Nirma University

University Elective Course

Semester End Examination (IR), December - 2017

B. Tech. in CL / CH / ME / EC, Semester-VII

Bachelor of Architecture (B.Arch.), Semester-III

UEIM007 Financial Management

Roll/ 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. Draw neat sketches wherever necessary.

Q-1. Max. Pvt. Ltd. is considering two projects M & N. The cash flow of both the projects is as follows. [20]

Year	Project M	Project N
1	11000	38000
2	19000	22000
3	32000	18000
4	37000	10000

The Investment in Project M is of Rs. 70000 whereas Project N needs an investment of Rs. 60000. The cost of capital is 8%.

What will be Pay-back period (PBP), Discounted Pay-back period, Net present value (NPV), Profitability index (PI) and Internal rate of Return (IRR) for Project M & N? Which Project should be selected? Why?

Q-2. The returns of two assets under four possible states of nature are given below. [20]

State of Nature	Probability	Return on Asset 1 (%)	Return on Asset 2 (%)
1	0.10	5	0
2	0.30	10	8
3	0.50	15	18
4	0.10	20	26

a. What is the standard deviation of the return on asset 1 and asset 2?
b. What is the covariance between the returns on assets 1 and 2?
c. What is the coefficient of correlation between the return on assets 1 & 2?
d. Draw a conclusion from all above requirements.

Q-3. Attempt **any two** of the following problems. [18]

(A) The Zenith manufacturing company produces Cement. The detail of revenue and cost is as below.

Sales Price per bag – Rs. 30
Variable cost per bag- Rs. 17
Fixed Cost – Rs. 12000

From the above details calculate:

I. How much Quantity company need to sales to reach to the break-even point?
II. Assume a 10 % increase in the sales price. What will be the new break-even point?
III. If the fixed cost is to be Rs. 17500, what will be break-even point?

(B) ACME Limited's Equity beta is 1.1. The risk-free rate is 8 percent and the market risk premium is 7 percent. ACME has a debt equity ratio of 1:2. Its pre-tax cost of debt is 10 percent and its tax rate is 30 percent. What will be the weighted average cost of capital (WACC)?

(C) The Following details are available for two firms, A & B Limited.

Particulars	A Limited	B Limited
Sales	15000	24000
Variable cost	7500	14000
Contribution	7500	10000
Fixed cost	3500	3500
Earnings before Interest and tax	4000	6500
Interest	1500	2500
Profit before tax	2500	4000

From the above given details calculate Operating leverage, Financial leverage and Combined leverage. Also comment on the relative risk position of them.

Q-4. Attempt **any two** of the following problems. [16]

(A) The earning per share of a company is Rs. 8 and the rate of capitalisation applicable is 10%. The rate of return on investments is 12%. Compute the market price of the company as per the Walter model if the dividend payout ratio is 50%, 60% and 80%. Also comment on the price.

(B) The following detail is available for MNP Pvt. Ltd.
Earnings per share - Rs. 5
Rate of return on investment – 20 per cent
Cost of capital – 16 per cent
Compute the market price of the company as per the Gordon valuation model if the dividend payout ratio is 40% and 50%. Also comment on the price.

(C) The relevant financial information for Apex Limited is as below:

Particulars	**Beginning of 2014 (In Rs.)**	**End of 2014 (In Rs.)**
Inventory	110	120
Account receivable	140	150
Account payable	60	66

The amount of Sales and Cost of goods sold is Rs. 1000 & Rs. 750, respectively. What is the length of the Operating cycle and cash cycle? Also comment on the Operating and cash cycle time.

Q-5. Attempt **any two** Questions. [16]

(A) What is banking? Explain any seven products/services offered by the banks in India.

(B) What is finance management? Explain the Four financial decisions in detail.

(C) What is Working capital? Explain all Disadvantages of having Shortage or Excess of Working Capital.

Q-6. The following annual details related to XYZ co. [10]

Sales (at the two month's credit) – Rs. 36,00,000

Material consumed (Suppliers extend two months credit) – Rs. 9,00,000

Wages Paid (One month arrear) – Rs. 7,20,000

Manufacturing expenses outstanding with one month arrear – Rs. 80000

Total administrative expenses outstanding with one month arrear – Rs. 2,40,000

Sales promotion expenses, paid quarterly in advance – Rs. 1,20,000

The company sells its products on the gross profit of 25% counting depreciation as part of the cost of the production. Company keeps one month's stock each of raw materials and finished goods, and a cash balance of Rs. 1, 00,000.

Assuming 20% safety margin, determine the working capital requirement.