

**FACULTY OF MANAGEMENT STUDIES**

**UNIVERSITY OF DELHI**

**Semester Examination 2016**

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									
	<p>1. a) Shareholders Equity of a Company appears as follows:</p> <table><tbody><tr><td>Equity share capital ( Par value Rs 5/)</td><td>Rs 10,00,000</td></tr><tr><td>Share premium account</td><td>Rs 12,00,000</td></tr><tr><td>Retained earnings</td><td>Rs 18,00,000</td></tr><tr><td>Total shareholders' equity</td><td>Rs 40,00,000</td></tr></tbody></table> <p>Determine the total number of shares outstanding, and show how the equity amount would change, if the company goes for a 50% bonus issue by capitalizing retained earnings equal to the nominal (par) value of the additional shares issued.</p> <p>b) A company considers purchasing an asset to replace an existing one. The price of the new asset is Rs 300,000, plus an additional Rs 40,000 to transport and install it. The new machine will tie up additional inventory worth Rs 60,000. The asset qualifies the firm for a Rs 45,000 investment tax credit. The company has an existing asset that can be sold for Rs 45,000, but it will cost Rs 15,000 to remove it so that it can be delivered to the buyer. The book value of the existing asset is Rs 40,000, and the company is in the 50-percent tax bracket. What is the net cash outlay for the new asset?</p>	Equity share capital ( Par value Rs 5/)	Rs 10,00,000	Share premium account	Rs 12,00,000	Retained earnings	Rs 18,00,000	Total shareholders' equity	Rs 40,00,000
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2. The Wipro company uses a target capital structure when calculating the cost of capital. The target structure and current component costs based on market conditions follow.

<u>Component</u>	<u>Mix</u>	<u>Cost</u>
Debt	25%	8%
Preferred stock	10	12
Common equity	65	20

The firm expects to earn Rs 20 million next year and plans to invest Rs 18 million in new capital projects. The company pays dividends equal to 60% of earnings. Flotation costs are 10% for common and preferred stock.

- a. What is Wipro's initial WACC?
- b. Where is the retained earnings breakpoint in the MCC?
- c. What is the new WACC after the break?
- d. Wipro can borrow up to Rs 4 million at a net cost of 8%. After that the net cost of debt rises to 12%. What is the new WACC after the increase in the cost of debt?

3. Apple company at present has an all equity capital structure of 20,000 equity shares of Rs 10/- each. To finance its new investment project it now wants to raise an additional Rs 2,00,000 for which it has identified three alternative funding sources as follows:

Alternative 1: 20,000 Equity shares of Rs 10/- each

Alternative 2: Debt at 14% interest

Alternative 3: Preference capital at 12% dividend

The present EBIT of the company is Rs 60,000 per annum, but with the new project the EBIT will rise to Rs 1,40,000 per annum. Tax rate is 30%.

Using the EBIT-EPS analysis, decide which financing alternative should be accepted.

4. Assume that you have just been hired as a financial analyst by Tropical Sweets Inc., a mid-sized California company that specializes in creating exotic candies from tropical fruits such as mangoes, papayas, and dates. The firm's CEO, George Yamaguchi, recently returned from an industry corporate executive conference in San Francisco, and one of the sessions he attended was on real options. Since no one at Tropical Sweets is familiar with the basics of real options, Yamaguchi has asked you to prepare a brief report that the firm's executives could use to gain at least a cursory understanding of the topics.

To begin, you gathered some outside materials the subject and used these materials to draft a list of pertinent questions that need to be answered. In fact, one possible approach to the paper is to use a question-and-answer format. Now that the questions have been drafted, you have to develop the answers.

a. What are some types of real options?

b. What are five possible procedures for analyzing a real option?

c. Tropical Sweets is considering a project that will cost \$70 million and will generate expected cash flows of \$30 per year for three years. The cost of capital for this type of project is 10 percent and the risk-free rate is 6 percent. After discussions with the marketing department, you learn that there is a 30 percent chance of high demand, with future cash flows of \$45 million per year. There is a 40 percent chance of average demand, with cash flows of \$30 million per year. If demand is low (a 30 percent chance), cash flows will be only \$15 million per year. What is the expected NPV?

d. Now suppose this project has an investment timing option, since it can be delayed for a year. The cost will still be \$70 million at the end of the year, and the cash flows for the scenarios will still last three years. However, Tropical Sweets will know the level of demand, and will implement the project only if it adds value to the company. Perform a qualitative assessment of the investment timing option's value.

5. a) With reference to the trade-off theory, explain the costs of distress and agency costs. What are the implications of the trade-off theory for an optimal capital structure?
- b) Explain the Modigliani -Miller theory and Walter's model of irrelevance of dividends.
- 6) The director of Finance of a MNC belonging to the capital budgeting division has asked you to analyze a replacement decision that the company is currently facing. As a financial analyst you need to evaluate the proposed acquisition of a new machine for the company's R&D department. The existing equipment can run for five more years, producing annual revenues of Rs 80,000 with cash expenses of Rs 40,000. The book value of the existing machine is Rs 20,000, and it is being depreciated at Rs 4,000 a year down to a zero book value. The machine can be sold today to net Rs 9,000, or it can be sold in five years to net Rs 6,000. The replacement machine will cost Rs 55,000, plus an additional Rs 25,000 to transport it to the factory and install it. It will generate revenues of Rs 85,000, but will have cash expenses of Rs 35,000. It will be depreciated using the straight-line method over five years when it will have a book of Rs 15,000 and cash salvage value of Rs 25,000. Using the equipment requires an increase in net working capital of Rs 5,000. The tax rate of the company is 40 percent, and cost of capital is 12 percent. Determine the NPV, IRR and PI of the proposal. Should the company replace the machine or continue with the existing one?