

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MBA - SEMESTER-III • EXAMINATION – WINTER • 2014**

**Subject Code: 2830201**

**Date: 09-12-2014**

**Subject Name: Strategic Financial Management (SFM)**

**Time: 10:30 am - 01:30 pm**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- 1 (a) (i) A company is evaluating two mutually exclusive projects. Project X will cost Rs 10,000 now and will generate cash flows of Rs 5,000 each year over its life of four years. Project Y will cost Rs 2,500 and will generate cash flows of Rs 3,000 each year over its life of three years. Which project would you select assuming a risk-free cost of capital of 10 percent? **03**
- (ii) Distinguish between Economic Value Added and Market Value Added. **04**
- (b) ABC Ltd., a well-established firm in pharma-sector, is considering the purchase of one of the two manufacturing companies. The financial manager of the company has developed the following information about the two companies. Both companies have total assets of Rs 30,00,000. **07**

Operating Statement

| Particulars              | X ltd., Rs. | Y ltd., Rs. |
|--------------------------|-------------|-------------|
| Sales Revenue            | 60,00,000   | 60,00,000   |
| Less: cost of goods sold | 45,00,000   | 45,00,000   |
| Selling expenses         | 4,80,000    | 4,80,000    |
| Admin. expenses          | 1,80,000    | 3,00,000    |
| Depreciation             | 2,40,000    | 1,80,000    |
| EBIT                     | 6,00,000    | 5,40,000    |
| Cost break-ups           |             |             |
| Variable costs:          |             |             |
| Cost of goods sold       | 18,00,000   | 36,00,000   |
| Selling expenses         | 3,00,000    | 3,00,000    |
| Total                    | 21,00,000   | 39,00,000   |

- (i) Prepare operating statements for both companies assuming that sales increase by 20 per cent. The total fixed costs are likely to remain unchanged and the variables costs are a linear function of sales.
- (ii) Calculate the degree of operating leverage.
- (iii) If ABC wishes to buy a company which has a lower degree of business risk, which company should be purchased by it?
- Q.2 (a)** Star Engineering Company has an unlevered cost of equity of 15 per cent, cost of debt of 12 per cent and debt ratio of 40 per cent. The company is considering an investment project in its existing line of business. The project will need a cash outlay of Rs 120 crore. It is expected to generate annual EBDIT of Rs 35 crore for 8 years. The project will require Rs 3 crore each year for net working capital and capital expenditure. Star will be able to borrow 50 per cent of the project's cost from a financial institution. The interest rate is 12 per cent p.a. and the loan will be repaid in five equal installments after three years. The corporate tax rate is 30 per cent. Assume straight-line depreciation for computing taxes and zero terminal value **07**

of the project. Should Star accept the project?

- (b) Safed Muskan Ltd. is a company in oral healthcare products. It is expected to grow at a higher rate for 4 years; thereafter the growth rate will fall and stabilise at a lower level. Calculate the value of the firm taking into consideration the below-given information. 07

| Base Year Information              |             | Inputs for the high growth period                                   |         | Inputs for the stable growth period             |       |
|------------------------------------|-------------|---------------------------------------------------------------------|---------|-------------------------------------------------|-------|
| Revenues                           | Rs 3200 mn  | Length of the high growth period                                    | 4 years | Expected growth rate in revenues and EBIT       | 10 %  |
| EBIT                               | Rs. 480 mn. | Growth rate in revenues, depreciation, EBIT and capital expenditure | 20 %    | Capital expenditures are offset by depreciation |       |
| Capital Expenditure                | Rs. 400 mn. | W / C as a % of revenues                                            | 25 %    | W / C as a % of revenues                        | 25 %  |
| Depreciation                       | Rs. 240 mn. | Cost of debt (pre-tax)                                              | 15 %    | Cost of debt (pre-tax)                          | 15 %  |
| W / C as a % of revenues           | 25 %        | Debt to Equity ratio                                                | 1.5:1   | Debt to Equity ratio                            | 1.5:1 |
| Corporate tax rate (for all times) | 35 %        | Risk-free rate                                                      | 12 %    | Risk-free rate                                  | 12 %  |
| Paid up equity capital (Rs 10 par) | Rs. 360 mn. | Market risk premium                                                 | 7 %     | Market risk premium                             | 7 %   |
| Market Value of Debt               | Rs 1200 mn. | Equity beta                                                         | 1.20    | Equity beta                                     | 0.85  |

