Exam Date & Time: 30-Nov-2023 (02:30 PM - 05:30 PM)

# MANIPAL ACADEMY OF HIGHER EDUCATION

SEVENTH SEMESTER B.TECH END SEMESTER EXAMINATIONS, NOV - DEC 2023

**FINANCIAL MANAGEMENT [HUM4051]**

**Marks: 50** **Duration: 180 mins.**

**A**

**Answer all the questions.** Section Duration: 180 mins

Instructions to Candidates: Answer ALL questions Missing data may be suitably assumed
Interest factor table is provided in reference material section, for others use formulas.

1) What is Working Capital Management. Explain in detail the operating cycle in working capital management. (4)

A)

B) Differentiate between:

a) Gross and Net Working Capital

b) Fixed and Fluctuating Working Capital (3)

C) A finance manager, or a chief financial officer, plays an important role in any business decision making. What are the most significant roles of a financial manager? (3)

2) Under your six-year savings plan, you deposit $1000 now, and $1000 at the end of the fourth year, in a bank account that earns 10% per year, compounded annually. You withdraw all your accumulated interest at the end of the second year, and the further interest plus principal at the end of the sixth year.

A)

i. Draw the complete cash flow diagram of these transactions for the bank. (4)

ii. Compute the penalty (suffered by you) for the early withdrawal of interest at the end of the second year.

B) Chain Reaction, Inc., has been growing at a phenomenal rate of 30 percent per year because of its rapid expansion and explosive sales. You believe this growth rate will last for three more years and will then drop to 20 percent per year for another two years after which growth stabilizes. If the growth rate then remains at 10 percent indefinitely, what is the total value of the stock? Total dividends just paid were $5 million, and the required return is 20 percent. (3)

C) ABC Limited currently has an 80:20 debt-to-equity ratio and plans to raise long-term funds for business expansion. Also the owners are not keen in diluting the ownership control. What is the source of finance you would recommend under this situation? Justify and list the merits and demerits of your chosen source. (3)

3) From the following Balances of M/s Pawan Sales on 31/3/2022, prepare a Trading and Profit & Loss Account and a Balance Sheet as on that date. The closing stock on 31.3.2012 was 1,04,000.

A)

(4)

| Particulars | Amount (₹) | Particulars | Amount (₹) |
|---|---|---|---|
| Drawings | 8,000 | Sales | 2,58,000 |
| Capital | 48,000 | Return Inwards | 2,000 |
| Sundry Creditors | 80,000 | Return Outwards | 2,200 |
| Sundry Debtors | 1,26,000 | Office Salaries | 18,000 |
| Bills Receivable | 10,000 | Manufacturing Wages | 8,000 |
| Opening stock | 90,000 | Commission | 9,000 |
| Fixtures and Fittings | 13,000 | Trade Expenses | 5,000 |
| Cash in hand | 2,000 | Rent | 4,400 |
| Machinery | 24,800 | Discount received | 8,000 |
| Bank Overdraft | 10,000 | Bills Payable | 14,000 |
| Purchases | 1,00,000 | | |

B) Jeyaseeli is a sole proprietor having a provisions store. Following are the transactions during the month of January, 2018. Journalise them. (3)

a) Commenced business with cash Rs. 80,000

b) Deposited cash with bank Rs. 40,000

c) Purchased goods by paying cash Rs. 5,000

d) Purchased goods from Lipton & Co. on credit Rs. 10,000

e) Sold goods to Joy and received cash Rs. 11,000

f) Paid salaries by cash Rs. 5,000

g) Paid Lipton & Co. by cheque for the purchases made on 4th Jan. Rs. 10,000

h) Bought furniture by cash Rs. 4,000

i) Paid electricity charges by cash Rs. 1,000

j) Bank paid insurance premium on furniture as per standing instructions Rs. 300

C) Prepare the ledger for cash account and purchase account from the journal entries made in question (3B). (3)

4) A) Mr. Ashish Sharma is vice president of Nepal Metal Works Inc. The company is considering issuing bonds to satisfy part of its financing need for a new venture of Steel Plant, which is going to be launched in Mid-Western Region of Nepal. He knows that Nepalese Financial Market is sensitive to the price and terms and condition of bond issue. As a result of this fact he is reluctant to entertain with new issue. As a financial consultant, he is seeking your help on certain issues associated with bond contract features, price and yields. You are required to address the following issues on behalf of Mr. Sharma. (4)

a) What are the key features of a bond?

b) What are call provisions and sinking fund provisions? Do these provisions make bonds more or less risky?

B) In continuation to Question (4A), How is the value of a bond determined? What is the value of a 10-year, Rs 1,000 par value bond with a 10 percent annual coupon if its required rate of return (kd) is 10 percent? (4)

C) What would be the value of the bond described in Question (4B) if, just after it had been issued, the expected inflation rate rose by 6 percentage points, causing investors to require a 16 percent return? (2)

Would we now have a discount or a premium bond?

5) A) Shrieves Casting Company is considering adding a new line to its product mix, and the capital budgeting analysis is being conducted by Sidney Johnson, a recently graduated MBA. The production line would be set up in unused space in Shrieves' main plant. The machinery's invoice price would be approximately $200,000, another $10,000 in shipping charges would be required, and it would cost an additional $30,000 to install the equipment. The machinery has an economic life of 4 years. The machinery is expected to have a salvage value of $25,000 after 4 years of use. The new line would generate incremental sales of 1,250 units per year for 4 years at an incremental cost of $100 per unit in the first year, excluding depreciation. Each unit can be sold for $200 in the first year. The sales price and cost are expected to increase by 3% per year due to inflation. Further, to handle the new line, the firm's net working capital (NWC) would have to increase by an amount equal to 12% of sales revenues. The firm's tax rate is 40%, and its overall weighted average cost of capital is 10%.

Based on the above information the Net Cash flows are estimated and provided below:

| Particulars | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 |
|---|---|---|---|---|---|
| Initial Outlay | ($240,000) | | | | |
| Operating Cash Flows | | $106,997 | $119,922 | $93,785 | $89,068 |
| CF due to NWC | (30,000) | (900) | (927) | (956) | 32,783 |
| Salvage Cash Flows | | | | | 15,000 |
| Net Cash Flows | ($270,000) | $106,097 | $118,995 | $92,830 | $136,850 |

(5)

Based on these estimates of net cash flows, determine the project's Net present value, Profitability index, and Discounted payback? Do these indicators suggest the project should be undertaken?

B) For the net cash flow and cost of capital information in question (5A), calculate the MIRR for the project. (3)

C) Define the Price-Earnings ratio and Book-value to price ratio. (2)

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