**Birla Institute of Technology & Science, Pilani**

**Work Integrated Learning Programmes Division**

**Second Semester 2023-2024**

**Mid-Semester Test**

**(EC-2 Regular)**

Course No. : BA ZG521

Course Title : Financial Management

Nature of Exam : Closed Book

Weightage : 30%

No. of Pages = 2

# No. of Questions = 5

Duration : 2 Hours

Date of Exam : 17/03/2024 (AN)

Note to Students:

1. Please follow all the *Instructions to Candidates* given on the cover page of the answer book.
2. All parts of a question should be answered consecutively. Each answer should start from a fresh page.
3. Assumptions made if any, should be stated clearly at the beginning of your answer.
4. (a) Explain the difference between shareholders’ wealth maximization versus profit maximization. **[2]**

(b) Financial management deals with investment decisions, financing decisions and rewarding (Dividend) decisions. Explain which decision(s) might be more critical and when? **[3]**

(c) Explain the concept of risk free rate, what are the characteristics of risk free assets and how can you choose an appropriate risk free asset when your investment horizon is short term and long term? **[3]**

1. The following are the financial statements for the year 2023 of Zigsaw company engaged in manufacturing of toys.

**Balance sheet as on 31 March, 2023**

|  |  |  |  |
| --- | --- | --- | --- |
| **Liabilities + OE** | **Amount (Rs.)** | **Assets** | **Amount (Rs.)** |
| Creditors | 280000 | Cash | 70000 |
| Trade Payables | 140000 | Debtors | 350000 |
| Outstanding expenses | 40000 | Stock | 490000 |
| Provision for tax | 100000 | Fixed assets | 1050000 |
| Long-term debt | 840000 | Goodwill | 140000 |
| Share capital | 420000 |  |  |
| Reserves | 280000 |  |  |
| **Total** | **2100000** | **Total** | **2100000** |

**Profit and Loss A/C for the year ended 31 March 2023**

|  |  |  |
| --- | --- | --- |
|  | **Amount (Rs.)** | **Amount (Rs.)** |
| Sales |  |  |
| Cash | 280000 |  |
| Credit | 1120000 |  |
| Total Sales |  | 1400000 |
| (-) COGS |  | 840000 |
| Gross Profit |  | 560000 |
| (-) Selling and Admin Exp. |  | 140000 |
| EBDIT |  | 420000 |
| (-) Depreciation |  | 98000 |
| EBIT |  | 322000 |
| (-) Interest |  | 42000 |
| EBT |  | 280000 |
| (-) Tax |  | 140000 |
| PAT |  | 140000 |
| (-) Dividend Paid |  | 42000 |

You are required to

1. What will be your advice to investors on the solvency position of the company? Calculate debt/equity ratio and interest coverage ratio to justify your answer. **[3]**
2. Being the supplier to Zigsaw Co., what would be your decision if the company wants to buy material of Rs.70000 on a three months’ credit. Calculate liquidity ratio (Current ratio, quick ratio) and efficiency ratio (inventory turnover ratio, debtors turnover ratio) to make decision. **[4]**
3. (a)How much does a deposit of Rs.40000 grow at the end of 10 years at the rate of 6 per cent interest and compounding is done semi-annually. **[2]**

(b) ABC company has taken loan of Rs.10 lakhs for an expansion program from IDBI bank at 7 per cent interest rate per year. The amount has to be repaid in 6 equal annual installments (EMI). Calculate the instalments amount. **[2]**

1. (a) What is risk-return trade-off. Distinguish between unsystematic/business risk and market risk. **[2]**

(b) The following table summarizes the annual returns you would have made on two companies Airtel and Mahindra & Mahindra from 2019 to 2023:

|  |  |  |
| --- | --- | --- |
| Year | Airtel | Mahindra & Mahindra |
| 2019 | 25% | -4% |
| 2020 | -8% | 28% |
| 2021 | 10% | -6% |
| 2022 | 11% | 48% |
| 2023 | 36% | 23% |

1. Estimate the average return of each company. **[2]**
2. Estimate risk in terms of standard deviation in annual returns in each company. **[2]**
3. A firm has the following information about a project.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Income Statement (Rs. In thousands)** | | |
|  |  |  |  |
| Revenue | 16 | 14 | 12 |
| (-) Expenses | 8 | 7 | 6 |
| Gross Profit | 8 | 7 | 6 |
| (-) Depreciation | 4 | 4 | 4 |
| Net Profit | 4 | 3 | 2 |

The initial investment of the project is estimated as Rs.12000. The cost of capital is 12 per cent. Compute:

1. Calculate the cash inflow of the project **[1]**
2. Payback period and discounted payback period, and give your decision. **[2]**
3. NPV for the project and give your decision. **[2]**