



# DELHI SCHOOL OF BUSINESS

By Vivekananda Institute of Professional Studies - TC

PGDM / PGDM (FINTECH) Program

TRIMESTER - V (Batch: 2023-25)

END-TERM EXAMINATION, JANUARY 2024

|             |                                       |             |      |
|-------------|---------------------------------------|-------------|------|
| Course Name | Corporate Banking and Credit Analysis | Course Code | CBCA |
| Duration    | Three Hours                           | Max. Marks  | 60   |

## Instructions:

1. For calculation-based questions, always show your work. Do not skip any steps.
2. For analysis or interpretation questions, ensure that your explanations are clear and concise.
3. Where applicable, use the provided formulas to perform your calculations.

**Q.1** DEF Ltd., a large-scale engineering firm, has approached a bank for a ₹50 crore term loan to expand its operations. The bank has requested a Cash Flow Statement to evaluate its repayment capacity and operational stability.

The following financial transactions are reported for the year ending March 31, 2024:

- 1. Cash received from customers for sales of ₹150 crore, which includes an advance of ₹10 crore for future deliveries. ○ -
- Collections from credit sales made in the previous year amounting to ₹20 crore. (-) Deb.
- ₹5 crore worth of sales during the year remains unpaid by customers. (-) <sup>Debt</sup> ~~CR~~ PP Cred.
- Payments to suppliers for raw materials of ₹80 crore, which includes a ₹10 crore payment for supplies received in the previous year.
- Outstanding payables for current year purchases amount to ₹15 crore.
- Salaries and operating expenses of ₹25 crore, paid in full, include ₹3 crore for employee bonuses for the previous year.
- 7. ○ Payment of interest on a term loan of ₹8 crore.
- Purchase of a new manufacturing unit for ₹20 crore, financed partly by cash payment of ₹12 crore, with the remaining amount financed through a lease agreement.
- Sale proceeds from a decommissioned unit amount to ₹8 crore.
- Dividend income received from a subsidiary: ₹4 crore.
- 8. ○ Proceeds from the issue of preference shares: ₹15 crore.
- Repayment of a long-term bank loan: ₹10 crore.



**DELHI SCHOOL OF BUSINESS**  
By Vivekananda Institute of Professional Studies - TC

- ₹5 crore declared as dividends for the current year, out of which ₹3 crore was paid.

Additional Information:

- The company's liquidity position has been under scrutiny due to a current ratio of 0.95 and a Debt Service Coverage Ratio (DSCR) of 1.1.
- For loan approval, the bank requires evidence of stable cash flows and a DSCR of at least 1.5.

**Questions:**

1. Using the data provided, prepare a detailed Cash Flow Statement for DEF Ltd. as per the bank's requirement. (10 Marks)
2. Assess whether the company is likely to meet the bank's loan approval criteria. (5 Marks)

**15 Marks**

**Q.2** XYZ Ltd., a manufacturing company, has applied for a ₹10 crore term loan to expand its operations. As part of the loan evaluation process, the bank wants to assess whether the company's Working Capital Finance (WCL) influences its sales performance. The company has provided historical data, and a Multiple Regression Analysis has been conducted. The regression model proposed is:

$$\text{Sales} = \beta_0 + \beta_1(\text{WCL}) + \beta_2(\text{Advertising}) + \epsilon$$

An Excel output of the regression analysis is provided below:

**Regression Output for XYZ Ltd.:**

| Regression Statistics | Values |
|-----------------------|--------|
| Multiple R            | 0.926  |
| R Square              | 0.858  |
| Adjusted R Square     | 0.836  |
| Standard Error        | 10.3   |
| Observations          | 10     |

| Coefficients                | Beta Value | Standard Error | t Stat | P-value |
|-----------------------------|------------|----------------|--------|---------|
| Intercept                   | 12.1       | 4.5            | 2.69   | 0.023   |
| Working Capital Limit (WCL) | 1.5        | 0.18           | 8.33   | 0.0001  |



# DELHI SCHOOL OF BUSINESS

By Vivekananda Institute of Professional Studies - TC

| Coefficients            | Beta Value | Standard Error | Stat | P-value |
|-------------------------|------------|----------------|------|---------|
| Advertising Expenditure | 0.85       | 0.72           | 1.18 | 0.273   |

1. Are both variables statistically significant in influencing sales? How would you interpret the significance of Working Capital Finance (WCL)? (2 Marks)
2. If Working Capital Limit (WCL) impacts the sales then by how much. (3 marks)
3. Evaluate the overall goodness-of-fit of the regression model. What do these values tell you about the explanatory power of the model in predicting sales? (2 Marks)
4. Calculate the new level of sales when Advertisement expenditure is Rs. 20 crore and working capital limit is Rs. 30 crore. (3 marks)

