

Chapter 05: Section 1, 2 and 3

Practice Question 98:

You are the Finance Manager for Mango Holdings' Seafood division. The Group CFO has highlighted that your division's 75-day receivables cycle is well above the 45-day industry norm. This ties up approximately Rs. 700 million in working capital. The situation forces reliance on costly short-term bank facilities, which erodes divisional margins.

Your key clients in the EU and Middle East are large distributors accustomed to these extended payment terms.

How should the head of Mango's Seafood division address the division's significant liquidity strain caused by extended customer payment terms without damaging key international client relationships?

Your task is to develop a strategy that reduces the receivables cycle while protecting valuable partnerships with these large distributors.

Practice Question 99:

You are the Commercial Strategy Manager at PalmNest Foods Pvt Ltd. Your company is a new entrant in the fast-moving consumer goods sector struggling to secure premium shelf space in major supermarket chains dominated by established competitors. The CEO, Ranjith Perera, believes the company must use more than marketing budgets to win over key retail partners.

During a strategy meeting, he turns to you with a specific challenge: **How can PalmNest Foods use its working capital policies as a strategic tool to compete effectively against larger, more established rivals in the modern trade (supermarket) channel?**

Your task is to propose a working capital management plan that builds stronger retail partnerships and achieves market penetration objectives.

Practice Question 100:

Given Information:

- Inventory: Rs. 15,000,000
- Trade Receivables: Rs. 12,500,000
- Cash and Bank Balances: Rs. 7,500,000
- Trade Payables: Rs. 10,000,000
- Short-term Bank Loan: Rs. 5,000,000
- Accrued Expenses: Rs. 2,000,000

Task: Calculate the Net Working Capital for BlueGem Textiles.

Practice Question 101:

Balance Sheet Item	2024	2023
Inventory	45,000	35,000
Trade Receivables	20,000	18,000
Cash & Equivalents	10,000	12,000
Total Current Assets	75,000	65,000
Trade Payables	30,000	25,000
Total Current Liabilities	30,000	25,000
Total Assets	150,000	125,000

Task:

1. Perform a vertical analysis for 2024, expressing each working capital component as a percentage of Total Assets.
2. Perform a horizontal analysis, calculating the year-over-year percentage change for each component from 2023 to 2024.

Practice Question 102:

Scenario: BlueGem Textiles, a clothing manufacturer, reported a Cost of Goods Sold (COGS) of Rs. 120 million for the year. Its opening inventory was Rs. 25 million and its closing inventory was Rs. 35 million.

Task: Calculate the company's inventory turnover ratio.

Practice Question 103:

Scenario: Zenith Logistics has an Earnings Before Interest and Tax (EBIT) of Rs. 80 million. Its capital employed (Total Assets - Current Liabilities) is Rs. 400 million. The management implements an efficiency programme that reduces its net working capital requirement by Rs. 50 million, thereby reducing the total capital employed.

Task: Calculate the ROCE before and after the working capital improvement.

Practice Question 104:

Palmnest Foods experiences seasonal sales peaks during the April New Year season and in December. The management wants to distinguish between its permanent and temporary working capital needs based on the total current asset levels over the past year.

The month-end current asset balances were as follows (in Rs. millions):

Month	Current Assets	Month	Current Assets
January	65	July	68
February	62	August	70
March	75	September	65
April (Peak)	90	October	64
May	70	November	78
June	65	December (Peak)	95

Practice Question 105:

Trident Logic Ltd, a software development company, is forecasting its working capital needs for the upcoming year. The current year's sales are Rs. 200 million, and a 25% increase to Rs. 250 million is projected for next year.

Current year's working capital account balances are:

- Accounts Receivable: Rs. 40 million
- Inventory (Work-in-Progress): Rs. 10 million
- Accounts Payable: Rs. 15 million

Practice Question 106:

BlueGem Textiles has a permanent working capital requirement of Rs. 100 million and temporary working capital needs that peak at Rs. 60 million. The company is considering three different financing strategies. The current interest rates are 8% for short-term debt and 12% for long-term debt.

- **Aggressive Strategy:** Finance all temporary needs and 40% of permanent needs with short-term debt.
- **Moderate Strategy:** Finance temporary needs with short-term debt and permanent needs with long-term debt (maturity matching).
- **Conservative Strategy:** Finance all permanent needs and 50% of peak temporary needs with long-term debt. The remaining temporary needs are also financed long-term as a buffer.

Practice Question 107:

Oceanleaf Exports has adopted a conservative working capital strategy. A snippet of its Statement of Financial Position is provided below:

Current Assets	Amount (Rs.)
Cash and Cash Equivalents	25,000,000
Marketable Securities	15,000,000
Accounts Receivable	30,000,000
Inventory	50,000,000
Total Current Assets	120,000,000
Current Liabilities	
Accounts Payable	35,000,000
Short-term Bank Loan	5,000,000
Total Current Liabilities	40,000,000

Calculate the company's Current Ratio, Quick Ratio, and Cash Ratio.

Practice Question 108:

As the Group Treasurer for Mango Holdings, you are reviewing the Seafood division's financing structure. The division relies heavily on short-term bank lines to manage its working capital requirements. These facilities carry an interest rate between 12% and 14%. This funding is constantly drawn upon to cover the gap created by a 75-day receivables cycle. The seasonal nature of seafood exports causes funding requirements to fluctuate significantly throughout the year. How can the Group Treasurer of Mango Holdings better structure and manage the short-term credit facilities for the Seafood division to reduce its high financing costs while still supporting its seasonal sales cycle? Your task is to propose a more cost-effective way to manage this short-term funding need.

