FACULTY OF MANAGEMENT STUDIES

UNIVERSITY OF DELHI

Semester Examination 2018

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.

<table>
<tr><td>Serial No. of Question</td><td>1. The capital structure of Apollo Ltd, is of the following order as on December 31, 2017.

<table>
<tr><td></td><td>Rs.</td></tr>
<tr><td>Equity shares (6, 50,000 of Rs. 10 each)</td><td>65, 00,000</td></tr>
<tr><td>10% Preference Shares (15000 of Rs. 100 each)</td><td>15, 00,000</td></tr>
<tr><td>13% Non-convertible debentures (20,000 of Rs 100 each)</td><td>20, 00,000</td></tr>
<tr><td></td><td>1, 00, 00,000</td></tr>
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The Equity Shares of the company are presently selling at Rs. 58 per share. The company is expected to pay a dividend of Rs. 3 per share in 2018 and this is likely to grow at 8% per year for infinity. The corporation tax may be assumed to be 50%. You are required to:

(i). Calculate the weighted average cost of capital on the basis of the existing capitalization scheme.</td></tr>
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(ii). Calculate the revised overall cost of capital, if the management decides to raise additional amount of Rs. 25, 00,000 from IDBI at 15%. The new investment is expected to raise the dividend by Rs. 4 per share without affecting the growth rate. But the increased financial leverage is likely to reduce the market price of the share to Rs. 45.

(iii). Calculate the overall cost of capital in (ii) above, if the growth rate in dividend increases to 10% as a result of additional investment?

2. A Company is considering replacing one of its bottling machines with a new, more efficient one. The old machine presently has a book value of Rs 75,000 and could be sold for Rs 60,000. The old machine if being depreciated using the straight line method down to a zero book value over the next 5 years generating depreciation of Rs 15,000 per year. The replacement machine would cost Rs 2,50,000 and have an expected life of 5 years after which it could be sold for Rs 20,000. Because of reduction in defects and material savings, the new machine would produce cash benefits of Rs 1,00,000 per year before depreciation and taxes. Assume straight line depreciation, a 40 percent marginal tax rate, and a required rate of return of 16 percent. Find: a. Payback period b. The net present value c. The profitability Index d. Internal rate of return.

3. a. A Pharma company invests $ 1000 in a project of which $ 800 is Equity and $200 is debt. The annual cash flows from the project are $ 146 and the tax rate is 25%. Both the interest and the cost of debt are each 7%, while return on equity is 15%. Calculate the NPV and APV of the project for the company.

b. Singer Ltd has estimated its total cash requirement to be Rs 2 crore next year. The opportunity cost of funds is 15% per annum. The company will have to incur Rs 150 per transaction when it converts its short term securities to cash. Determine the optimum cash balance. How much is the total annual cost of the demand for the optimum cash balance?

4. Discuss the determinants of Capital Structure for Indian Companies. How bad is India's corporate debt problem? The trade-off between the tax benefits and the

costs of distress determines optimal capital structure. Present Value (tax shield) initially increases as a firm borrows more. Present Value (cost of financial distress) is small and the value of the firm increases with more borrowing. In this context, explain the trade-off theory of Capital structure.

5. Short Circuit Electric Company (SCEC) is one of the market leaders in electric product manufacturing. Its market share in the same sector is more than 34 percent and is way ahead of its competitors. The performance of the SCEC has been eye caching for the past 15 years. Its earnings per share (EPS) have impressive at more than ₹2 during the last ten years (given face value of the equity share as ₹10). The management had satisfaction of paying adequate dividends to its shareholders which, in turn, has boosted the share price and the market value of SCEC.

EPS, DPS, D/P and P/E Multiple ratio of SCEC, 2003-12

Particulars	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
EPS(₹)	2.62	3.11	3.20	3.30	3.42	3.52	2.86	2.48	2.32	2.1
DPS(₹)	1.8	1.8	2.0	2.0	2.0	2.2	2.2	2.2	2.2	2.2
D/P Ratio (%)	68.7	57.9	62.5	60.6	58.5	62.5	76.9	88.7	95.7	104.8
P/E Multiple						25	22	20	18	15

However, the past four years' (2009-12) have been the cause of concern to management due to a downward trend and a sharp decline in EPS from ₹3.52 in 2008 to ₹2.1 by 2012. In spite of this decrease, SCEC maintained high DPS of ₹2.2 (increased in 2008) in years 2009-2012 and has adhered to a stable dividend policy. This policy, in turn, has arrested the decline in its MPS. However, the position had worsened during 2010-2012 in as much as dividend payments in 2012 were higher than EPS in 2012.

The CEO, Mr. Wireman, when analyzed the situation with his Finance Manager, Mr. Cable, concluded that the reasons for such a downward trend were two-fold:

(i) Increasing competition in the electronic product manufacturing market. Few small firms offered products at lower prices; which in turn, has caused dent in its profit margins.

(ii)Decline in technological up gradation of its R&D unit, which has resulted in lagging behind of SCEC in developing newer and more advanced products in comparison with its competitors.

At this juncture, SCEC is confronted with a choice whether to cut down on the payment of dividends or to continue with the same dividend payment of ₹ 2.2 per share. The CEO also wants to evaluate the option of having stock repurchase concurrently with decrease in DPS.

In order to analyze the same, the CEO asked his Chief Financial Analyst, Mr. Switch, to give recommendations regarding his prospective action, taking into account all the pros and cons of the action and its impact.

6. a. Albany 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 A 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 B 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 percent 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. Prepare an analytical income statement that proves EPS will be the same regardless of the plan chosen at the EBIT found in part (i).

b. What is Economic Value added? How is the same calculated in three different ways? Discuss the benefits of economic value added with applications in business.