

**FACULTY OF MANAGEMENT STUDIES**

**UNIVERSITY OF DELHI**

**Semester Examination 2014**

Name of Examination...MBA (FT) First Year

Paper Name - Financial Management

Paper No.....6204

Time allowed... THREE Hours Maximum Marks.....50

...ATTEMPT any Five Questions. All questions carry equal marks.

Serial  
No. of  
Question

1. a) Xerox Company has a number of copiers that were bought four years ago for Rs 20,000. Currently maintenance costs Rs 2,000 a year; but the maintenance agreement expires at the end of two years and thereafter the annual maintenance charges will rise to Rs 8,000. The machines have a current resale value of Rs 8,000, but at the end of year 2 their value will have fallen to Rs 3,500. By the end of year 6 the machines will be valueless and would be scrapped. Xerox is considering replacing the copiers with new machine that would essentially do the same job. These machines cost Rs 25,000 and the company can take out an eight year maintenance contract for Rs 1,000 a year. The machines will have no value by the end of eight years and will be scrapped. Both machines are depreciated by using 15% WDV depreciation rate, and the tax rate is 35%. The cost of capital is 7%. When should Xerox replace its copiers?

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1. b) Explain the following terms and give examples to illustrate your answer – Real Options, Modified Internal Rate of Return (MIRR), Profitability Index.

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2. David Lyons, CEO of Lyons Solar Technologies, is concerned about his firm's level of debt financing. The company uses short-term debt to finance its temporary working capital needs, but it does not use any permanent (long-term) debt. Other solar technology companies average about 30 percent debt, and Mr. Lyons wonders why they use so much more debt, and what its effects are on stock prices. To gain some insights into the matter, he poses the following questions to you, his recently hired assistant:

- Business Week recently ran an article on companies' debt policies, and the names Modigliani and Miller (MM) were mentioned several times as leading researchers on the theory of capital structure. Briefly, what assumptions are embedded in the MM and Miller models?
- Discuss the Trade Off theory mentioning the costs associated with Financial Distress. How do firms deal with financial distress?
- Assume that firms U and L are in the same risk class, and that both have  $EBIT = \$500,000$ . Firm U uses no debt financing, and its cost of equity is  $rs_U = 14\%$ . Firm L has \$1 million of debt outstanding at a cost of  $rd = 8\%$ . There are no taxes. Assume that the MM assumptions hold, and then: Find  $v$ ,  $s$ ,  $rs$ , and WACC for firms U and L.

↓ common stock value  
↓ cost of equity  
Value

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3. a) From the following projections of Golders Corporation for the next year, you are required to determine the working capital required by the company.

Annual Sales,	Rs 14,40,000
Cost of Production,	Rs 10,80,000
Raw Material Consumption,	Rs 7,20,000
Monthly Expenditure,	Rs 30,000
Estimated Opening Stock of Raw Material,	Rs 1,40,000
Estimated Closing Stock of Raw Material,	Rs 1,25,000
Inventory norms:	

Raw Material, 2 months

Finished Goods, 1 month

3.b) What is operating cycle? What other factors help a firm in determining its working capital needs?

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✓ 4. a) ABC Inc. are planning to open a small manufacturing corporation. The company will manufacture a full line of solar-energized home product. The investors of the company have proposed two financing plans. Plan I is an all common equity alternative. Under this plan 2,00,000 common shares will be sold to net the firm Rs. 20 per share. Financial leverage is stipulated in plan II and 1,00,000 shares will be sold. A debt issue with 31-year maturity period will be privately placed. The interest rate on the debt issue will be 18 per cent while the principal borrowed will amount to Rs. 20,00,000. The corporate tax rate is 50 percent.

(i) Find the EBIT indifference level associated with the two financing proposals.

(ii) If a detailed analysis that long-term EBIT will always be close to Rs. 1,50,000 annually, which plan would be chosen? Why?

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4. b) The Wei Corporation expects next year's net income to be Rs 40 million. The firm's debt ratio is currently 60 percent. Wei has Rs 18 million of profitable investment opportunities and it wishes to maintain its existing debt ratio. According to the residual dividend model, how large should Wei's dividend payout ratio be next year?

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✓ 4 c) Distinguish between permanent and temporary sources of Finance. In this context also discuss the three approaches to Working Capital Management.

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✓ 5. Comment on the veracity of the following statements with proper justification for your position.

i) "Dividend Irrelevance Proposition is meaningless so long as theories price



share as present value of dividend streams from company."

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- ii) "Managers are reluctant to make dividend changes that might have to be reversed." Also discuss the factors relevant for determining the dividend policy for a Company.

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- iii) Distinguish between Stock Dividends and Stock Splits with the help of a Hypothetical Balance Sheet.

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6. a) Longstreet Communications Inc. (LCI) has the following capital structure, which it considers to be optimal: debt = 25%, Preferred stock = 15%, and common stock = 60%.

LCI's tax rate is 40 percent and investors expect earnings and dividends to grow at a constant rate of 6 percent in the future. LCI paid a dividend of Rs3.70 per share last year ( $D_0$ ), and its stock currently sells at a price of Rs60 per share. Treasury bonds yield 6 percent, the market risk premium is 5 percent, and LCI's beta is 1.3. These terms would apply to new security offerings:

**Preferred:** New preferred could be sold to the public at a price of Rs100 per share, with a dividend of Rs9. Flotation costs of Rs5 per share would be incurred.

**Debt:** Debt could be sold at an interest rate of 9 percent.

- A. Find the component costs of debt, preferred stock and common stock.  
Assume LCI does not have to issue any additional shares of common stock.  
B. What is the WACC?

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6.b) Discuss the factors that are relevant in designing a capital structure for an organization.

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