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शक्तिउत्थानआश्रमलखीसरायबिहार

Class 12 commerce Sub. ACT Date 04.03.2021

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Accounting Ratios H.W

Question 16:

You are able to collect the following information about a company for two years:

| | 2015-16 | 2016-17 |
|--|--------------|--------------|
| Trade receivables on Apr. 01 | Rs. 4,00,000 | Rs 5,00,000 |
| Trade receivables on Mar. 31 | | Rs 5,60,000 |
| Stock in trade on Mar. 31 | Rs. 6,00,000 | Rs 9,00,000 |
| Revenue from operations (at gross profit of 25%) | Rs. 3,00,000 | Rs 24,00,000 |

Calculate Inventory Turnover Ratio and Trade Receivables Turnover Ratio.

ANSWER:

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Revenue from Operations}}{\text{Average Inventory}}$$

or,

$$\begin{aligned}\text{Cost of Revenue from Operations} &= \text{Revenue from Operations} - \text{Gross Profit} \\ &= 24,00,000 - 6,00,000 \\ &= 18,00,000\end{aligned}$$

$$\begin{aligned}\text{Average Inventory} &= \frac{\text{Inventory in the beginning} + \text{Inventory at the end}}{2} \\ &= \frac{6,00,000 + 9,00,000}{2} \\ &= 7,50,000\end{aligned}$$

$$\text{Inventory Turnover Ratio} = \frac{18,00,000}{7,50,000} = 2.4 \text{ times}$$

$$\text{Trade Receivables Turnover Ratio} = \frac{\text{Net Credit Sales}}{\text{Average Trade Receivables}}$$

$$\begin{aligned} \text{Average Trade Receivables} &= \frac{\text{Trade Receivables in the beginning} + \text{Trade Receivables at the end}}{2} \\ &= \frac{5,00,000 + 5,60,000}{2} \\ &= 5,30,000 \end{aligned}$$

$$\text{Trade Receivables Turnover Ratio} = \frac{24,00,000}{5,30,000} = 4.53 \text{ times}$$

Note: It has been assumed that all sales are credit sales

Question 17:

From the following Balance Sheet and other information, calculate following ratios:

(i) Debt-Equity Ratio (ii) Working Capital Turnover Ratio (iii) Trade Receivables Turnover Ratio

Balance Sheet as at March 31, 2017

| Particulars | Note No. | Rs. |
|-----------------------------------|----------|------------------|
| I. Equity and Liabilities: | | |
| 1. Shareholders' funds | | |
| a) Share capital | | 10,00,000 |
| b) Reserves and surplus | | 9,00,000 |
| 2. Non-current Liabilities | | |
| Long-term borrowings | | 12,00,000 |
| 3. Current Liabilities | | |
| Trade payables | | 5,00,000 |
| Total | | 36,00,000 |
| II. Assets | | |

| | |
|------------------------------|------------------|
| 1. Non-current Assets | |
| a) Fixed assets | |
| Tangible assets | 18,00,000 |
| 2. Current Assets | |
| a) Inventories | 4,00,000 |
| b) Trade Receivables | 9,00,000 |
| c) Cash and cash equivalents | 5,00,000 |
| Total | 36,00,000 |

Additional Information: Revenue from Operations Rs. 18,00,000

ANSWER:

1. Debt-Equity Ratio

$$\begin{aligned} \text{Debt Equity Ratio} &= \frac{\text{Debt}}{\text{Equity}} \\ &= \frac{12,00,000}{19,00,000} \\ &= 0.63 : 1 \end{aligned}$$

Debt = Long Term Borrowings = Rs 12,00,000

Equity = Share Capital + Reserve and Surplus

$$= 10,00,000 + 9,00,000$$

$$= \text{Rs } 19,00,000$$

2. Working Capital Turnover Ratio

$$\begin{aligned} \text{Working Capital Turnover Ratio} &= \frac{\text{Revenue from Operations}}{\text{Working Capital}} \\ &= \frac{18,00,000}{13,00,000} \\ &= 1.39 \text{ times} \end{aligned}$$

Revenue from Operations = Rs 18,00,000

Working Capital = Current Assets – Current Liabilities

$$= 18,00,000 - 5,00,000$$

$$= \text{Rs } 13,00,000$$

3. Trade Receivables Turnover Ratio

$$\begin{aligned} \text{Trade Receivables Turnover Ratio} &= \frac{\text{Net Credit Sales}}{\text{Average Trade Receivables}} \\ &= \frac{18,00,000}{9,00,000} \\ &= 2 \text{ times} \end{aligned}$$

Net Credit Sales = Rs 18,00,000

Average Trade Receivables = Rs 9,00,000

Notes:

1. Revenue from Operations are assumed to be revenue generated from credit sales.
 2. The amount of trade receivables given in the Balance Sheet is assumed to be Average Trade Receivables.
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Question 18:

From the following information, calculate the following ratios:

i) Quick Ratio

ii) Inventory Turnover Ratio

iii) Return on Investment

| | Rs. |
|----------------------------|----------|
| Inventory in the beginning | 50,000 |
| Inventory at the end | 60,000 |
| Revenue from operations | 4,00,000 |
| Gross Profit | 1,94,000 |
| Cash and Cash Equivalents | 40,000 |
| Trade Receivables | 1,00,000 |
| Trade Payables | 1,90,000 |
| Other Current Liabilities | 70,000 |
| Share Capital | 2,00,000 |
| Reserves and Surplus | 1,40,000 |

(Balance in the Statement of Profit & Loss A/c)

ANSWER:

$$(i) \text{ Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

$$\begin{aligned} \text{Quick Assets} &= \text{Cash} + \text{Debtors} \\ &= 40,000 + 1,00,000 \\ &= 1,40,000 \end{aligned}$$

$$\begin{aligned} \text{Current Liabilities} &= \text{Creditors} + \text{Outstanding Expenses} \\ &= 1,90,000 + 70,000 \\ &= 2,60,000 \end{aligned}$$

$$\text{Quick Ratio} = \frac{1,40,000}{2,60,000} = 7 : 13 = 0.54 : 1$$

(ii)

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Revenue from Operations}}{\text{Average Inventory}}$$

$$\begin{aligned} \text{Cost of Revenue from Operations} &= \text{Revenue from Operations} - \text{Gross Profit} \\ &= 4,00,000 - 1,94,000 \\ &= 2,06,000 \end{aligned}$$

$$\begin{aligned} \text{Average Inventory} &= \frac{\text{Inventory in the beginning} + \text{Inventory at the end}}{2} \\ &= \frac{50,000 + 60,000}{2} \\ &= 55,000 \end{aligned}$$

$$\text{Inventory Turnover Ratio} = \frac{2,06,000}{55,000} = 3.74 \text{ times}$$

$$\text{Return on Investment} = \frac{\text{Profit before Interest and Tax}}{\text{Capital Employed}} \times 100$$

$$\begin{aligned} \text{Capital Employed} &= \text{Equity Share Capital} + \text{Profit and Loss} \\ &= 2,00,000 + 1,40,000 \\ &= 3,40,000 \end{aligned}$$

$$\text{Return on Investment} = \frac{1,40,000}{3,40,000} \times 100 = 41.17\%$$