Practice Question 109:

Palmnest Foods purchases goods worth Rs. 100,000 from a supplier. The credit terms are **2/10, n/30**. This means a 2% discount can be taken if the invoice is paid within 10 days; otherwise, the full amount is due within 30 days. The company's bank offers an overdraft facility at an annual interest rate of 15%. Calculate the effective annual rate (EAR) of forgoing the discount and advise whether the company should take the discount.

Practice Question 110:

BlueGem Textiles takes a short-term loan of Rs. 1,200,000 to finance a new weaving equipment installation project. The loan has a term of 12 months and a fixed annual interest rate of 12%. Repayments are made in equal monthly instalments. Create a loan amortisation schedule for the first three months.

Solution:

1. Calculate the monthly interest rate:

$$\text{Monthly Rate (r)} = \frac{12\%}{12} = 1\% \text{ or } 0.01$$

2. Calculate the fixed monthly payment (Equated Monthly Instalment - EMI): The formula for the EMI is: $P \times \frac{r(1+r)^n}{(1+r)^n - 1}$, where P is the principal, r is the monthly rate, and n is the number of months.

$$\begin{aligned} \text{EMI} &= \text{Rs. } 1,200,000 \times \frac{0.01(1 + 0.01)^{12}}{(1 + 0.01)^{12} - 1} \\ &= \text{Rs. } 1,200,000 \times \frac{0.01(1.126825)}{1.126825 - 1} \\ &= \text{Rs. } 1,200,000 \times \frac{0.01126825}{0.126825} \\ &= \text{Rs. } 106,618.56 \end{aligned}$$

3. Create the Amortisation Schedule: For each month, the interest is calculated on the opening balance. The rest of the fixed payment reduces the principal.

- **Month 1 Interest:** Rs. 1,200,000 × 1% = Rs. 12,000.00
- **Month 1 Principal:** Rs. 106,618.56 - Rs. 12,000.00 = Rs. 94,618.56
- **Month 1 Closing Balance:** Rs. 1,200,000 - Rs. 94,618.56 = Rs. 1,105,381.44

Answer: The loan amortisation schedule for the first three months is as follows:

Month	Opening Balance (Rs.)	Monthly Payment (Rs.)	Interest (1%) (Rs.)	Principal (Rs.)	Closing Balance (Rs.)
1	1,200,000.00	106,618.56	12,000.00	94,618.56	1,105,381.44
2	1,105,381.44	106,618.56	11,053.81	95,564.75	1,009,816.69
3	1,009,816.69	106,618.56	10,098.17	96,520.39	913,296.30

Table 1.3.1: Sample Loan Amortisation Schedule for BlueGem Textiles

Practice Question 111:

Oceanleaf Exports factors invoices worth Rs. 1,000,000 from its overseas customers. The factor provides a non-recourse arrangement with the following terms:

- **Advance Rate:** 80% of the invoice value
- **Service Fee:** 1.5% on the face value of the invoices
- **Interest Charge:** 12% per annum on the advanced funds
- **Average Collection Period:** 60 days

Calculate the total cost of this factoring arrangement.

Practice Question 112:

Using the answer for question 111, calculate the effective annual rate of the factoring arrangement

Practice Question 113:

As a Credit Analyst at Taprobane Finance Ltd., you are reviewing a new loan application. A prospective SME client has applied for a working capital facility to support its growth. The client's financial statements show profitability, but you must look beyond these surface-level numbers to understand the true cash flow dynamics of the business.

The loan committee requires a robust justification for any facility, which centres on understanding the client's operational financing gap.

How should a credit analyst assess the operational financing requirements of a potential SME client to structure an appropriate working capital loan?

Your task is to quantify the client's cash conversion cycle to determine the precise financing gap between cash outflows and inflows.

Practice Question 114:

Scenario: Zenith Logistics, a wholesale distributor, has provided the following financial data for the year ended 31st March 2024. You are tasked with calculating its full cash conversion cycle.

Given Information:

- Opening Inventory: Rs. 4,500,000
- Closing Inventory: Rs. 5,500,000
- Opening Trade Receivables: Rs. 3,200,000
- Closing Trade Receivables: Rs. 3,800,000
- Opening Trade Payables: Rs. 2,900,000
- Closing Trade Payables: Rs. 3,100,000
- Cost of Goods Sold (COGS): Rs. 30,000,000
- Total Credit Sales: Rs. 40,000,000

Practice Question 115:

A textile company, FashionForward PLC, holds Rs. 2.2 million of inventory from last season's fashion line. A market analysis indicates that these items can only be sold at a 30% discount off their original cost through clearance channels. Calculate the required write-down to reflect the inventory's net realisable value.

Practice Question 116:

A company successfully implements initiatives to reduce its CCC from 54 days to 42 days. The company's annual revenue is Rs. 100,000,000 and its short-term borrowing rate is 15%. Calculate the cash released and the annual financing cost savings from this improvement.

Practice Question 117:

Palmnest Foods sells FMCG products with high demand during the April New Year season and in December. Its annual COGS is Rs. 120,000,000. The year-end inventory balances were: Beginning Rs. 10,000,000 and Ending Rs. 14,000,000. However, the inventory balances at the end of each quarter were:

- Q1: Rs. 15,000,000
- Q2: Rs. 20,000,000
- Q3: Rs. 35,000,000
- Q4: Rs. 14,000,000 (Closing Balance)

Calculate the inventory turnover ratio using both the simple average and the quarterly average method to demonstrate the impact of seasonality.

Practice Question 118:

Scenario: Trident Logic Ltd wants to forecast the demand for its flagship product, the TL-500 network router, for July. The sales data for the past six months are as follows: January (1,200 units), February (1,300 units), March (1,250 units), April (1,400 units), May (1,450 units), and June (1,500 units).

Problem: Calculate the 3-month simple moving average forecast for July.