Reg. No.										

MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL

VI SEMESTER B.TECH. (COMMON TO ALL)

END SEMESTER EXAMINATIONS- MAY 2022

SUBJECT: FINANCIAL MANAGEMENT [HUM 4051]

REVISED CREDIT SYSTEM

Time: 3 Hours MAX. MARKS: 50

Instructions to Candidates:

- Answer **ALL** the questions.
- Interest factor table are provided, for others use formulae
- Missing data may be suitably assumed.

1A) Discuss briefly the functions of a chief financial officer. **(03)**

1B) Differentiate between Internal Rate of Return (IRR) technique and Net Present Value technique in capital budgeting. What is the rationale behind these techniques if the alternatives are independent? **(02)**

1C) Journalize the transactions given below, **(05)**

a. 1.1.2011 Sunitha started his business with cash Rs. 5,00,000
b. 2.1.2011 Borrowed from Malathi Rs. 5,00,000
c. 2.1.2011 Purchased furniture Rs. 1,00,000
d. 4.1.2011 Purchased furniture from Meenal on credit Rs. 1,50,000
e. 5.1.2011 Purchased goods for cash Rs. 50,000
f. 6.1.2011 Purchased goods from Ram on credit Rs. 2,50,000
g. 8.1.2011 Sold goods for cash Rs. 1,25,000
h. 8.1.2011 Sold goods to Shyam on credit Rs. 55,000
i. 9.1.2011 Received cash from Shyam Rs. 25,000
j. 10.1.2011 Paid cash to Ram Rs. 90,000

2A) A company is considering buying a new bottle capping machine. The initial cost of the machine is $325,000 and it has a 1O-year life. Monthly maintenance costs are expected to be $1200 per month for the first 7 years and $2000 per month for the remaining years. The machine requires a major overhaul costing $55,000 at the end of the fifth year' of service. Assume that all these costs occur at the end of the appropriate period. What is the future value of all the costs associated with owning and operating this machine if the nominal interest rate is 10.2%? **(03)**

2B) A project requires an initial investment of Rs. 2,50,000 and generates net cash flows of Rs. 95,000, Rs. 95,000, Rs. 1,00,000 and Rs. 1,12,500 in the first, second, third and fourth year respectively. Calculate the regular payback period, modified internal rate of return and the profitability index for the project if the cost of capital is 12%. **(03)**

2C) Based on the bond valuation model, state the bond value theorems. Show how bond values are influenced by the relationship between the required rate of return and the coupon rate with an example. **(04)**

3A) Skanda Pvt Ltd Compay (SKC) a private company which is into the manufacturing of variety of paper cups and related products with its market all over India, the following details of the company are given below: **(03)**

The Skanda Pvt. Ltd. Company (SKC) earned Rs. 70 a share last year and paid a dividend of Rs. 30 a share. Next three years there is an expectation that the SKC would earn Rs. 40, Rs. 50 and Rs. 60 respectively and continue its payout ratio. Assume that you expect to sell the stock for Rs. 2800 after two year from now. If you require 12% on this stock, how much would you be willing to pay for it?

3B) Differentiate between: **(03)**

i) Preference share and Debentures

ii) Hire purchase and Overdraft

3C) Discuss the benefits and drawbacks of equity shares from the standpoints of the company and the investor. **(04)**

4A) ABC Ltd. needs to pay Rs.1,50,000 for its suppliers and its inventory level is about Rs.1,00,000. Also, its accounts receivable is worth 35,000 within its operating cycle. **(03)**

i) Determine the working capital of the firm.

ii) Is the firm in a good position or not. Why?

4B) With a neat sketch explain in detail the concept of operating cycle in working capital management. **(03)**

4C) Explain the concept of gross and net working capital. State the significance of working capital management. **(04)**

5A) From the following Trial Balance prepare the Trading a/c and Profit and Loss a/c for the year ending 31st December, 2010 and Balance Sheet as on that date. The Closing Stock on 31st December, 2010 was valued at Rs. 2,50,000. Note: Commission is received by the company, B/P is Balance Payable and B/R is Balance receivable. **(04)**

Debit Balances	Amount (Rs.)	Credit Balance	Amount (Rs.)
Stock (1-1-2010)	2,00,000	Sundry Creditors	1,50,000
Purchases	7,50,000	Purchases Return	30,000
Sales Return	80,000	Sales	25,00,000
Freight and Carriage	75,000	Commission	33,000
Wages	3,65,000	Capital	17,00,000
Salaries	1,20,000	Interest on Bank Deposit	20,000
Repairs	12,000	B/P	62,000
Trade Expenses	40,000		
Rent and Taxes	2,40,000		
Cash in Hand	57,000		
B/R	40,000		
	5,50,000		
Plant and Machinery	16,00,000		
Withdrawals (Drawings)	1,66,000		
Bank Deposit	2,00,000		
	44,95,000		**44,95,000**

5B) Mr. Ram has Rs.20,000 to invest. Usually, he would deposit the money in his savings account, which earns 6.5% interest. However, he is considering three alternative investment opportunities: **(03)**

Option 1: Buying and holding a stock that grows 12% per year for three years.

Option 2: Making a personal loan of Rs.20,000 to a friend and receiving Rs.1500 per year for three years.

