

GUJARAT TECHNOLOGICAL UNIVERSITY**SEMESTER– 2 EXAMINATION – WINTER 2012****Subject code:** 2820003**Date:**07/01/2013**Subject Name:** Financial Management**Time:** 10:30 – 13:30**Total Marks:** 70**Instructions:**

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

Q.1 (a) Indicate whether the following statements are true or false with valid reason or necessary example: **07**

- (1) The Market Value of the firm is the result of Trade-off between cost and risk.
- (2) The primary capital market operates through the medium of stock exchanges.
- (3) If the output is less than operating break-even point, then the degree of operating leverage will be less than zero.
- (4) A change in YTM affects those bonds with a higher YTM more than it affects bonds with a lower YTM.
- (5) The overall capitalization rate and the cost of debt remain constant for all degrees of leverage. This is pronounced by Net Operating Income Approach.
- (6) In order to maximize the value of a firm according to Walter Model, when the return on investment is more than the cost of equity capital, the firm should not pay dividend at all.
- (7) If security is less risky than the market portfolio, then its beta would be more than 1.

(b)

(1) What is the present value of an income stream which provides Rs. 1000 at the end of year one, Rs. 2500 at the end of year two and Rs. 5000 during each of the years 3 through 10, if the discount rate is 12%? **04**

(b)

(2) Maze Limited is facing gloomy prospects. The earnings and dividends are expected to decline at the rate of 4%. The previous dividend was Rs. 1.50. If the current market price is Rs. 8.00, what the rate of return do investors expect from the stock of Maze Limited? **03**

Q.2 (a) The present credit terms of MNC company are 2/15, net 45. Its sales are Rs. 200 million, its average collection period, ACP, is 30 days, its variable costs to sale ratio, V , is 0.80, and its cost of capital, k , is 12%. The proportion of sales on which customers currently take discount, po , is 0.5. MNC is considering relaxing its discount terms to 3/15, net 45. Such a relaxation is expected to increase sales by Rs. 10 million, reduce the ACP to 27 days, and increase the proportion of discount sales to 0.6. MNC's tax rate is 40%. What will be the effect of liberalizing the cash discount on residual income? **07**

(b) A pro forma cost sheet of a company provides the following data: **07**

Costs (per unit):
 Raw Materials: 52 Rs.
 Direct Labor: 19.5 Rs.
 Overheads: 39 Rs.
 Total Cost (per unit): 110.5 Rs.

Profit: 19.5 Rs.
Selling Price: 130 Rs.

The following additional information available:

Average raw material in stock: 1 Month, Average Material in process: 0.5 Month, Average Finished goods: 1 Month, Credit allowed by suppliers: 1 Month, Credit allowed by debtors: 2 Months, Time lag in payment of wages: 1.5 weeks, Overheads: 1 Month. 25% of sales are on cash basis. Cash balance is expected to be Rs. 120000.

You are required to prepare a statement showing the working capital needed to finance a level of activity of 70000 units of output. You may assume that production carried on evenly, throughout the year and wages and overhead accrue similarly. (1 Month = 4 Weeks & 1 Year = 52 Weeks)

OR

- (b) Consider the following data for a certain item purchased by Magnum Limited. **07**

Annual usage = 6000 units,
Fixed cost per order = Rs. 400,
Purchase price per unit = Rs. 100,
Carrying cost = 20% of inventory value.
What is the EOQ?

Now, assume that a discount of Rs. 5 per unit is offered if the order size is 1000 units. Should Magnum seek the quantity discount?

- Q.3** (a) From the following data calculate NPV and Profitability Index for the following projects. Assume a required rate of return is 10% and 35% tax rate. Assume straight line method of depreciation for tax purpose. Expected Life is 5 years. **07**

Project	A	B
Initial Cash Outlay	Rs. 100000	Rs. 140000
Salvage Value	-	Rs. 20000

CFBDT	Project A	Project B
Year 1	Rs. 25000	Rs. 40000
Year 2	Rs. 25000	Rs. 40000
Year 3	Rs. 25000	Rs. 40000
Year 4	Rs. 25000	Rs. 40000
Year 5	Rs. 25000	Rs. 40000

- (b) As a financial manager of a X co., you are required to determine the weighted average cost of capital of the company using market value weights. The following information is available for computations: **07**

The company's present book value capital structure is:
Rs.

Debentures (Rs. 100 per debenture)	800000
Preference Shares (Rs. 100 per share)	200000
Equity Shares (Rs. 10 per share)	1000000

All the securities are traded in the capital markets. Recent prices are:

Debentures, Rs.110 per debenture
Preference Shares, Rs.120 per shares
Equity Shares, Rs. 22 per shares

Anticipated external financing opportunities are:

- (i) Rs. 100 per debenture redeemable at par, 10 year maturity, 11% coupon rate, 4% flotation costs, sales price Rs. 100
- (ii) Rs. 100 preference share redeemable at par, 10 year

maturity, 12% dividend rate, 5% flotation costs, sales price Rs. 100

- (iii) Equity shares, Rs. 2 per share flotation costs, sales price Rs. 22.

In addition, the dividend expected on the equity share at the end of the year is Rs. 2 per share, the anticipated growth rate in dividends is 7% and the firm has the practice of paying all its earnings in the form of dividends. The corporate tax rate is 35%.

OR

- Q.3 (a)** A machine costs Rs. 100000 and is subject to a depreciation rate of 25% under the WDV method. What is the present value of the tax savings on account of depreciation for a period of 5 years if the tax rate is 40% and the discount rate is 15%? **07**
- (b)** Discuss the application of CAPM to the calculation of cost of equity. Explain its pros & cons also. **07**

- Q.4 (a)** Explain the meaning of Leverage and its types with the following example: **07**
- | | |
|--------------|---------|
| EBIT | Rs. 200 |
| Contribution | Rs. 400 |
| Interest | Rs. 100 |
- Calculate & Interpret DOL, DFL and DCL.
- (b)** From the following selected data determine the value and overall cost of capital of firms; Pfizer and Zydus belonging to the homogeneous risk class under Net Income approach: **07**

Particulars	Levered firm Pfizer	Unlevered firm Zydus
EBIT	200000 Rs.	200000 Rs.
Interest (0.10)	50000 Rs.	-----
Equity capitalization rate	20%	20%
Corporate Tax rate	35%	35%

Which of the two firms has an optimal capital structure?

OR

- Q.4 (a)** Explain Modigliani & Miller position in capital structure theory contribution and illustrate how the arbitrage mechanism works with the help of an example. **07**
- Q.4 (b)** Write a note on Initial Public Offer (IPO). **07**
- Q.5 (a)** The following information is available for Premji Company: **07**
- | | |
|---|-------|
| Earnings per share | Rs. 5 |
| Rate of return required by shareholders | 16% |
- Assuming that the Gordon Valuation model holds, what rate of return should be earned on investments to ensure that the market price is Rs. 50 when the dividend payout is 40%.
- (b)** Discuss the factors which are relevant for determining the Dividend Payout Ratio. **07**

OR

- Q.5 (a)** The following information is available for Avanti Corporation. **07**
- | | |
|---|-------|
| Earnings per share | Rs. 4 |
| Rate of Return on investments | 18% |
| Rate of Return required by shareholders | 15% |
- What will be the price per share as per the Walter Model if the payout ratio is 40%, 50% and 60%?
- (b)** What are the common objections and key regulations applicable to Share Buybacks? **07**
