Chapter 05: Section 4 - 7

Practice Question 119:

BlueGem Textiles has an annual demand of 10,000 bales for a specific grade of cotton yarn used in its weaving operations. The cost to place an order with the supplier is Rs.5,000. The annual cost to hold one bale of yarn in inventory is Rs.200. EOQ is 707 bales. Calculate the total cost of inventory.

Practice Question 120:

BlueGem Textiles, a textile manufacturing company based in Sri Lanka, reported the following financial data for the year ended 31st December 2024:

- Total Sales: Rs. 85,000,000
- Cash Sales: Rs. 15,000,000
- Sales Returns and Allowances: Rs. 2,000,000
- Accounts Receivable (1st Jan 2024): Rs. 7,500,000
- Accounts Receivable (31st Dec 2024): Rs. 8,500,000

Calculate the receivables turnover ratio for the year.

Practice Question 121:

Using the calculated receivables turnover ratio of 8.5 times for BlueGem Textiles from question 120, calculate the debtors' collection period. The company's standard credit term is 45 days.

Practice Question 122:

"Lanka Distributors Ltd" is considering offering an early settlement discount with terms "2/10, n/30" to its customers. The company's current cost of short-term financing through a bank overdraft is 18% per annum. The company needs to determine if the discount is a cheaper source of finance than its overdraft.

Practice Question 123:

ABC Corporation is evaluating a credit application from a new customer, "Innovate Tech (Pvt) Ltd," for a credit limit of Rs. 1,000,000. ABC uses a weighted scoring model to assess creditworthiness. The model and Innovate Tech's data are shown below:

- **Risk Factors and Weights:** Payment History (50%), Capital Strength (Debt-to-Equity Ratio) (30%), Years in Business (20%).
- **Scoring Scale (per factor):** 0-100 points.
- **Credit Thresholds:** Score $>$ 75: Approve Rs. 1,000,000; Score 60-75: Approve Rs. 500,000; Score $<$ 60: Decline.
- **Innovate Tech's Data:**
  - CRIB report shows a clean payment history: Score = 90.
  - Debt-to-Equity Ratio is 1.2 (considered high risk): Score = 40.
  - The company has been in business for 8 years: Score = 70.

Practice Question 124:

Following is the rerevivable aging schedule of a Phoenix Trading.

Customer	Total Due	Current	1-30 Days	31-60 Days	61-90 Days	90+ Days
Customer A	350,000	0	150,000	0	0	200,000
Customer B	300,000	0	0	300,000	0	0
Customer C	80,000	0	0	0	80,000	0
Customer D	450,000	450,000	0	0	0	0
Total	**1,180,000**	**450,000**	**150,000**	**300,000**	**80,000**	**200,000**

Based on the above schedule calculate provision for doubtful accounts as per the following schedule.

- Current: 0.5%
- 1-30 Days Past Due: 2%
- 31-60 Days Past Due: 10%
- 61-90 Days Past Due: 25%
- 90+ Days Past Due: 40%

Practice Question 125:

ABC Manufacturing Ltd. reported a Cost of Goods Sold (COGS) of Rs. 120,000,000 for the year ended 31st March 2024. The company's accounts payable balance was Rs. 12,500,000 on 1st April 2023 and Rs. 17,500,000 on 31st March 2024. Calculate the payables turnover ratio.

Practice Question 126:

Using the calculated payables turnover ratio of 8.0 times for ABC Manufacturing Ltd. from question 125, calculate the creditors' settlement period in days.

Practice Question 127:

Alpha Trading PLC has an annual Cost of Goods Sold (COGS) of Rs. 730,000,000. The company is considering changing its payment policy to extend its average creditors' settlement period by 10 days. Calculate the amount of cash that would be retained and made available for other purposes if this policy is implemented.