**Q.3** Operating Statement for XYZ Ltd. (Credit Monitoring Analysis). For the Years Ending March 31, 2024, and March 31, 2023

| Particulars                     | For the Year Ending March 31, 2024 (₹ Crore) | For the Year Ending March 31, 2023 (₹ Crore) |
|---------------------------------|--|--|
| Sales / Revenue                 | ₹250   | ₹220   |
| Less: Cost of Goods Sold (COGS) | ₹150   | ₹130   |
| Gross Profit                    | ₹100   | ₹90  |
| Less: Operating Expenses        | ₹40  | ₹35  |
| Breakdown of Operating Expenses |  |  |
| Employee Costs                  | ₹18  | ₹15  |
| Rent and Utilities              | ₹6   | ₹5   |
| Depreciation                    | ₹8   | ₹7   |
| Other Operating Expenses        | ₹8   | ₹8   |
| Operating Profit (EBIT)         | ₹60  | ₹55  |
| Less: Non-Operating             | ₹5   | ₹4   |



**DELHI SCHOOL OF BUSINESS**  
By Vivekananda Institute of Professional Studies - TC

| Particulars                  | For the Year Ending March 31, 2024 (₹ Crore) | For the Year Ending March 31, 2023 (₹ Crore) |
|------------------------------|--|--|
| Expenses                     |  |  |
| Interest on Borrowings       | ₹12  | ₹10  |
| Net Profit Before Tax (NPBT) | ₹48  | ₹45  |
| Less: Provision for Tax      | ₹9   | ₹8   |
| Net Profit After Tax (NPAT)  | ₹39  | ₹37  |

**Additional Financial Data for Financial Analysis:**

Using the prepared Operating Statement for XYZ Ltd., Analyse the operating statement following the incremental sales method. (20 marks)

**Q.4 XYZ Bank's Balance Sheet for Interest Rate Risk Analysis (₹ Crore)**

| Particulars                          | Amount (₹ Crore) | Repricing Interval |
|--------------------------------------|------------------|--------------------|
| Assets                               |                  |                    |
| Loans and Advances                   |                  |                    |
| - Fixed-Rate Loans                   | ₹300             | 1 year (+)         |
| - Floating-Rate Loans                | ₹200 ✓           | 3 months (+)       |
| Investments                          |                  |                    |
| - Government Securities (Fixed Rate) | ₹150             | 2 years            |
| - Corporate Bonds (Fixed Rate)       | ₹80              | 1 year (+)         |
| - Floating Rate Bonds                | ₹120             | 6 months (+)       |
| Cash & Cash Equivalents              | ₹100             | Immediate          |
| Interbank Loans & Advances           | ₹50              | 1 year (+)         |
| Other Assets (Fixed Rate)            | ₹70              | 3 years (+)        |

**DELHI SCHOOL OF BUSINESS**  
By Vivekananda Institute of Professional Studies - TC

| Particulars                        | Amount (₹ Crore) | Repricing Interval |
|------------------------------------|------------------|--------------------|
| Total Assets                       | ₹1,020           |                    |
| Liabilities                        |                  |                    |
| Deposits                           |                  |                    |
| - Fixed-Rate Deposits              | ₹250             | 1 year             |
| - Floating-Rate Deposits           | ₹100             | 6 months           |
| - Savings Deposits                 | ₹200             | Immediate          |
| - Current Accounts                 | ₹50              | Immediate          |
| Borrowings                         |                  |                    |
| - Short-Term Borrowings            | ₹75              | 3 months           |
| - Medium-Term Borrowings           | ₹100             | 1 year             |
| - Long-Term Borrowings             | ₹60              | 5 years            |
| Other Liabilities                  |                  |                    |
| - Bills Payable (Fixed Rate)       | ₹40              | 1 year             |
| - Accrued Expenses (Floating Rate) | ₹30              | 6 months           |
| Total Liabilities                  | ₹1,105           |                    |
| Equity                             | ₹(85)            |                    |
| Total Liabilities & Equity         | ₹1,020           |                    |

- Calculate the Repricing Gap for each time bucket. (4 marks)  $(DA - DL) (RSA - RSL)$  (5)
- Assume a rise in interest rates by 1%. Calculate the potential change in NII based on the repricing gap for each time bucket. (4 marks)  $(RSA - RSL) \times 1 = 10.05\%$
- Analyze the bank's interest rate risk based on the repricing gaps:
  - If interest rates rise, which time periods will impact the bank's Net Interest Income (NII) negatively or positively? (2 marks)
  - If interest rates fall, how will the bank's Net Interest Income (NII) be affected overall? (5 marks)

**(15 Marks)**