Nirma University

Institute of Technology

Semester End Examination (RPR), December - 2019

B. Tech. in Information Technology / IC Engineering, Semester-VI (Minor Specialization)

IMM252 Corporate Finance

Exam No. [   ]   Supervisor's initial with date [   ]

Time: 3 Hours

Max. Marks : 100

Instructions:
1. Attempt all questions.
2. Figures to right indicate full marks.
3. Assumption/s if any, state clearly before starting question.
4. Time value of money tables should be given. Scientific non-programmable calculator should be allowed.

SECTION - I

Q-1   **Attempt any two questions**

(A) In what ways is the wealth maximizing objective superior to the profit maximization objective? Explain. (5)

(B) Explain the differences between profit, fund and cash with an example. (5)

(C) What is the concept of working capital cycle? What is meant by cash conversion cycle? Why are these concepts important in working capital management? Give an example to illustrate. (5)

Q-2 (A) A Rs. 1000 par value bond, bearing a coupon rate of 12 percent will mature after 6 years. The appropriate discount rate is 16 percent Compute the following: (10)
(a) What is the value of the bond, if the discount rate is 16 percent?
(b) What is the value of the bond if interest is paid semi-annually?

(B) The next expected EPS of an FMCG company is Rs. 10 for a share of Rs. 10 par value. It has a policy to retain 60% of the earnings. FMCG being a growth industry, it witnesses an abnormally high growth rate for the company which is currently 20%. However, you expect it to come down to its normal level of 10% after next 4 years and stabilize at that level. If the cost of equity is 15%, what should be intrinsic value of the stock of the company? (10)

Q-3 The rate of return on the stock of Marvel Corp and on the market index for 6 periods are as follows: (20)

Period	Return on the stock of Marvel Corp (%)	Return on the market index (%)
1	15	10
2	10	7
3	-8	1
4	18	14
5	12	10
6	20	13

(A) What is the beta of the stock of Marvel Corp?

(B) If the risk-free rate is 6.35%, what is the cost of equity for Marvel Corp under Capital Asset Pricing Model (CAPM)?

OR

Q-3   The returns of two stocks under three possible states of nature are given below: (20)

State of nature	Probability	Return on stock 1	Return on stock 2
1	0.40	-5%	-2%
2	0.25	20%	12%
3	0.35	15%	20%

(A)   What is the standard deviation of the return on stock 1 and on stock 2?

(B)   What is the standard deviation of returns of a portfolio which consist 60% in stock-1 and 40% in stock-2?

SECTION – II

Q-4 (A)   Briefly explain long-term sources of finance.   (5)

Q-4 (B)   What are the salient features of the international foreign exchange market?   (5)

Q-5 (A)   The Normax Company is planning to request a line of credit from its bank on December 2019. The following figures are given: (15)

Actual November 2019	Rs. 150,000
Actual December 2019	150,000
Forecast	
January 2020	300,000
February 2020	450,000
March 2020	600,000
April 2020	300,000

Collection estimates obtained from the credit and collection department are as follows: collected within the month of sale, 5 percent; collected the month following the sale (i.e. next month), 80 percent; collected the second month following the sale, 15 percent. Payments for labor and raw materials are typically made in next month. Total labor and raw materials costs are estimated for each month as follows:

Actual November 2019	Rs. 75,000
Actual December 2019	75,000
Forecast	
January 2020	105,000
February 2020	735,000
March 2020	255,000
April 2020	195,000

Except the above expenses, the remaining expenses as shown below are incurred / recognized in the same month.

General and administrative salaries will amount to approximately Rs. 22,500 a month; lease payments under long-term lease contracts will be Rs. 7,500 a month; depreciation charges will be Rs. 30,000 a month; miscellaneous expenses will be Rs. 2,250 a month; income tax payments of Rs. 52,500 will be due in both March and June; and a progress payment of Rs. 150,000 on a new research laboratory must be paid in April. Cash on hand on January 1, 2020 will amount to Rs. 110,000.

Prepare a cash budget for the first four months of 2020.

Q-5 (B) Following is the cash flow information of a project to be undertaken by Plasto Ltd. The initial cash outlay is Rs. 100 million. (15)

Year	1	2	3	4	5
CF in millions	35	31	27	32	45

Calculate following if the discount rate is 15%;
1. Payback period
2. Discounted payback period
3. Net Present Value
4. Profitability Index

Q-6 Emerald Limited has the following book value capital structure: (10)

Equity Share Capital (150 million @ Rs. 10 par)   Rs. 1,500 million
Reserves and Surplus   Rs. 2,250 million
10.5% P' Share Capt. (1 million @ Rs. 100 par)   Rs. 100 million
9.5% Debentures (1.5 million @ Rs. 1000 par)   Rs. 1,500 million
8.5% Term Loans from Financial Institutions   Rs. 500 million

The debentures of a company are redeemable after three years and are quoting at Rs. 981.05 per debenture. The applicable income tax rate for the company is 35%. The preferred stock of the company is redeemable after 5 years is currently selling at Rs. 98.15 per preference share. The current market price per equity share is Rs. 60. The prevailing default-risk free interest rate on 10-year GOI Treasury Bonds is 5.5%. The average market risk premium is 8%. The beta of the company is 1.18.

Calculate;
A. Cost of Equity (Ke)
B. Cost of Preference Share (Kp)
C. Cost of Debt (After Tax) (Kd)
D. Cost of Term Loan (After Tax) (Kt)
E. Calculate the weighted average cost of capital (Ko) (Using market value proportions)