EASTERN UNIVERSITY, SRI LANKA
FACULTY OF COMMERCE AND MANAGEMENT
PART II EXAMINATION IN BBA/COM
1998/99 (OCT/NOV- 2000)

BBA 304 FINANCIAL MANAGEMENT

Time : 03 Hours

Answer **ALL** questions

01. i. Last year Eric Company distributed Rs. 4/- per share as dividend. Both earnings and dividends are expected to grow at a constant rate of 8 percent. The present market price of the share is Rs. 50 per share. The Company's beta coefficient is 1.5. The return on market portfolio is 12 percent and risk-free rate is 9 percent. Company's A-rated bonds are yielding 12 percent.

    Calculate the cost of retained earnings (Internal equity)

    Using. a. The Gordon's Growth Model

    b. The Bond Plus Method

    c. Capital asset pricing model (CAPM)

    (06 Marks)

    ii. Nissan a Japanese based car manufacturer is evaluating two overseas locations for a proposed productions expansion, one site in India, other on Sri Lanka. The likely investment in each site depends to a great extent on future economic conditions. These scenarios are postulated, and the internal rate of return from each investment is computed under each scenario. The returns with estimated probabilities are shown below.

	Internal Rate of Return (IRR)	
Probability	**Mumbay**	**Colombo**
0.3	20%	10%
0.3	10%	30%
0.4	15%	20%

Required:

a. Calculate the expected IRRs and standard deviation of IRR for each investment.

(08 Marks)

b. If the Company has expected to consider following investment mix, what would be the portfolio returns and standard deviation of portfolio returns.

   i. India 50% and Sri Lanka 50%

   ii. India 75% and Sri Lanka 25%

   The correlation between two investment is zero (0)

(06 Marks)

c. Explain the potential advantages and disadvantage of portfolio investments.

(04 Marks)

(Total 24 Marks)

02. The Management of a Company is considering five investments proposals for investing Rs.750,000.

Investment	Profitability Index	Initial outlay
1	1.3	500,000
2	1.4	100,000
3	1.1	400,000
4	1.5	200,000
5	1.6	150,000

Projects 3 and 4 are mutually exclusive. All the projects are divisible. You are required to identify the optimum project mix and the expected net present value (NPV) on the proposed project mix.

(06 Marks)

ii. Arun Company Ltd. is considering replacing a machine, which was purchased two years ago for Rs.370, 000. The remaining life of this machine is 10 years. At the retirement of the machine it can be recovered Rs.10,000 as scrap sale value. However, another firm is ready to buy this machine for Rs.100,000 at the beginning of this year. The Company applies straight-line depreciation for this type of machine.

To replace the machine company, is considering a new more efficient machine. The purchase value of this machine is Rs. 420,000/- At end of 10th year; the salvage rate of this machine is 20,000. The machine will have a greater capacity, and annual returns are expected to go up by Rs.40,000 per year.

The operating efficiency of the new machine will also produce an expected cost saving of Rs.50,000 per year. The company's tax rate is 40%. A 25% investment allowance will apply if the machine is purchased.

Additionally, if the machine is purchased inventories will increase by Rs.50,000, receivables by Rs.25,000 and payables by Rs.20,000 during the life the project.

Determine the economic desirability of the purchase of the machine, assuring the cost of capital to be 12%.

(16 Marks)

(Total 22 Marks)

03. Eastern Bright Company Ltd. is considering a proposal to acquire new machine. Because of the shortage in cash available to purchase the machine the lease financing alternative will have to be considered as well. The finance department has been able to provide the following estimates.

Expected useful life	- 5 years
Purchase price	- Rs.2.3 Million
Lease payment (premium)	- Rs.720,000
Annual operating cost (if purchased)	Rs.260,000 (Fixed for the five years)
Annual operating cost (if leased)	Rs.60,000
Scrap value	Nil

In addition you are given the following information:

i. Lease payment being required at the beginning of the year.

ii. The machine, if purchased would qualify for capital allowance.

iii. Taxation rate is 40%.

iv. There is 12 months lag in payment of taxes and in the receipt of tax allowances.

v. The company's cost of capital is 20% and its current net of tax long-term borrowing rate is 9%.

You are required to advise the company whether it should purchase or lease the machine.

(20 Marks)

04. i. Brown Private Ltd. Company a manufacturer of novelty toys, has the following working capital items in its balance sheet at the start and end of its financial year.

	1 January	*31 December*
Stock	110,000	130,000
Debtors	64,000	96,000
Creditors	60,000	90,000

Turnover for the year Rs.900,000 and cost of sales is Rs.560,00.
Based on the above data you are required to compute the cash operating cycle.

(04 Marks)

ii. During the next three months the Vijitha Company Ltd. will require to find Rs. 600,000 for the financing of some new equipment. It had been anticipated that the company would have been able to find the funds for this from internal sources but by the end of the June the bank overdraft will have reached the limit of Rs.250,000. The Company does not operate a detailed budgeting planning system but you have been able to obtain the following sales estimates.

(Rs.'000)

	Cash sales	*Credit sales*	*Total sales*
July	400	2000	2400
August	450	2100	2550
September	500	2200	2700

The sales price is estimated to give a gross profit margin of 33.33% on gross cost and Rs.2.4 million of goods at sales value will be needed as stock to enable the above sales forecasts to be met. All company purchases are paid for on receipts in order to get the benefit of a 5% discount, and likewise a discount of 3% is offered to customers who pay within 15 days. Only 50% of customers pay in time to take the benefit of the cash discount, 20% pay at the end of 30 days and the remainder at the end of 60 days. The estimated other expenses payable monthly are as follows:

Fixed Rs.500,000
Variable 12.5% of gross sales.

Cash sales for June were Rs.200,000 and credit sales were Rs.2.85 million, of which Rs.1.85 million were still outstanding. The operating balances for beginning of July are as follows.

Stock Rs.2.2 million
Debtors Rs.2.75 million

Prepare the cash budget for the months of July, August and September along with a report commenting on any other matters that you would wish the directors of the company to consider.

(16 Marks)
(Total 20 Marks)

i. Briefly explain different methods of Valuation used by firms.

(03 Marks)

ii. What is meant by 'Mutually Exclusive' project?

(03 Marks)

iii. Distinguish between traditional methods and discounted cash flows (DCF) methods of investment appraisal?

(03 Marks)

iv. Mr. Ganesh is drawing an annual salary of Rs. 180,000/- of which he is prepared to spend 40% for investment annually. However this amount in not adequate enough to start a business. Therefore he approaches you to get a valuable advice. The annual 40% of his salary can be paid as installment for 15 years. How much can be borrowed from the bank at the interest rate of 18% per annum? Advise Mr. Ganesh?