IIT Delhi

B Tech – MSL 302 – Managerial Accounting & Financial Management

Major Test – November 21, 2017

Max Marks: 40

Duration: 2 hours

Instructions: The marks that each question carries are indicated in brackets.

1. Indicate whether the following statements are true or false with reasons (**2 marks**)
   (a) Overall cost of capital decreases on payment of entire long term debt.
   (b) Retained earnings do not have explicit cost. They carry implicit cost.

2. Wren Manufacturing is in the process of analyzing its investment decision-making procedures. The two projects evaluated by the firm during the past month were projects A and B. The basic variables surrounding each project analysis and the resulting decision actions are summarized in the following table. (**6 marks**)

Basic variables	**Project A**	**Project B**
Cost	\$64,000	\$58,000
Life	15 years	15 years
Expected return	8%	15%
Least-cost financing		
Source	Debt	Equity
Cost (after-tax)	7%	16%
Decision		
Action	Invest	Don't invest
Reason	8% > 7% cost	15% < 16% cost

a. Evaluate the firm's decision-making procedures, and explain why the acceptance of project A and rejection of project B may not be in the owners' best interest.
b. If the firm maintains a capital structure containing 40% debt and 60% equity, find its *weighted average cost* using the data in the table.
c. If the firm had used the weighted average cost calculated in part **b**, what actions would have been indicated relative to projects A and B?
d. Compare and contrast the firm's actions with your findings in part **c.** Which decision method seems more appropriate? Explain why.

3. (a) A mining company's iron ore reserves are being depleted and a declining of iron ore is rising every year. As a consequence, the Co's earnings and dividends are declining at a rate of 5% per year. If previous year dividend was Rs. 5 and the equity required rate of return is 12%, what would be the current price of the equity share of the company? (**3 marks**)

(b) XYZ Ltd. is planning for an issue of 11% preference shares of Rs. 100 each, redeemable at 4% premium after 6 years. They are expected to be sold at a premium of 3%. The likely floatation cost is Rs. 2 per share. Determine the cost of preference share capital assuming 30% corporate tax and dividend payment tax of 20 %. (**3 marks**)

OR

Explain why: **(6 marks)**

(a) The cost of retained earnings is less than the cost of new equity.

(b) Debt is usually considered the cheapest source of financing available to the firm.

4. The High-Flying Growth Company (HFGC) has been growing very rapidly in recent years, making its shareholders rich in the process. The average annual rate of return on the stock in the last few years has been 8%, and HFGC managers believe that 8% is a reasonable figure for the firm's cost of capital. To sustain a high growth rate, the HFGC CEO argues that the company must continue to invest in projects that offer the highest rate of return possible. Two projects are currently under review. The first is an expansion of the firm's production capacity, and the second project involves introducing one of the firm's existing products into a new market. Cash flows from each project appear in the following table. (**10 marks**)

a. Calculate the NPV, IRR, and PI for both projects.

b. Rank the projects based on their NPVs, IRRs, and PIs.

c. Do the rankings in part **b** agree or not?

d. The firm can only afford to undertake one of these investments, and the CEO favors the plant expansion because it offers a higher rate of return (that is, a higher IRR) than the product introduction. What do you think the firm should do? Why?

Year	Plant expansion	Product introduction
0	-$105,000	-$105,000
1	60,000	15,000
2	45,000	30,000
3	30,000	45,000
4	15,000	75,000

5. Write short notes on any two: **(10 marks)**

(1) NI and NOI approach

(2) CAPM

(3) Different techniques of capital budgeting

(4) Factors affecting working capital requirement

6. A company had a quick ratio of 1.4, a current ratio of 3.0, an inventory turnover of 6 times, total current assets of Rs. 810,000, and cash and marketable securities of Rs. 1,20,000. Find annual sales and debtors collection period.

Assume that the current assets of the company comprise only of cash and marketable securities, debtors, and inventory. All sales are on credit. **(6 marks)**