Ans. 1 Total sales = Credit sales + Cash sales

Let the total sales be x

Cash sales = 25% of $x \rightarrow \frac{x}{4}$

Credit sales = Rs 600 000

Now $x = \frac{x}{4} + 600\,000$

$4x = x + 2400\,000$

$3x = 2400\,000$

$x =$ Rs 800 000 (Total sales)

Cash sales = $800\,000 \times \frac{25}{100} = 200\,000$

COGS = op. stock + purchases − cl. stock

= (op stock − closing stock) + purchases

= − 50 000 + 690 000

= Rs 640 000

Gross profit = Total sales − COGS

= 800 000 − 640 000

= Rs. 160 000

Gross profit Ratio = $\frac{GP}{\text{Net sales}} \times 100$

$= \frac{160\,000}{800\,000} \times 100 = 20\%$

Ans 2 To calculate operating Ratio, we need

* Cost of Goods sold = Sales - Gross profit
= 400 000 - 184 000
= Rs. 216 000

* operating expenses = Administration Exp + selling & Distribution expenses
= 10 000 + 14 000
= Rs. 24 000

* Net Sales = Sales - Sales Return
= 400 000 - 0
= Rs 400 000

$$\text{operating Ratio} = \frac{\text{COGS + operating Exp.}}{\text{Net sales}} \times 100$$

$$= \frac{216\,000 + 24\,000}{400\,000} \times 100$$

$$= \frac{240\,000}{400\,000} \times 100$$

$$= 60\%$$

Operating Profit Ratio = 100 - 60
= 40 %

operating Ratio and operating Profit Ratios of complementary to each other and the sum of the two totals to be 100.

Ans. 3

Profit (given)	500 000
Add : Interest (loan)	100 000
10% of 10 00 000	600 000

Capital employed can be calculated by both the formulas in this particular question.

(1) Asset side Approach

Capital employed = Fixed Assets + Working Capital

= Fixed Assets + (Current Assets − current liab)

= 29 00 000 + (25 00 000 − 15 00 000)

= 29 00 000 + 10 00 000

= Rs. 39 00 000

(2) Liability side Approach

capital employed = Share cap. + Reserves + long term loans − Fictitious Assets

= 20 l + (5l + 5l) + 10l − 1l ← Underwriting commission

= Rs. 39 00 000