| Roll No. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

# PRESIDENCY UNIVERSITY

## BENGALURU

**End - Term Examinations – MAY/ JUNE 2025**

**Date:** 04-06-2025 **Time:** 01:00 pm – 04:00 pm

| | | |
|---|---|---|
| **School:** SOC | **Program:** B. Tech | |
| **Course Code:** MGT2021 | **Course Name:** Finance for Engineers | |
| **Semester**: IV | **Max Marks**: 100 | **Weightage**:50% |

| **CO - Levels** | **CO1** | **CO2** | **CO3** | **CO4** | **CO5** |
|---|---|---|---|---|---|
| **Marks** | **13** | **33** | **28** | **26** | |

**Instructions:**

*(i) Read all questions carefully and answer accordingly.*

*(ii) Do not write anything on the question paper other than roll number.*

## Part A

**Answer ALL the Questions. Each question carries 2 marks.** **10Q x 2M=20M**

| | | | | |
|---|---|---|---|---|
| **1.** | Define Financial Management | **2 Marks** | **L1** | **CO1** |
| **2.** | From the following information calculate the amount of liabilities of XYZ Ltd.<br>Total assets 1200000<br>Total Capital 400000 | **2 Marks** | **L3** | **CO1** |
| **3.** | Mention two methods that consider the time value of money. | **2 Marks** | **L1** | **CO2** |
| **4.** | Define capital budgeting. | **2 Marks** | **L1** | **CO2** |
| **5.** | Name two long-term sources of project funding. | **2 Marks** | **L1** | **CO3** |
| **6.** | A company issues bonds worth ₹5,00,000 at a 7% interest rate. The corporate tax rate is 25%. Calculate the after-tax cost of debt. | **2 Marks** | **L3** | **CO3** |
| **7.** | Calculate the working capital from the following information of ABC Ltd.<br>Current assets 20000<br>Current liability 30000 | **2 Marks** | **L3** | **CO4** |

| | | | | |
|---|---|---|---|---|
| **8.** | State the concept of working capital. | **2 Marks** | **L1** | **CO4** |
| **9.** | A company has a 10 percent preference shares of Rs 5,00,000. Determine the cost of preference shares. | **2 Marks** | **L3** | **CO3** |
| **10.** | Calculate Cost of Goods Sold from the following information<br>Purchases 500000<br>Wages 15000<br>Opening stocks 20000<br>Closing stocks 10000 | **2 Marks** | **L3** | **CO1** |

## Part B

**Answer ALL the Questions. Each question carries 7 Marks.** **Total Marks 35M**

| | | | | | |
|---|---|---|---|---|---|
| **11.** | **a.** | Explain Income statement, balance sheet and Cash flow statement with the formats. | **07 Marks** | **L2** | **CO 1** |
| **Or** | | | | | |
| **12.** | **a.** | A company reports the following data: Equity Capital: 4,00,000, Reserve and Surplus: 1,00,000, Liabilities: 7,00,000, Current Assets: 2,00,000, Non-current Assets: 6,00,000. Prepare balance sheet of the company. | **07 Marks** | **L3** | **CO 1** |

| | | | | | |
|---|---|---|---|---|---|
| **13.** | **a.** | Summarize the concept of capital budgeting techniques. | **07 Marks** | **L2** | **CO 2** |
| **Or** | | | | | |
| **14.** | **a.** | PQR Ltd. is evaluating two investment projects, Project A and Project B. Expected annual profit of the project and initial investment details as follows. | **07 Marks** | **L3** | **CO 2** |

| Year | Project A | Project B |
|---|---|---|
| 0 | 5,00,000. | 8,00,000. |
| 1 | 10,000 | 5000 |
| 2 | 20,000 | 15,000 |
| 3 | 30,000 | 25,000 |
| 4 | 40,000 | 35,000 |
| 5 | 50,000 | 20,000 |
| Salvage value | 50000 | 30000 |
| Working Capital | 10000 | 15000 |

Calculate ARR and suggest the company to choose a project.

