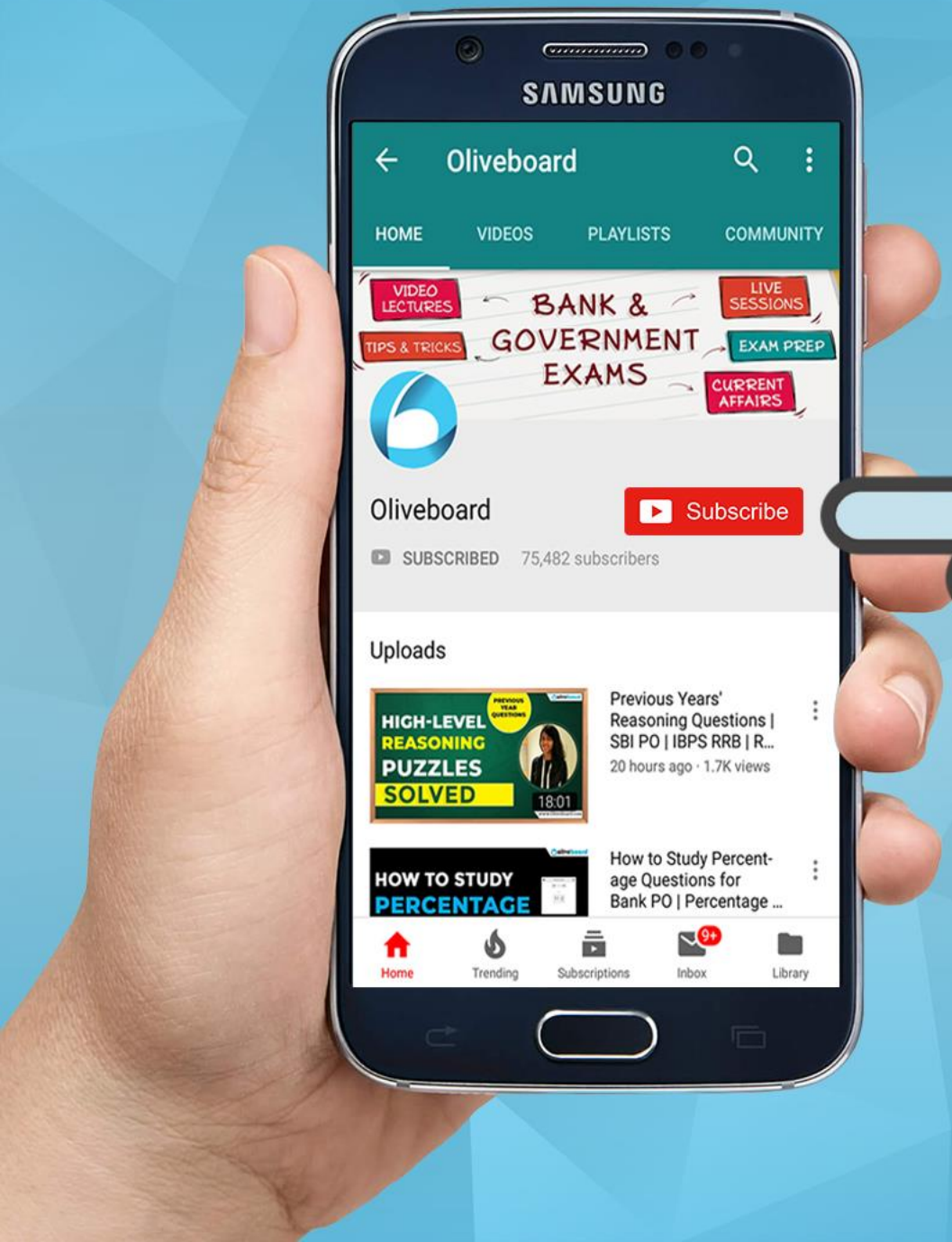

SUBSCRIBE

For latest videos

oliveboard

PARTNERSHIP PROBLEMS

FOR BANK EXAMS

RBI GRADE B | IBPS PO | IBPS SO | INDIAN BANK PO

Introduction

- Partnership problems involve computation of profit borne by each partner in business
- Reliant on ratio and proportions topic
- Not difficult but time-consuming
- Three types of questions can be expected

Concept & Variations

- One concept, three variations
  - **Concept –** to compute the total profit/loss to be borne by each member in a partnership
  - **Variation 1** – computation of profit/loss when the investment durations are the same for all partners
  - **Variation 2** – computation of profit/loss when investment duration varies
  - **Variation 3** – computation of profit/loss when investment duration varies (in parts)

Variation 1 – Example & Solution

Example: Ajay and Vijay start a business in which Ajay invests Rs. 30,000 and Vijay invests Rs. 40,000. The business makes a profit of Rs. 35,000 in 1 year; compute Ajay and Vijay's share of profit.

- Capital = Rs. 30,000 + 40,000 = Rs. 70,000
- Ajay's Investment = Rs. 30,000
- Vijay's Investment = Rs. 40,000
- Ratio of Ajay to Vijay's investments = 3:4 [A – 3:7 and V – 4:7]
- Ajay's Profit= Rs. 35,000 x [3/7] = Rs. 15,000
- Vijay's Profit = Rs. 35,000 x [4/7] = Rs. 20,000

Variation 2 – Example & Solution

Example: Ajay and Vijay are business partners. Ajay invests Rs. 40,000 for 5 months and Vijay invests Rs. 45,000 for 2 months. From the Rs. 30,000 profit the business makes, what is each one's share?

- **Formula:** if 2 partners, P1 and P2 invest amounts I1 and I2 for time periods T1 and T2, then the ratio of profit may be calculated using the formula = **I1 x T1: I2 x T2**
- Application: 40,000 x 5: 45,000 x 2 = 20:9
- Ajay's Profit = 30,000 x (20/29) = Rs. 20,689.65 ~ Rs. 20,690
- Vijay's Profit = 30,000 x (9/29) = Rs. 9,310.34 ~ Rs. 9,310

Variation 3 – Example & Solution

Example: Ajay, Vijay, and Ramesh start a business and invest Rs. 30,000, Rs. 40,000, and Rs. 50,000. Vijay takes out Rs. 20,000 at end of year 1 and Ramesh withdraws Rs. 25,000 at end of year 2. Compute their profit sharing ratio at the end of year 3.

- Ajay has invested Rs. 30,000 for all 3 years (1,2, and 3)
- Vijay invested Rs. 40,000 for year 1 and 20,000 for year 2 and 3
- Ramesh's investment is Rs. 50,000 for year 1 and 2, and Rs. 25,000 for year 3
- Formula: I1[a] x T1[a] + I1[b] x T1[b]: I2[a] x T2[a] + I2[b] x T2[b]: I3[a] x T3[a] + I3[b] x T3[b]

Variation 3 – Example & Solution

- Formula: I1[a] x T1[a] + I1[b] x T1[b]: I2[a] x T2[a] + I2[b] x T2[b]: I3[a] x T3[a] + I3[b] x T3[b]
- Applying the formula, we have:
- Ratio of Profits: {30,000 x 36}: {40,000 x 12 + 20,000 x 24}: {50,000 x 24 + 25,000 x 12}
- Ratio of Profits: 10,80,000: 96,000: 15,00,000
- When simplified: **54:48:75**

LIKE SHARE SUBSCRIBE

www.OliveBoard.in