

KERALA HIGH COURT
OFFICE ATTENDANT EXAM

Numerical Ability

Discount

Key Concepts • Shortcuts • 25 Practice Questions • Answer Key with Solutions

1. Key Terms

Term	Meaning
Marked Price (MP)	Listed / printed price (also called list price)
Discount	Reduction on the marked price: $MP - SP$
Selling Price (SP)	Price actually paid after discount
Net price	Price after all discounts have been applied

Remember: Discount % is always calculated on the **Marked Price**, not on the cost price.

2. Important Formulas

- **Discount** = $MP - SP$
- **Discount %** = $(\text{Discount} / MP) \times 100$
- **SP** = $MP \times (100 - \text{Discount}\%) / 100$
- **MP** = $SP \times 100 / (100 - \text{Discount}\%)$
- Successive discounts $a\%$ and $b\%$: equivalent single discount = $a + b - (ab/100)\%$. Or multiply the factors:
 $SP = MP \times (1 - a/100) \times (1 - b/100)$.
- Order of successive discounts does not matter for the final price.
- Markup $x\%$ on CP, then discount $y\%$: **Net profit %** = $[(100 + x)(100 - y) / 100] - 100$. A negative answer means loss.
- Buy 2 get 1 free = discount of **33 1/3 %**; Buy 3 get 1 free = **25%**; Buy 1 get 1 free = **50%**.
- If MP is $x\%$ more than SP, then discount % = $[x / (100 + x)] \times 100$.
- To gain $p\%$ after giving $d\%$ discount: required markup = $[(100 + p) / (100 - d)] \times 100 - 100\%$.

Quick tip: Take MP = 100 and apply the discounts one after another to find the net discount fast.

3. Practice Questions (25)

- Q1. The marked price of a jacket is Rs 1200 and a discount of 15% is offered. Selling price:**
- (a) Rs 1020
 - (b) Rs 1050
 - (c) Rs 980
 - (d) Rs 1000
- Q2. An article marked Rs 800 is sold for Rs 680. The discount percentage is:**
- (a) 12%
 - (b) 10%
 - (c) 15%
 - (d) 18%
- Q3. After a 10% discount, an article is sold for Rs 900. Its marked price was:**
- (a) Rs 900
 - (b) Rs 1100
 - (c) Rs 1000
 - (d) Rs 950
- Q4. A discount of Rs 150 is given on a marked price of Rs 1250. The discount percentage is:**
- (a) 10%
 - (b) 15%
 - (c) 8%
 - (d) 12%
- Q5. The single discount equivalent to successive discounts of 20% and 25% is:**
- (a) 45%
 - (b) 40%
 - (c) 35%
 - (d) 50%
- Q6. The marked price is Rs 2000. Two successive discounts of 10% each are given. The selling price is:**
- (a) Rs 1600
 - (b) Rs 1620
 - (c) Rs 1640
 - (d) Rs 1800
- Q7. A shopkeeper marks an article 40% above cost price and allows a 25% discount. His gain or loss is:**
- (a) 5% loss
 - (b) 10% profit
 - (c) 5% profit
 - (d) No profit, no loss
- Q8. 'Buy 2 and get 1 free' is equal to a discount of:**
- (a) 25%
 - (b) 20%
 - (c) 30%
 - (d) $33\frac{1}{3}\%$
- Q9. A 20% discount is given on a marked price and the selling price is Rs 640. The discount amount is:**
- (a) Rs 120
 - (b) Rs 160
 - (c) Rs 200
 - (d) Rs 180

Q10. A shirt marked Rs 750 is sold for Rs 600. The discount percentage is:

- (a) 15%
- (b) 25%
- (c) 20%
- (d) 10%

Q11. 'Buy 3 and get 1 free' is equal to a discount of:

- (a) 20%
- (b) $33 \frac{1}{3} \%$
- (c) 30%
- (d) 25%

Q12. Successive discounts of 20%, 10% and 5% are given on Rs 1000. The final price is:

- (a) Rs 684
- (b) Rs 700
- (c) Rs 690
- (d) Rs 680

Q13. A shopkeeper marks goods 20% above cost and gives a 10% discount. His profit percentage is:

- (a) 10%
- (b) 8%
- (c) 12%
- (d) 5%

Q14. A sofa marked at Rs 12000 is sold at a 5% discount. Selling price:

- (a) Rs 11000
- (b) Rs 11500
- (c) Rs 11400
- (d) Rs 11600

Q15. A 30% discount is offered on an item marked Rs 500. Selling price:

- (a) Rs 300
- (b) Rs 375
- (c) Rs 325
- (d) Rs 350

Q16. A trader wants a 20% profit after giving a 10% discount. By what percentage should he mark up the cost price?

