, how much did the article cost?  
 a ₹ 400  
 b ₹ 350  
 c ₹ 380  
 d ₹ 450
8. Lemons are bought ₹ 48 per dozen and sold at the rate of ₹ 40 per 10 lemons. During this business, what is percentage profit or loss occurred?  
 a 10% profit  
 b 10% loss  
 c No profit or loss  
 d None of the above
9. The marked price of a pen is increased by 20% and then a discount of 20% is allowed. If MRP is not increased and discount of 20% is offered. Then, by how much per cent is the selling price changed?  
 a 25%  
 b 20%  
 c -20%  
 d -10%
10. Match the following:
- | List I   | List II     |
|--|-------------|
| A. If CP = 150, loss per cent = 20%, then SP =                         | i. Profit   |
| B. If SP = 250, profit per cent = 25%, then CP =                       | ii. ₹ 120   |
| C. If profit = 10% and loss = 10%, then (successive) resultant will be | iii. ₹ 200  |
| D. If SP > CP, then ... occurs.  | iv. 1% loss |

### Codes

	A	B	C	D
a	(i)	(ii)	(iii)	(iv)
b	(ii)	(iii)	(iv)	(i)
c	(ii)	(iv)	(iii)	(i)
d	(ii)	(i)	(iii)	(iv)

11. A sells a bicycle to B at a profit of 30% and B sells it to C at a loss of 20%. If C pays ₹ 520 for it. Then, at what price did A buy?

- a ₹ 450  
b ₹ 500  
c ₹ 600  
d ₹ 550

12. Two stores A and B charge ₹ 750 for a video game. This week, there is sale offer on both the stores. The video game available at store B is of ₹ 600 and 25% off at store A. At which store, the video game is less expensive?

- a A  
b B  
c Same at A and B  
d None of the above

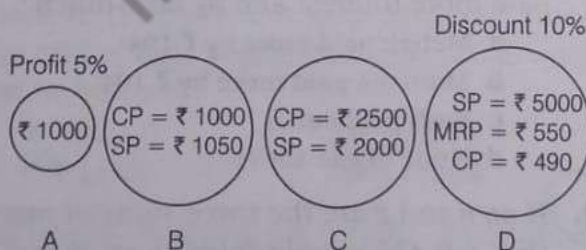
13. A dealer sold a radio at a loss of 2.5%. Had he sold it for ₹ 100 more, he would have gained 7.5%. For what value should he sell it in order to gain  $12\frac{1}{2}\%$ ?

- a ₹ 1000                      b ₹ 1125  
c ₹ 1250                      d ₹ 1500

14. Divya purchased 20 dozens notebooks at ₹ 48 per dozen. She sold 8 dozens at 10% profit and remaining at 20% profit. What is his total profit percentage in this transaction?

- a 16%                              b 30%  
c 15%                              d 25%

15. Choose odd one from the given figures.



- a A  
b B  
c C  
d D

16. A, B and C marked an article at ₹ 5000 each. A sold it after giving successive discounts of 20% and 40%. B sold it after giving a 60% discount. C sold it after giving two successive discounts of 30% each. The maximum selling price (in ₹) is

- a 2400                              b 2450  
c 2000                              d 1600

17. State 'T' for true or 'F' for false.

- If selling price is less than cost price, then profit occurs.
- Discount per cent is calculated on SP.
- On selling a fan for ₹ 810, the gain is 8%. Then, CP of fan is ₹ 750.
- The marked price is always fixed more than selling price.
- $CP = MRP - \text{Discount}$

### Codes

	I	II	III	IV	V		I	II	III	IV	V
a	F	F	T	T	F	b	T	T	T	T	F
c	F	T	T	T	F	d	T	T	T	F	T

18. Fill in the blanks with the help of options, given in the box.

- (i) 800, (ii) 4.5, (iii) 195, (iv) discount, (v) 2.5,  
(vi)  $11\frac{1}{9}\%$ , (vii) 1000, (viii) 199.5, (ix) Sales tax,  
(x) 10%

- \_\_\_ is charged on the sale of an item by the government and is added to the bill amount.
- In the first year, on an investment of ₹ 60000, the loss is 5% and in the second year, the gain is 10%. The net result after 2 yr is \_\_\_ % gain.
- A vendor losses the selling price of 4 oranges on selling 36 oranges. His loss % is \_\_\_.
- The marked price of an article when it is sold for ₹ 880 after a discount of 12%, is \_\_\_.
- 5% sales tax is charged on an article marked ₹ 200 after allowing a discount of 5%, then amount payable is \_\_\_.

### Codes

	I	II	III	IV	V
a	(ix)	(ii)	(vi)	(vii)	(viii)
b	(i)	(ii)	(iii)	(iv)	(v)
c	(vi)	(vii)	(viii)	(ix)	(x)
d	(ii)	(iv)	(vi)	(ix)	(i)

2. Profit/loss is always calculate on CP

3. CP = ₹10

Gain per cent = 10%

$$= 10 \times \frac{10}{100} = 1$$

∴ Selling price = 10 + 1 = ₹11

4. SP = ₹1085

Profit per cent =  $8\frac{1}{2}\%$

CP = ?