**OR**

- (b) (i) Explain the terms bonus shares and stock split. What is the rationale for companies to go for either? 04
- (ii) A large engineering company wants to diversify into fertilizer business and organizes it as a new division. The company found a comparable fertilizer company that has an equity beta of 1.20, and debt-to-market value ratio of 0.72. The debt beta is zero. The engineering company will have a debt-to-value ratio of 0.60 for proposed fertilizer business. Calculate the beta for the proposed new division. 03

- Q.3** (a) A company is considering two mutually exclusive projects. The company uses the certainty equivalent approach. The estimated cash flow and certainty equivalents for each project are as follows: 07

|  | Project 1 | Project 2 |
|--|-----------|-----------|
|  | Certainty | Certainty |

| Year | Cash Flow | Equivalents | Cash Flow | Equivalents |
|------|-----------|-------------|-----------|-------------|
| 0    | -30,000   | 1.00        | -40,000   | 1.00        |
| 1    | 15,000    | 0.95        | 25,000    | 0.90        |
| 2    | 15,000    | 0.85        | 20,000    | 0.80        |
| 3    | 10,000    | 0.70        | 15,000    | 0.70        |
| 4    | 10,000    | 0.65        | 10,000    | 0.60        |

Which project should be accepted, if the risk-free discount rate is 5%?

- (b) Explain the terms horizontal merger, vertical merger and conglomerate merger with suitable examples. What possible synergies could exist in each of these types? **07**

**OR**

- Q.3 (a)** What are the fundamental conceptual similarities and differences between risk-adjusted discount rate method and certainty equivalent method? Discuss the comparative advantages and disadvantages of these two methods of risk evaluation. **07**

- (b) XYZ Ltd. is considering merger with ABC Ltd. XYZ Ltd.'s shares are currently traded at Rs 25. It has 2,00,000 shares outstanding and its earnings after taxes (EAT) amount to Rs 4,00,000. ABC Ltd. has 1,00,000 shares outstanding, its current market price is Rs 12.50 and its EAT is Rs. 1,00,000. The merger will be affected by means of a stock swap (exchange). ABC Ltd. has agreed to a plan under which XYZ Ltd. will offer the current market value of ABC Ltd.'s shares. **07**

(i) What is the pre-merger Earnings Per Share (EPS) and P/E ratio of both the companies?

(ii) If ABC Ltd.'s P/E ratio is 8, what is its current market price? What is the exchange ratio? What will XYZ Ltd.'s post-merger EPS be?

(iii) What must the exchange ratio be for XYZ Ltd.'s pre-merger and post-merger EPS to be the same?

- Q.4 (a)** The PQR Ltd. has to make a choice between debt issue and equity issue for its expansion programme. Its current position is as follows: **07**

|                                  |           |
|----------------------------------|-----------|
| 5% Debt                          | Rs 20,000 |
| Equity Capital (Rs 10 per share) | 50,000    |
| Surpluses                        | 30,000    |
| Total Capitalization             | 1,00,000  |
| Sales                            | 3,00,000  |
| Total Costs                      | 2,69,000  |
| Income before interest and taxes | 31,000    |
| Interest                         | 1,000     |
| Earnings before taxes            | 30,000    |
| Income tax                       | 10,500    |
| Income after taxes               | 19,500    |

The expansion programme is estimated to cost Rs 50,000. If this is financed through debt, the rate of interest on new debt will be 7 per cent and the price-earnings ratio will be 6. If the expansion programme is financed through equity, new shares can be sold netting Rs 25 per share; and the price-earnings ratio will be 7. The expansion will generate additional sales of Rs 1,00,000 with a return of 10 per cent on sales before interest and taxes.

If the company is to follow a policy of maximizing the market value of its shares, which form of financing should it choose?