Practice Question 128:

A retail company, Festive Goods Ltd., experiences a significant sales peak in December. Its month-end accounts payable balances for the last 13 months are shown below. The company's COGS for the last 12 months (Jan-Dec 2024) was Rs. 60,000,000. Calculate the payables turnover ratio using a simple average of the opening (Dec 2023) and closing (Dec 2024) balances, and then compare it with a ratio calculated using a 12-month rolling average.

Month	Closing Payables (Rs.)
Dec 2023	10,000,000
Jan 2024	4,000,000
Feb 2024	3,500,000
Mar 2024	3,800,000
Apr 2024	4,100,000
May 2024	4,000,000
Jun 2024	4,200,000
Jul 2024	4,500,000
Aug 2024	4,800,000
Sep 2024	5,500,000
Oct 2024	8,000,000
Nov 2024	9,600,000
Dec 2024	12,000,000

Practice Question 129:

For Week 4, ABC Trading Ltd. forecasted a closing cash balance of Rs. 1,100,000. The actual closing balance was Rs. 950,000. Calculate the forecast accuracy.

Practice Question 130:

Calculate the super quick ratio

- Cash and Equivalents: Rs. 2,000,000
- Trade Receivables: Rs. 3,500,000
- Inventory: Rs. 6,000,000
- Total Current Liabilities: Rs. 5,000,000

Practice Question 131:

A utility company forecasts a total cash need of Rs. 120,000,000 for the upcoming year. The fixed cost of converting securities to cash (brokerage fees, administrative time) is Rs. 20,000 per transaction. The interest rate on short-term investments is 8% per annum. Calculate the optimal cash replenishment amount using the Baumol model.

The Baumol model formula is C = $\sqrt{\frac{2FT}{i}}$ Where:

- F = Fixed transaction cost = Rs. 20,000
- T = Total cash need for the period = Rs. 120,000,000
- i = Interest rate on investments = 0.08

Practice Question 132:

A company with volatile cash flows wants to use the Miller-Orr model. Based on historical data and policy, it has determined the following:

- Minimum required cash balance (Lower Limit): Rs. 10,000,000
- Variance of daily net cash flows: Rs. 900,000,000
- Transaction cost for buying/selling securities: Rs. 25,000

- Daily interest rate: 0.02% (or 0.0002)

The model's formula for the spread between the upper and lower limits is: Spread = $3\left(\frac{3 \times \text{Transaction Cost} \times \text{Variance}}{4 \times \text{Interest Rate}}\right)^{1/3}$

Practice Question 133:

A Treasury Analyst at Taprobane Finance Ltd. has Rs. 50 million in surplus funds to invest. The current yield curve for government Treasury Bills is as follows:

- 91-day T-Bill: 6.0% annualised yield
- 182-day T-Bill: 6.8% annualised yield

The company's cash forecast confirms the Rs. 50 million will not be needed for at least the next 6 months. Calculate the additional income that can be earned by investing in the longer-term bill.

Practice Question 134:

Calculate debt to equity ratio

Financial Item	Amount (Rs.)
Total Equity	25,000,000
Short-term Bank Loans	15,000,000
Long-term Bonds	45,000,000

Practice Question 135:

To solve an immediate cash crisis, Oceanleaf Exports decides to use invoice discounting. It has Rs. 15,000,000 in outstanding invoices from reliable overseas customers. The finance provider offers an 85% advance rate and charges a fee equivalent to an annual interest rate of 20%. The invoices are expected to be paid in 60 days.

Calculate the amount to be paid by Oceanleaf and the amount retained.

Practice Question 136:

You are a financial analyst reviewing the health of Mango Holdings, a publicly listed diversified conglomerate with operations across multiple sectors. You need to calculate its Altman Z-score to predict the likelihood of bankruptcy within the next two years.

Given Financial Data (Rs. '000):

- Sales: 600,000
- Earnings Before Interest and Taxes (EBIT): 45,000
- Total Assets: 400,000
- Total Liabilities: 220,000
- Retained Earnings: 50,000
- Working Capital: 30,000
- Market Value of Equity: 150,000