By using the formula,

$$CP = \frac{SP \times 100}{100 + \text{Profit}\%}$$

$$\therefore CP = \frac{1085 \times 100}{100 + 8.5}$$

$$= \frac{1085 \times 100}{108.5}$$

$$= ₹1000$$

5. Use formula for successive discount for x%, y% and z%.

First,  $x + y - \frac{x \times y}{100} \rightarrow r\%$  [say]

Then, r% and z%

$$\left( r + z - \frac{r \times z}{100} \right)\%$$

$$\text{So, } r\% = 20 + 10 - \frac{20 \times 10}{100} = 28\%$$

$$\therefore \text{Final discount} \\ = 28 + 10 - \frac{28 \times 10}{100} = 38 - 2.8 \\ = 35.2\%$$

6. CP of 5 oranges = ₹6

Profit per cent = 20%

$$\therefore \text{SP of 5 oranges} = 6 + 6 \times \frac{20}{100}$$

$$= 6 + 1.2$$

$$= ₹7.2$$

$$\therefore \text{SP of 1 orange} = ₹ \frac{7.2}{5} = ₹1.44$$

7. Marked price of an article = ₹500

Discount per cent = 5%

∴ SP of article

$$= ₹ \left( 500 - 500 \times \frac{5}{100} \right)$$

$$= ₹475$$

Profit per cent = 25%

$$\therefore \text{CP of article} = \frac{475 \times 100}{100 + 25}$$

$$= \frac{475 \times 100}{125} = ₹380$$

8. CP of 1 lemon =  $\frac{48}{12} = ₹4$

SP of 1 lemon =  $\frac{40}{10} = ₹4$

∴ CP = SP

i.e. no loss or profit during this transaction.

9. Let marked price of a pen be ₹100.

Discount = 20%

$$\therefore \text{SP} = ₹ \left( 100 - 100 \times \frac{20}{100} \right)$$

$$= ₹80$$

New marked price

$$= 100 + 100 \times \frac{20}{100}$$

$$= ₹120$$

Discount allowed = 20%

$$\therefore \text{New SP} = ₹ \left( 120 - 120 \times \frac{20}{100} \right)$$

$$= ₹96$$

Now, change in SP = ₹(96 - 80)

$$= ₹16$$

$$\therefore \text{Per cent change in SP} = \frac{16}{80} \times 100$$

$$= 20\%$$

11. Let cost price of A be ₹100.

∴ SP of A = CP of B

$$= ₹100 + \left( ₹100 \times \frac{30}{100} \right) = ₹130$$

∴ SP of B = CP of C

$$= ₹130 - \left( ₹130 \times \frac{20}{100} \right) = ₹104$$

If C pays ₹104, then CP of A is ₹100.

∴ C pays ₹520, then CP of A

$$= ₹ \frac{100 \times 520}{104} = ₹500$$

12. Stores A and B charge for video game = ₹750

For store B,

SP of video game = ₹600

For store A,

SP of video game

$$= ₹750 - \left( ₹750 \times \frac{25}{100} \right)$$

$$= ₹562.5$$

So, store A provides video game at less price.

13. Let CP of radio be ₹100.

SP of radio = ₹(100 - 100 × 2.5%)

$$= ₹97.5$$

SP, if profit = 7.5%

SP = 100 + 100 × 7.5%

$$= 100 + 100 \times \frac{7.5}{100}$$

$$= ₹107.5$$

∴ Difference in SP = ₹10

When difference is ₹10, CP of radio ₹100.

When difference is ₹100, CP of radio = ₹

$$\frac{100 \times 100}{10} = ₹1000$$

Profit per cent = 12.5%

$$\therefore \text{SP} = 1000 + 1000 \times \frac{12.5}{100}$$

$$= ₹1125$$

14. CP of 20 dozens notebooks

$$= ₹48 \times 20 = ₹960$$

CP of 8 dozens notebooks

$$= ₹48 \times 8 = ₹384$$

SP of 8 dozens notebooks

$$= ₹ \left( 384 + 384 \times \frac{10}{100} \right)$$

$$= ₹422.4$$

CP of 12 dozens notebooks

$$= ₹48 \times 12 = ₹576$$

SP of 12 dozens notebooks

$$= ₹ \left( 576 + 576 \times \frac{20}{100} \right)$$

$$= ₹691.2$$

∴ Total SP = ₹(422.4 + 691.2)

$$= ₹1113.6$$

Profit = ₹(1113.6 - 960) = ₹153.6

$$\therefore \text{Profit per cent} = ₹ \frac{153.6}{960} \times 100$$

$$= 16\%$$

15. In option (c) there is loss and in all other cases, there is profit.

16. For A marked an article is ₹5000.

Successive discount for A,

$$x + y - \frac{xy}{100} = 20 + 40 - \frac{20 \times 40}{100}$$

$$= 60 - \frac{800}{100} = 52\%$$

$$\therefore \text{Selling price} = 5000 - 5000 \times \frac{52}{100}$$

$$= 5000 - 2600 = ₹2400$$

For B marked an article is ₹5000.

$$\text{Selling price} = 5000 - 5000 \times \frac{60}{100}$$

$$= 5000 - 3000 = ₹2000$$

For C marked an article is ₹5000.

Successive discount for C,

$$x + y - \frac{x \times y}{100} = 30 + 30 - \frac{30 \times 30}{100}$$

$$= 60 - \frac{900}{100} = 51\%$$

$$\therefore \text{Selling price} = 5000 - 5000 \times \frac{51}{100}$$

$$= 5000 - 2550$$

$$= ₹2450$$

Thus, maximum selling price is ₹2450.

17. I. False II. False

III. True IV. True

V. False

18. I. Sales tax II. 4.5

III.  $11\frac{1}{9}\%$  IV. 1000

V. 199.5