- (a) 25%
- (b) 30%
- (c) 40%
- (d) $33 \frac{1}{3} \%$

Q17. The marked price is Rs 600 and the selling price is Rs 540. The discount percentage is:

- (a) 5%
- (b) 15%
- (c) 10%
- (d) 12%

Q18. Discounts of 10% and 20% are given in succession on Rs 500. Final price:

- (a) Rs 360
- (b) Rs 380
- (c) Rs 400
- (d) Rs 340

Q19. The single discount equal to two successive discounts of 10% and 10% is:

- (a) 18%
- (b) 20%
- (c) 19%
- (d) 21%

Q20. An article marked Rs 600 is sold at a 10% discount and a profit of Rs 40 is made. The cost price is:

- (a) Rs 450
- (b) Rs 500
- (c) Rs 480
- (d) Rs 520

Q21. A 25% discount is given and the selling price is Rs 450. The marked price is:

- (a) Rs 500
- (b) Rs 550
- (c) Rs 600
- (d) Rs 650

Q22. A 12.5% discount is given on a marked price of Rs 960. Selling price:

- (a) Rs 820
- (b) Rs 860
- (c) Rs 840
- (d) Rs 800

Q23. A 15% discount is given on Rs 2400 and a further Rs 100 is taken off. The final price is:

- (a) Rs 1940
- (b) Rs 1960
- (c) Rs 2040
- (d) Rs 1900

Q24. An article marked Rs 1500 is sold for Rs 1215 after two successive discounts. If the first discount is 10%, the second is:

- (a) 8%
- (b) 10%
- (c) 12%
- (d) 15%

Q25. The marked price is 25% more than the selling price. The discount percentage is:

- (a) 25%
- (b) 20%
- (c) 15%
- (d) 30%

4. Answer Key

1-a | 2-c | 3-c | 4-d | 5-b | 6-b | 7-c | 8-d | 9-b | 10-c | 11-d | 12-a | 13-b | 14-c | 15-d | 16-d | 17-c | 18-a | 19-c | 20-b | 21-c | 22-c | 23-a | 24-b | 25-b

5. Solutions

Q1. (a) Rs 1020 - Discount = 15% of 1200 = 180. SP = 1200 - 180 = Rs 1020.

Q2. (c) 15% - Discount = 120. $120/800 \times 100 = 15\%$.

Q3. (c) Rs 1000 - MP = $900 \times 100 / 90 = \text{Rs } 1000$.

Q4. (d) 12% - $150/1250 \times 100 = 12\%$.

Q5. (b) 40% - $20 + 25 - (20 \times 25)/100 = 45 - 5 = 40\%$.

Q6. (b) Rs 1620 - $2000 \times 0.9 \times 0.9 = \text{Rs } 1620$.

Q7. (c) 5% profit - CP = 100, MP = 140, SP = 75% of 140 = 105. Profit = 5%.

Q8. (d) 33 1/3 % - Pay for 2, get 3: discount = $1/3 = 33 \frac{1}{3} \%$.

Q9. (b) Rs 160 - MP = $640 \times 100 / 80 = 800$. Discount = $800 - 640 = \text{Rs } 160$.

Q10. (c) 20% - Discount = 150. $150/750 \times 100 = 20\%$.

Q11. (d) 25% - Pay for 3, get 4: discount = $1/4 = 25\%$.

Q12. (a) Rs 684 - $1000 \times 0.8 \times 0.9 \times 0.95 = \text{Rs } 684$.

Q13. (b) 8% - CP = 100, MP = 120, SP = 108. Profit = 8%.

Q14. (c) Rs 11400 - Discount = 600. SP = $12000 - 600 = \text{Rs } 11400$.

Q15. (d) Rs 350 - Discount = 150. SP = Rs 350.

Q16. (d) 33 1/3 % - Markup = $(120/90) \times 100 - 100 = 133.33 - 100 = 33 \frac{1}{3} \%$.

Q17. (c) 10% - Discount = 60. $60/600 \times 100 = 10\%$.

Q18. (a) Rs 360 - $500 \times 0.9 \times 0.8 = \text{Rs } 360$.

Q19. (c) 19% - $10 + 10 - (10 \times 10)/100 = 19\%$.

Q20. (b) Rs 500 - SP = 540. CP = $540 - 40 = \text{Rs } 500$.

Q21. (c) Rs 600 - MP = $450 \times 100 / 75 = \text{Rs } 600$.

Q22. (c) Rs 840 - $12.5\% = 1/8$. Discount = 120. SP = Rs 840.

Q23. (a) Rs 1940 - $2400 \times 0.85 = 2040$. $2040 - 100 = \text{Rs } 1940$.

Q24. (b) 10% - After 10%: 1350. $1215/1350 = 0.9$, so the second discount is 10%.

Q25. (b) 20% - Discount % = $25/125 \times 100 = 20\%$.