

## Day 2 - Aptitude Practice (Time & Work + Simple Interest)

**Q1:**

$$1/12 + 1/18 = 30/216 \text{ so total time is } 216/30 = 7.2 \text{ days}$$

**Q2:**

$$C \text{ alone works for 4 days} = 4/20 = 1/5 \text{ of the work done}$$

$$\text{Remaining work} = 4/5$$

$$C + D \text{ together} = 1/20 + 1/30 = 1/12 \text{ work/day}$$

$$\text{Time} = (4/5) / (1/12) = 4/5 \times 12 = 9.6 \text{ days}$$

$$\text{Total} = 4 + 9.6 = 13.6 \text{ days}$$

**Q3:**

$$A = 1/10, B = 1/15, C = 1/30$$

$$\text{Combined for 2 days} = (1/10 + 1/15 + 1/30) \times 2 = 2/5 \text{ work done}$$

$$\text{Remaining} = 3/5$$

$$A + B = 1/10 + 1/15 = 1/6 \text{ work/day}$$

$$\text{Time} = (3/5) / (1/6) = 3/5 \times 6 = 3.6 \text{ days}$$

$$\text{Total time} = 2 + 3.6 = 5.6 \text{ days}$$

**Q4:**

$$P = 7500, R = 6\%, T = 4 \text{ years}$$

$$SI = (7500 \times 6 \times 4)/100 = 1800$$

**Q5:**

$$P = 12000, R = 10\%, T = 2.5 \text{ years}$$

$$SI = (12000 \times 10 \times 2.5)/100 = 3000$$

**Q6:**

$$P = 8000, \text{ Amount} = 9200 \rightarrow SI = 1200, R = 5\%$$

$$1200 = (8000 \times 5 \times T)/100 \rightarrow T = 3 \text{ years}$$