IV Profitability Ratios

1. Gross Profit Ratio $= \dfrac{\text{Gross profit}}{\text{Net Sales}} \times 100$

where Gross profit = Net Sales − COGS

* This ratio indicates the rel^n ship b/w gross profit and net sales.
* Higher ratio shows low cost of goods sold.
* Any fluctuation in the gross profit is the result of change either in 'sales' or the 'cost of goods sold' or both.

2. Operating Ratio

$$= \frac{\text{Cost of goods sold} + \text{op. Expenses}}{\text{Net Sales}} \times 100$$

where, Net Sales = Sales − Sales Return

* Operating Exp. can be factory expenses, office and Administration expenses and selling expenses.
* This ratio is calculated to judge the operational efficiency of the business.

* A decline in the operating ratio, is better because it would leave a high margin, which means more profit.

3. operating Profit Ratio

$$= \frac{\text{operating Profit}}{\text{Net sales}} \times 100$$

where, operating profit = Net profit + Non operating expenses - Non op. Income

* The objective of computing this ratio is to determine the operational efficiency of management.

* An increase in the ratio over the previous period shows improvement in the operational efficiency of the business.

* operating Ratio + op. Profit Ratio = 100

Imp It can be noted that op. profit ratio and op. ratio are complementary to each other and thus if one of the 2 ratios is deducted from 100, another ratio is obtained.

4. Net Profit Ratio $= \frac{\text{Net Profit}}{\text{Net sales}} \times 100$

Net profit Ratio indicates the overall efficiency of the business. Higher the ratio, better the business.

5. Return on Investment or Return on Capital employed

$$= \frac{\text{Profit before Int., Tax \& Dividend}}{\text{Capital Employed}} \times 100$$

where, Capital Employed = Share Capital + Reserves + long term loans − fictitious Assets − Non operating Assets

OR

$$= \text{Fixed Assets (Net)} + \text{Working Capital}$$

* Non operating Assets includes Advance for purchase of fixed Assets, Non-trade Investments.

* The ratio judges the overall performance of the enterprise

* It measures how efficiently the resources entrusted to the business are used.

PROFITABILITY RATIOS

1. Calculate the Gross profit Ratio from the following data:
Cash Sales being 25% of Total Sales
Purchases Rs 690 000
Credit Sales Rs. 600 000
Excess of closing stock over opening stock Rs 50 000

Ans. $\boxed{20\%}$

2. The following is the Trading & Profit and loss A/c of a firm for the year ended March 31, 2020.

Particulars	(₹)	Particulars	(₹)
Stock (1.4.19)	35 000	Sales	400 000
Purchases	2 25 000	Stock (At end)	50 000
Wages	6 000		
Gross profit	184 000		
	450 000		450 000
Administration expenses	10 000	Gross profit	184 000
Selling & Distribution expenses	14 000		
Loss on sale of Plant	150 000		
Net profit	10 000		
	184 000		184 000

Calculate operating Ratio and operating Profit Ratio.

Ans. op. Ratio = 60%
op. profit Ratio = 40%

3. Following is the Balance sheet of X Ltd. as on 31st March, 2020.

Liabilities	(₹)	Assets	(₹)
Share capital	20 00 000	Fixed Assets (Net)	29 00 000
Reserves	5 00 000	Current Assets	25 00 000
10% Loans	10 00 000	Underwriting commission	100 000
Current liabilities	15 00 000		
Profit for the year	5 00 000		
	55 00 000		55 00 000

Find out the Return on capital employed.

Ans. : Rs. 39 00 000