

PROFIT & LOSS – FOUNDATION → PLACEMENT LEVEL

1. BASIC TERMINOLOGY

Profit and Loss problems are based on the relationship between Cost Price (CP) and Selling Price (SP). This topic is very important for placement aptitude exams and is closely connected with percentages.

- Cost Price (CP): Price at which the article is bought
- Selling Price (SP): Price at which the article is sold
- Profit = SP – CP
- Loss = CP – SP

2. IMPORTANT FORMULAS

- Profit % = $(\text{Profit} / \text{CP}) \times 100$
- Loss % = $(\text{Loss} / \text{CP}) \times 100$
- SP at x% profit = $\text{CP} \times (100 + x) / 100$
- SP at x% loss = $\text{CP} \times (100 - x) / 100$

3. SOLVED EXAMPLES

- Example 1: CP = 500, SP = 650 → Profit = 150, Profit % = 30%
- Example 2: CP = 800, Loss = 10% → SP = 720
- Example 3: CP = 250, Profit = 20% → SP = 300
- Example 4: CP = 400, Profit = 25% → SP = 500

4. IMPORTANT SHORTCUT RATIOS

- Profit 25% → SP : CP = 5 : 4
- Profit 20% → SP : CP = 6 : 5
- Loss 20% → SP : CP = 4 : 5
- Loss 25% → SP : CP = 3 : 4

5. PRACTICE QUESTIONS (HOMEWORK)

- 1. $CP = 600$, $SP = 720$. Find Profit %
- 2. An article is sold at 15% loss. $CP = 800$. Find SP
- 3. Find SP if $CP = 500$ and profit = 30%
- 4. A trader gains 20% by selling an article for ₹600. Find CP
- 5. An article is sold at loss of 25%. If $CP = 400$, find SP

6. ANSWERS (FOR SELF-CHECK)

- 1. 20%
- 2. ₹680
- 3. ₹650
- 4. ₹500
- 5. ₹300