Seat No.: ________ Enrolment No.______________

GUJARAT TECHNOLOGICAL UNIVERSITY

M.B.A -IInd SEMESTER–EXAMINATION – MAY/JUNE- 2012

Subject code: 2820003 **Date: 30/05/2012**

Subject Name: Financial Management

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.**

Q.1 **(a)** If you deposit Rs.3,000 today at 8 percent rate of interest in how many years (roughly) will this amount grow to Rs.1,92,000 ? Work this problem using the *rule of 72*–do not use tables **03**

(b) You plan to go abroad for higher studies after working for the next five years and understand that an amount of Rs.2,000,000 will be needed for this purpose at that time. You have decided to accumulate this amount by investing a fixed amount at the end of each year in a safe scheme offering a rate of interest at 10 percent. What amount should you invest every year to achieve the target amount? **03**

(c) A finance company advertises that it will pay a lump sum of Rs.100,000 at the end of 5 years to investors who deposit annually Rs.12,000. What interest rate is implicit in this offer? **04**

(d) Pioneer Stores is trying to determine the economic order quantity for a certain type of machine tool. The firm sells 60,000 numbers of this machine tool annually at a price of Rs.80 per piece. The purchase price per machine tool to the firm is, however, Rs.65. The cost of carrying a machine tool is Rs.10 per year and the cost of placing an order is Rs.80. What is the economic order quantity? **04**

Q.2 **(a)** What do you mean by term "Working Capital"? Explain the policies of working capital management. **07**

(b) The present sales of Nachiket Industries are Rs.100 million. The firm classifies its customers into 3 credit categories: A, B, and C. The firm extends unlimited credit to customers in category A, limited credit to customers in category B, and no credit to customers in category C. As a result of this credit policy, the firm is foregoing sales to the extent of Rs.10 million to customers in category B and Rs.20 million to customers in category C. The firm is considering the adoption of a more liberal credit policy under which customers in category B would be extended unlimited credit policy and customers in category C would be provided limited credit. Such relaxation would increase the sales by Rs.30 million on which bad debt losses would be 10 percent. The contribution margin ratio for the firm is 20 percent, the average collection period is 45 days, and the cost of capital is 16 percent. The tax rate for the firm is 35 percent. **07**

What will be the effect of relaxing the credit policy on the residual income of the firm?

OR

(b) You have been asked to prepare a cash budget for the next quarter, January through March, for Jahanara Fashions. They have provided you with the following information: **07**

1. Sales are expected to be: Rs.400,000 in January, Rs.400,000 in February, and Rs.600,000 in March. All sales will be in cash.
2. The estimated purchases are: Rs.380,000 in January, Rs360,000 in February, and Rs.450,000 in March. Payments for purchases will be made after a lag of one month. Outstanding on account of purchases in December last are Rs.350,000.

3. The rent per month is Rs.10,000 and the partners' personal withdrawal per month is Rs.25,000.
4. Salaries and other expenses, payable in cash, are expected to be: Rs.25,000 in January, Rs.20,000 in February, and Rs.30,000 in March.
5. They plan to buy furniture worth Rs.40,000 on cash payment in January..
6. The cash balance at present is Rs.6,000. Their target cash balance, however, is Rs.15,000. What will be surplus/ deficit of cash in relation to their target cash balance?

Q.3 **(a)** Why is preference capital considered as a hybrid source of financing? Evaluate it as a source of long-term finance. **07**

(b) Urmila Ltd. and Lara Ltd. are identical in every respect except that the former does not have debt in its capital structure while later employs Rs. 6 00 000 of 15% debt. The EBIT for both the firms are Rs. 2 00 000. Equity capitalization rate for unleveled company is 20%. Compute the value of the firms using MM assumptions. Tax rate is 35%. Also determine the WACC for both firm. **07**

OR

Q.3 **(a)** "Leverage is Double Edge Sword" Explain this with illustration **07**

(b) Nine Gems Ltd has just installed Machine-R at a cost of Rs 2,00,000. The machine has a five year life with no residual value. The annual volume of production is estimated at 1,50,000 units, which can be sold at Rs 6 per unit. Annual operating costs are estimated at Rs 2,00,000 (excluding depreciation) at this output level. Fixed costs are estimated at Rs 3 per unit for the same level of production. Nine Gems Ltd has just come across another model called Machine-S capable of giving the same output at an annual operating cost of Rs 1,80,000 (exclusive of depreciation). There will be no change in fixed costs. Capital cost of this machine is Rs 2,50,000 and the estimated life is for 5 years with no residual value. The company has an offer for sale of Machine-R at Rs 1,00,000. The cost of dismantling and removal will be Rs 30,000. As the company has not yet commenced operations, it wants to sell Machine-R and purchase Machine-S. Nine Gems Ltd will be a zero-tax company, for seven years in view of several incentives and allowances available. The cost of capital may be assumed at 14 per cent. Advise whether the company should opt for replacement. **03** **04**

Q.4 **(a)** Discuss the theories of capital structure with graphical presentation. **07**

(b) A large sized chemical company has been expected to grow at 14 per cent per year for the next 4 years and then to grow indefinitely at the same rate as that of the national economy, that is, 5 per cent. The required rate of return on the equity shares is 12 per cent. Assume that the company paid a dividend of Rs 2 per share last year. Determine the market price of the shares today **07**

OR

Q.4 **(a)** Explain the nature of the factors which influence the dividend policy of a firm **07**

(b) The required return on the market portfolio is 15 percent. The beta of stock A is 1.5. The required return on the stock is 20 percent. The expected dividend growth on stock A is 6 percent. The price per share of stock A is Rs.86. What is the expected dividend per share of stock A next year? **07**

1. What will be the combined effect of the following on the price per share of stock ?
2. The inflation premium increases by 3 percent.
3. The decrease in the degree of risk-aversion reduces the differential between the return on market portfolio and the risk-free return by one-fourth.
4. The expected growth rate of dividend on stock A decrease to 3 percent.

5. The beta of stock A falls to1.2

Q.5 **(a)** Discuss the "Bank Finance" as working capital finance. **07**

(b) Calculate (a) the operating leverage, (b) financial leverage and (c) combined leverage from the following data under situations I and II and financial plans, A and B. **07**

Installed capacity, 4,000 units
Actual production and sales, 75 per cent of the capacity
Selling price, Rs 30 per unit and Variable cost, Rs 15 per unit
Fixed cost: Under situation I, Rs 15,000 and Under situation II, 20,000
Capital structure:

Particulars	Financial plan	
	A	B
Equity	Rs 10,000	Rs 15,000
Debt (0.20 interest)	10,000	5,000

OR

Q.5 **(a)** Discuss the relationship of bond value with respect to yield and maturity. **07**

(b) A proforma cost sheet of a company provides the following particulars: **07**

Particulars	Amount per unit
Raw materials	Rs 80
Direct labour	30
Overhead	60
Total cost	170
Profit	30
Selling price	200

The following further particulars are available: Raw materials in stock, on average, one month; Materials in process (completion stage, 50 per cent), on average, half a month; Finished goods in stock, on average, one month. Credit allowed by suppliers is one month; Credit allowed to debtors is two months; Average time-lag in payment of wages is 1.5 weeks and one month in overhead expenses; one-fourth of the output is sold against cash; cash in hand and at bank is desired to be mantained at Rs 3,65,000.

You are required to prepare a statement showing the working capital needed to finance a level of activity of 1,04,000 units of production. You may assume that production is carried on evenly throughout the year, and wages and overheads accrue similarly. For calculation purposes, 4 weeks may be taken as equivalent to a month.

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