- (b) What is meant by leverage analysis? With what type of risk is each leverage associated? Why must the finance manager keep in mind the degree of financial leverage in evaluating the various financing plans? **07**

**OR**

**Q.4 (a)** P Ltd's capital structure consists of the following

**07**

| Particulars                  | Amount (in Rs Lakhs) |
|------------------------------|----------------------|
| Equity shares of Rs 100 each | 20                   |
| Retained earnings            | 10                   |
| 9% preference shares         | 12                   |
| 7% debentures                | 8                    |
| Total                        | 50                   |

The company's EBIT is at the rate of 15 per cent on its capital employed which is likely to remain unchanged after expansion. The expansion involved additional finances aggregating Rs 25 lakhs for which following alternatives are available to it:

- Issue of 20,000 equity shares at a premium of Rs 25 per share
- Issue of 10% preference shares
- Issue of 8% debentures

It is estimated that the P/E ratio in case of equity shares, preference shares and debentures financing would be 12, 10 and 8 respectively.

Which of the financing alternatives would you recommend and why? The corporate tax rate is 35 per cent.

**(b)** Key information pertaining to the proposed new financing plans of 123 Ltd. is given below:

| Sources of Funds  | Financing Plans                     |                                      |
|-------------------|-------------------------------------|--------------------------------------|
|                   | 1                                   | 2                                    |
| Equity            | 15,000 shares of Rs 100 each        | 30,000 shares of Rs 100 each         |
| Preference Shares | 12%, 25,000 shares of Rs 100 each   | -                                    |
| Debentures        | Rs 5,00,000 at a coupon rate of 10% | Rs 15,00,000 at a coupon rate of 11% |

Assuming a tax rate of 35 per cent,

- Determine the (a) indifference point, and (b) financial break-even point for each financing plan.
- Which plan has more financial risk and why?
- Indicate over what EBIT range, if any, one plan is better than the other.

**Q.5 (a)** The balance sheet of Ever Green Ltd. as on March 31, 2010 is as follows:

**07**

Rs. in lakhs

|                                  |     |     |
|----------------------------------|-----|-----|
| Source of Funds:                 |     |     |
| Shareholders' Funds              |     |     |
| Share Capital                    | 200 |     |
| Reserves and Surplus             | 140 | 340 |
| Loan Funds:                      |     |     |
| Long Term Loans                  |     | 360 |
| Total                            |     | 700 |
| Application of Funds:            |     |     |
| Fixed Assets (Net Block)         |     | 500 |
| Current Assets, Loans & Advances |     |     |
| Inventories                      | 300 |     |
| Receivables                      | 240 |     |
| Cash and Bank                    | 60  |     |
|                                  | 600 |     |

Less: Current Liabilities and Provisions

|                    |     |     |
|--------------------|-----|-----|
| Short-term Loans   | 200 |     |
| Payables           | 120 |     |
| Provisions         | 80  |     |
|                    | 400 |     |
| Net Current Assets |     | 200 |
| Total              |     | 700 |

Sales for the year 2009-10 were Rs 600 lakh. For the year ending on March 31, 2011, they are expected to increase by 20 per cent. The net profit margin after taxes and dividend payout are expected to be 4 and 50 per cent respectively.

You are required to:

- (i) Estimate the External Funds Requirement (EFR) for the year 2010-11.
- (ii) Determine the mode of raising EFR given the following parameters:
  - a. Current ratio should be 1.33
  - b. Ratio of Fixed Assets to Long-term loans should be 1.5
  - c. Long-term Debt to Equity ratio should not exceed 1.06
- (iii) Determine the order of Preference of EFR amongst Short-term loans, Long-term loans and Equities.

Note: Assume Assets will increase pari passu with sales.

- (b)** Write short notes on (i) Corporate Governance & (ii) Agency Theory **07**

**OR**

- Q.5 (a)** “Strategic Financial Planning is subject to the various macro and micro environmental factors.” Elaborate. **07**
- (b)** What is a feasibility study? What are the main objectives of conducting a pre-feasibility study? **07**

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