Eastern University, Sri Lanka

Faculty of Commerce & Management

Special Examination for Final Year Business Administration – 2005/06

MGT 3043 Financial Management

Answer all the questions

Time: 03 Hours

Q1 a) You have been given the following information for a decision making regarding four projects

Cash Flow stream	End of Year (in Rupees)				
	1	2	3	4	5
Project A	1000	2000	2000	3000	3000
Project B	6000	-	-	-	-
Project C	-	-	-	-	12000
Project D	2000	-	5000	-	3000

I. Calculate the future value of each stream at the end of year 5 with an interest rate of 10 percent

II. Compute the present value of each stream if the discount rate is 14 percent

III. Compute the internal rate of return of each stream if the initial investment at time 0 were Rs.6000

(12 Marks)

b) Zwing-Zook Enterprise has a beta of 1.45. The risk-free rate is 6 percent and the expected return in the market portfolio is 10 percent. The company presently pays a dividend of Rs.2 a share and investors expect it to experience a growth in dividends of 7 percent per annum for many years to come.

I. What is the stock's required rate of return according to the CAPM?

II. What is the stock's present market price per share, assuming this required return?

(08 Marks)

a) High-Low Plumbing Company sells plumbing fixtures on terms of 2/10, net 30. Its financial statements over the last 3 years follows

	2001	2002	2003
Cash	Rs. 30,000	Rs. 20,000	Rs. 5,000
Accounts receivable	200,000	260,000	290,000
Inventory	400,000	480,000	600,000
Net fixed assets	800,000	800,000	800,000
	1,430,000	1,560,000	1,695,000
Accounts payable	Rs. 230,000	Rs. 300,000	Rs. 380,000
Accruals	200,000	210,000	225,000
Bank loan, short term	100,000	100,000	140,000
Long-term debt	300,000	300,000	300,000
Common stock	100,000	100,000	100,000
Retained earnings	500,000	550,000	550,000
	1,430,000	1,560,000	1,695,000
Sales	Rs. 4,000,000	Rs. 4,300,000	Rs. 3,800,000
Cost of goods sold	3,200,000	3,600,000	3,300,000
Net profit	300,000	200,000	100,000

Using the following ratios, analyze the company's financial condition and performance over the last 3 years.

I. Current ratio

II. Acid-test ratio

III. Average collection period

IV. Inventory turnover

V. Total debt to net worth

VI. Long-term debt to total capitalization

VII. Gross profit margin

VIII. Net profit margin

IX. Assets turnover

X. Return on assets

(12 Marks)

b) You borrow Rs.10,000 at 14 percent compound annual interest for four years. The loan is repayable in four equal annual installments payable at the end of each year.

I. What is the annual payment that will completely amortize the loan over four years? (You may wish to round to the nearest Rupee.)

II. Of each equal payment, what is the amount of interest? The amount of loan principal?

(08 Marks)

Q3 a) The Sunrise and Sunset companies have the following probability distribution of returns;

Economic conditions	Probability	Returns%	
		Sunrise	Sunset
High growth	0.1	32	30
Normal growth	0.2	20	17
Slow growth	0.4	14	6
Stagnation	0.2	-5	-12
Decline	0.1	-10	-16

I. You are required to:

II. Determine the Expected Return for Stock Sunrise and Sunset?

III. Determine the Standard Deviation for Stock Sunrise and Sunset?

IV. If you invested equally on Stock Sunrise and Sunset,

(1) Calculate the Expected Return of Portfolio?

(2) Calculate the Standard Deviation of Portfolio?

(3) Correlation of returns between the Stock Sunrise and Sunset?

V. Find optimum investment proportion in stock Sunrise and Sunset?

(14 Marks)

b) A company has a target capital structure calling for 30% debt, 10% preferred stock and 60% common equity. It's before tax cost of debt is 10%, its cost of preferred stock is 12%, its cost of common equity from retained earning is 15% and its marginal tax rate is 40%. Calculate the Weighted Average Cost of Capital (WACC).

(06 Marks)

Q4 a) Silicon Wafer Company presently pays a dividend of Rs.1 per share and has a share and has a share price of Rs.20

i. If this dividend was expected to grow at a 12 percent rate forever, what is the firm's expected, or required, return on equity using a dividend discount model approach?

ii. Instead of the situation in Part (i), suppose that the dividend was expected to grow at a 20 percent rate for five years and at 10 percent per year thereafter. Now what is the firm's expected, or required, return of equity.

(10 Marks)

b) Fast and Loose Company has outstanding an 8 percent, four-year, Rs.1000 par value bond on which interest is paid annually.

i. If the market required rate of return is 15 percent, what is the market value of the bond?

ii. What would be its market value if the market required return dropped to 12 percent? To 8 percent?

(10 Marks)

Q5 a) Proforma cost sheet of a company provides the following data:

	Costs per unit
Raw materials	52.00
Direct lobar	19.50
Overheads	39.00
Total cost (per unit)	110.50
Profit	19.50
Selling price	130.00

The following is the additional information available:

Average raw material in stock: one month; average material in process: half a month. Credit allowed by suppliers: one month; credit allowed to debtors: two months. Time lag in payment of wages: one and a half weeks. Over head: one month. One –fourth of sales are on cash basis. Cash balance is expected to be Rs 120000.00.

You are required to prepare a statement showing the working capital needed to finance a level of activity of 70000.00 units of output. You may assume that the production is carried on evenly throughout the year and wages and overheads accrue similarly.

(10 Marks)

b) A company wants to lease a Rs 10,00,000 equipment. The lessor requires eight annual end-of-the-year lease payments of Rs 175,000. The company's marginal tax rate is 30 per cent. If it buys the equipment, it can write-off using straight line method for 8 years. The company's borrowing rate is 15 per cent. Should the company lease the equipment?

(10 Marks)