Option 3: Purchasing a 7 year old bond for Rs.20,000. The bond has a face value of Rs.20,000 and a coupon rate of 10% payable semi-annually, with a maturity period of 10 years. Recommend the best option to Mr. Ram.

5C) The Rs.1,000 face value EFG bond has a coupon of 10% (paid semi-annually), matures in 4 years, and has current price of Rs.1,140. What is the EFG bond's yield to maturity? **(03)**

5%

5%	Compound Interest Factors								5%
	Single Payment		Uniform Payment Series				Arithmetic Gradient		
	Compound Amount Factor Find *F* Given *P*	Present Worth Factor Find *P* Given *F*	Sinking Fund Factor Find *A* Given *F*	Capital Recovery Factor Find *A* Given *P*	Compound Amount Factor Find *F* Given *A*	Present Worth Factor Find *P* Given *A*	Gradient Uniform Series Find *A* Given *G*	Gradient Present Worth Find *P* Given *G*	
n	*F/P*	*P/F*	*A/F*	*A/P*	*F/A*	*P/A*	*A/G*	*P/G*	*n*
1	1.050	.9524	1.0000	1.0500	1.000	0.952	0	0	1
2	1.102	.9070	.4878	.5378	2.050	1.859	0.488	0.907	2
3	1.158	.8638	.3172	.3672	3.152	2.723	0.967	2.635	3
4	1.216	.8227	.2320	.2820	4.310	3.546	1.439	5.103	4
5	1.276	.7835	.1810	.2310	5.526	4.329	1.902	8.237	5
6	1.340	.7462	.1470	.1970	6.802	5.076	2.358	11.968	6
7	1.407	.7107	.1228	.1728	8.142	5.786	2.805	16.232	7
8	1.477	.6768	.1047	.1547	9.549	6.463	3.244	20.970	8
9	1.551	.6446	.0907	.1407	11.027	7.108	3.676	26.127	9
10	1.629	.6139	.0795	.1295	12.578	7.722	4.099	31.652	10
11	1.710	.5847	.0704	.1204	14.207	8.306	4.514	37.499	11
12	1.796	.5568	.0628	.1128	15.917	8.863	4.922	43.624	12
13	1.886	.5303	.0565	.1065	17.713	9.394	5.321	49.988	13
14	1.980	.5051	.0510	.1010	19.599	9.899	5.713	56.553	14
15	2.079	.4810	.0463	.0963	21.579	10.380	6.097	63.288	15

10%

n	*F/P*	*P/F*	*A/F*	*A/P*	*F/A*	*P/A*	*A/G*	*P/G*	*n*
1	1.100	.9091	1.0000	1.1000	1.000	0.909	0	0	1
2	1.210	.8264	.4762	.5762	2.100	1.736	0.476	0.826	2
3	1.331	.7513	.3021	.4021	3.310	2.487	0.937	2.329	3
4	1.464	.6830	.2155	.3155	4.641	3.170	1.381	4.378	4
5	1.611	.6209	.1638	.2638	6.105	3.791	1.810	6.862	5
6	1.772	.5645	.1296	.2296	7.716	4.355	2.224	9.684	6
7	1.949	.5132	.1054	.2054	9.487	4.868	2.622	12.763	7
8	2.144	.4665	.0874	.1874	11.436	5.335	3.004	16.029	8
9	2.358	.4241	.0736	.1736	13.579	5.759	3.372	19.421	9
10	2.594	.3855	.0627	.1627	15.937	6.145	3.725	22.891	10
11	2.853	.3505	.0540	.1540	18.531	6.495	4.064	26.396	11
12	3.138	.3186	.0468	.1468	21.384	6.814	4.388	29.901	12
13	3.452	.2897	.0408	.1408	24.523	7.103	4.699	33.377	13
14	3.797	.2633	.0357	.1357	27.975	7.367	4.996	36.801	14
15	4.177	.2394	.0315	.1315	31.772	7.606	5.279	40.152	15

12%

n	F/P	P/F	A/F	A/P	F/A	P/A	A/G	P/G	n
1	1.120	.8929	1.0000	1.1200	1.000	0.893	0	0	1
2	1.254	.7972	.4717	.5917	2.120	1.690	0.472	0.797	2
3	1.405	.7118	.2963	.4163	3.374	2.402	0.925	2.221	3
4	1.574	.6355	.2092	.3292	4.779	3.037	1.359	4.127	4
5	1.762	.5674	.1574	.2774	6.353	3.605	1.775	6.397	5
6	1.974	.5066	.1232	.2432	8.115	4.111	2.172	8.930	6
7	2.211	.4523	.0991	.2191	10.089	4.564	2.551	11.644	7
8	2.476	.4039	.0813	.2013	12.300	4.968	2.913	14.471	8
9	2.773	.3606	.0677	.1877	14.776	5.328	3.257	17.356	9
10	3.106	.3220	.0570	.1770	17.549	5.650	3.585	20.254	10
11	3.479	.2875	.0484	.1684	20.655	5.938	3.895	23.129	11
12	3.896	.2567	.0414	.1614	24.133	6.194	4.190	25.952	12
13	4.363	.2292	.0357	.1557	28.029	6.424	4.468	28.702	13
14	4.887	.2046	.0309	.1509	32.393	6.628	4.732	31.362	14
15	5.474	.1827	.0268	.1468	37.280	6.811	4.980	33.920	15