| | | | | | |
|---|---|---|---|---|---|
| **15.** | **a.** | Distinguish between equity shares and preference shares. | **07 Marks** | **L2** | **CO 3** |
| **Or** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **16.** | **a.** | A company has the following capital structure:<br>Equity: ₹12,00,000 with a cost of equity at 12%<br>Debt: ₹8,00,000 with a cost of debt at 8%<br>Preference shares 6,00,000 with a cost of 9%<br>Retained earnings of 4,00,000 with a cost of 12%.<br>Calculate the Weighted Average Cost of Capital (WACC). | **07 Marks** | **L3** | **CO 3** |

<table>
<tr><td><b>17.</b></td><td><b>a.</b></td><td>Calculate Net working capital and Gross working capital from the following information.
<table>
<tr><td>Particulars</td><td>Amount (₹)</td></tr>
<tr><td>Stocks</td><td>3,00,000</td></tr>
<tr><td>Cash in hand</td><td>10,000</td></tr>
<tr><td>Creditors</td><td>6,000</td></tr>
<tr><td>Trade Debtors</td><td>15,000</td></tr>
<tr><td>Pre-paid Expenses</td><td>20,000</td></tr>
<tr><td>Cash at bank</td><td>1,00,000</td></tr>
<tr><td>Bills Payables</td><td>8,000</td></tr>
</table></td><td><b>07 Marks</b></td><td><b>L3</b></td><td><b>CO 4</b></td></tr>
<tr><td colspan="6"><b>Or</b></td></tr>
<tr><td><b>18.</b></td><td><b>a.</b></td><td>Discuss different approaches of working capital investment.</td><td><b>07 Marks</b></td><td><b>L2</b></td><td><b>CO 4</b></td></tr>
</table>

| | | | | | |
|---|---|---|---|---|---|
| **19.** | **a.** | Differentiate between ARR and IRR in detail. | **07 Marks** | **L2** | **CO 2** |
| | | **Or** | | | |
| **20.** | **a.** | A project requires an initial investment of ₹4,00,000. The expected cash inflows for the next four years are as follows:<br>Year 1: ₹1,00,000<br>Year 2: ₹1,20,000<br>Year 3: ₹1,40,000<br>Year 4: ₹1,60,000<br>Calculate Net Present Value (NPV) using a discount rate of 10%. | **07 Marks** | **L3** | **CO 2** |

## Part C

**Answer any Three Questions. Each question carries 15 marks** **3Q x 15M=45M**

| | | | | | |
|---|---|---|---|---|---|
| **21.** | **a.** | A company provides the following details:<br>Net Income: ₹40,000<br>Depreciation: ₹12,000<br>Increase in Inventory: ₹6,000<br>Decrease in Accounts Payable: ₹4,000 | **15 Marks** | **L3** | **CO 1** |

Purchase of Equipment: ₹25,000

Sale of Land: ₹15,000

Loan Taken: ₹50,000

Loan Repaid: ₹20,000

Prepare the Cash Flow Statement.

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**22.** **a.** A firm whose cost of capital is 10% considering two projects X and Y, the details of which are as follows:

| **Particulars** | **Project X** | **Project Y** |
|---|---|---|
| 1 | 40,000 | 90,000 |
| 2 | 60,000 | 80,000 |
| 3 | 80,000 | 60,000 |
| 4 | 1,00,000 | 20,000 |
| 5 | 1,20,000 | 16,000 |

The original investment is Rs.2,00,000 for both projects. Compute the IRR for the two projects. Project X by 20% and 29% and Project Y by 9% and 15% trail rates.

**15 Marks** **L3** **CO 2**

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**23.** **a.** Discuss different long-term source of finance and its types.

**15 Marks** **L2** **CO 3**

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**24.** **a.** Estimate the Working Capital of ABC Ltd by using the following details.

| Particulars | Amount (₹) |
|---|---|
| Raw Materials | 1,00,000 |
| Bills Receivable | 10,000 |
| Work-in-Progress | 25,000 |
| Trade Payables | 6,000 |
| Finished Goods | 75,000 |
| Trade Debtors | 15,000 |
| Pre-paid Expenses | 20,000 |
| Minimum Cash Balance | 1,00,000 |
| Bills Payables | 8,000 |
| Wages Payable | 10,000 |
| Payables for Overheads | 15,000 |
| Safety Margin | 20% |

**15 Marks** **L3** **CO 4**