EASTERN UNIVERSITY, SRI LANKA

FACULTY OF COMMERCE AND MANAGEMENT

Third Year First Semester Examination in Bachelor of Commerce/ Bachelor of Commerce (Specialization in Accounting and Finance)-2009/2010 (August 2011)

DAF 3043 Corporate Finance

Answer All Questions. **Time: Three (03) hours.**

Calculator Permitted.

---

1) The following are the financial statement of the AKM plc for the year 2010:

The Income Statement for the year ended 31.12.2010

	Rs.	Rs.
Sales: Cash	280000	
Credit	1120000	1400000
Less: Cost of Sales		840000
Gross Profit		560000
Less: Operating expenses	140000	
Depreciation	98000	
Interest on Long term Debt	42000	280000
Profit before taxes		280000
Less: Taxes		140000
Profit after taxes		140000
Less: Preference Dividend	17000	
Ordinary Dividend	25000	42000
Retained profit for the year		98000
Profit & Loss b/f		182000
		280000

Balance sheet as at 31.12.2010

Liabilities	Rs.	Assets	Rs.
Ordinary share capital (Rs.10 each)	140000	Fixed assets	1050000
Preference share capital	280000	Goodwill	140000
Profit & Loss account	280000	Stock	490000
Long term debt	840000	Debtors	350000
Creditors	280000	Cash	70000
Bills payables	140000		
Taxes payable	100000		
Outstanding expenses	40000		
	2100000		**2100000**

The ratios for the years 2008 and 2009 for the AKM plc and their industry ratios a
given below:

	2008	2009	Industry
Current ratio	2.54	2.10	2.30
Acid test ratio	1.10	0.96	1.20
Debtor turnover	6.00	4.80	7.00
Stock turnover	3.80	3.05	3.85
Long term debt to total capital	0.38	0.41	0.4
Gross profit margin %	38	41	40
Net profit margin %	18	16	15
Return on equity %	24	29	19
Return on total assets %	7.0	6.8	8.0
Total assets turnover	0.5	0.6	0.7
Interest coverage	10	9	10
Earning Per Share (Rs.)	9.00	8.50	6.00
Dividend Per share (Rs.)	2.00	1.50	1.80

Required:

Calculate the ratios for 2010 and evaluate the company's operating performance and financial position comparing between years and with the industrial average.

(25 Marks)

02. (I) Find the present value of the cash inflows of Rs.10000 at the end of each year for next 10 years assuming a discount rate of 12 percent.

(05 Marks)

(II) Compute the present value of the cash flows of Rs.50000; Rs.75000; (Rs.10000); Rs.75000; and Rs.90000 flown at the end of one through five years. Assume a 15 percent discount rate.

(05 Marks)

(III) A Bank pays 10 percent annual interest and compounds it bi-annually for a fixed deposit scheme. If Rs.25000 is deposited today, how much shall it grow at the end of 5 years?

(05 Marks)

are The Profit/ Volume ratio of PDA plc is 40% and its Margin of Safety is 50%. Sales is Rs.800000.

Required: Calculate the following:

(a) the Break-Even Point

(b) Net Profit

(07 Marks)

) BMV plc sold in two successive years 7000 and 9000 units and incurred a loss of Rs.10000 and earned Rs.10000 as profit respectively. The selling price per unit is Rs.100.

Required: Calculate the following:

(a) The amount of Fixed Cost

(b) The number of units to break even

(c) The number of units to earn a profit of Rs.50000

(10 Marks)

(Total 25 Marks)

(I) A machine "M" has a cost of Rs.300000 and net cash flow of Rs.80,000 per year for 6 years. A substitute machine "N" would cost Rs.200000 and generate net cash flow of Rs.56000 per year for 6 years. The required rate of return of both Machines is12%

Calculate the NPV and the IRR for each machine. Which machine should be purchased and why?

(07 Marks)

(IV) A firm deposits Rs.20000 at the end of each year for five years at 11 per interest rate. How much would this annuity accumulate at the end of the fifth ye

(05 Ma

(V) A firm purchased a machine for Rs.1000000 by making a down paymen Rs.150,000 and remainder in equal installments of Rs.250,000 for five years. W is the rate of interest to the firm?

(05 Mar

(Total 25 Mar

03. (I) Two firms, GKB plc and NSP plc, sell identical products in the same market. Th budgeted profit and loss accounts for the year ending on 31st December 2011 a as follows:

	GKB plc		NSP plc	
	Rs	Rs	Rs	Rs
Sales		400000		40000
Less: Variable Costs	320000		280000	
Fixed Costs	40000	360000	80000	36000
Net Profit		40000		4000

Required:

(a) Calculate the Break-Even Point for each firm

(b) State what shall be the likely effect on the profits of the firms in conditions of (i) increasing demand for the product, (ii) falling demand for the product

(08 Marks)

II) The SDR plc and the MRT plc have the following probability distribution of returns from their securities:

Economic Conditions	Probability	Returns (%)	
		SDR plc	MRT plc
High growth	0.1	32	-14
Normal growth	0.2	20	-10
Slow growth	0.4	10	06
Stagnation	0.2	-08	17
Decline	0.1	-12	30

Required:

(i) Determine the Covariance of returns

(ii) Determine the Correlation of returns between the two companies' securities

(iii) If a portfolio is created by investing equally in securities of both companies, what will be the Expected Rate of Return of the Portfolio

(iv) Measure the Risk of the Portfolio by calculating the Standard Deviation of its returns and comment on the risk of the portfolio

(v) Determine the optimal combination of two securities to form the minimum risk portfolio

(18 Marks)

(Total 25 Marks)