UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF MANAGEMENT AND FINANCE

Bachelor of Business Administration (Level-1, Semester-III) Examination-July, 2017

FIN-1301 Financial Management

Three (03) Hours

Answer All Questions

Use of Calculators is allowed.

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1. i. Explain the two components of total risk. Which risk is relevant in explaining the relationship between risk and return as per Capital Asset Pricing Model?

(05 marks)

ii. The following common stocks are available for investment:

Common Stock	Beta
A	1.40
B	0.80
C	0.60
D	1.80
E	1.05
F	0.90

a. If you invest 20 percent of your funds in each of the first four securities, and 10 percent in each of the last two, what is the beta of your portfolio?

(03 marks)

b. If the risk-free rate is 8 percent and the expected return on the market portfolio is 14 percent, what will be the portfolio's expected return?

(03 marks)

iii. Selena Maranjian is considering investing in a bond currently selling for Rs. 9,730. The bond has five years to maturity, a Rs. 10,000 face value, and a 10 % coupon rate. The next annual interest payment is due one year from today. The approximate discount factor for investments of similar risk is 9%. Calculate the intrinsic value of the bond. Based on this calculation, should Selena Maranjian purchase the bond?

(06 marks)

iv. John Company currently pays a dividend of Rs 2.00 per share on its common stock. The company expects to increase the dividend at a 15 percent annual rate for the first four years and at a 10 percent rate for the next three years, and then grow the dividend at a 7 percent rate thereafter. This phased-growth pattern is in keeping with the expected life cycle of earnings. You require a 12 percent return to invest in this stock. What value should you place on a share of this stock?

(08 marks)

(Total 25 Marks)

2. i. Does the payback period method of evaluating projects identify the ones that will maximize wealth? Explain.

(03 marks)

ii. When a firm is faced with capital rationing, how could the profitability index (PI) be used to select the best projects?

(03 marks)

iii. Why doesn't choosing the projects with the highest Profitability Index (PI) always lead to the best decision?

(03 marks)

iv. Champion company is evaluating the following 7 investment proposals. The company has a capital expenditure ceiling of Rs.150 million, and therefore, cannot accept all available proposals.

Project	Cash outlay (Rs. million)	NPV (Rs. million)
O	10	1.8
P	50	8.0
Q	20	4.0
S	60	3.6
T	100	25.0
U	80	18.0
V	40	4.0

You are required to rank the proposals according to PI and identify the group of proposals to be accepted.

(06 marks)

v. Rainbow Company has the opportunity to bring out a new product, the Vitamin-Burger. The initial cost of the assets for the new product is Rs.100 million, and the company's working capital would increase by Rs.10 million during the life of the new product. The

new product is estimated to have a useful life of four years, at which time the assets would be sold for Rs.5 million.

Management expects company sales to increase by Rs.120 million the first year, Rs.160 million the second year, Rs.140 million the third year, and then trailing to Rs.50 million by the fourth year because competitors have aggressively launched competitive products. Operating expenses are expected to be 70% of sales, and depreciation is based on an asset life of three years under MACRS (modified accelerated cost recovery system) schedule is as follows.

Recovery Year	3-Year property Class
1	33.33 %
2	44.45 %
3	14.81 %
4	7.41 %

If the required rate of return on the Vitamin-Burger project is 8% and the company's tax rate is 30%.

a. Calculate the initial cash flow, incremental operating cash flows and terminal year cash flow for Rainbow Company's new product opportunity.
b. Determine whether the launch of new product is prudent by using Net Present Value (NPV) Method.

(10 marks)
(Total Marks 25)

3. i. "Lack of control over current assets can have adverse impact on the company's performance". Critically examine this statement.

(06 marks)

ii. To increase sales from their present annual figure of Rs.24 million, Kim Chi Company, a wholesaler, introduced more liberal credit standards. Currently, the firm has an average collection period of 30 days. It believes that, with increasingly liberal credit standards, the following will occur

	Credit Policy			
	P	Q	R	S
Increase in sales from previous level (in millions rupees)	2.8	1.8	1.2	0.6
Average collection period for incremental sales (days)	45	60	90	144

Kim Chi Company has estimated that the following pattern of bad-debt losses will prevail if it initiates the increased liberal credit terms

	Credit Policy			
	P	Q	R	S
Bad-debt losses on incremental sales	1.5%	3.0%	5.0%	7.5%

The prices of its products average Rs.20 per unit, and variable costs average Rs.18 per unit. The company has a pre-tax opportunity cost of funds is 30 percent. (Assume a 360-day year.)

Which credit policy should be followed? Justify your answer.

(07 marks)

(Total 13 Marks)

4. i. Write down the main factors which influence the optimum capital structure.

(03 marks)

ii. Clearly explain how Modigliani and Miller are (MM) capital structure theory differs from the traditional theory of capital structure? (04 marks)

iii. Assume you are in a "Modigliani Miller" world with corporate taxes but no costs of financial distress. Jupiter PLC has perpetual EBIT of Rs. 8 million per year and an all equity discount rate of 12%. Jupiter has Rs.15 million of debt outstanding at a cost 8%, and its corporate tax rate is 30%.

a. What is Jupiter PLC's value?

b. What is Jupiter PLC's cost of equity?

(05 marks)

(Total Marks 12)

5. i. "Financial Management is related not only to fund raising but encompasses the wider perspective of managing the finances for the company efficiently" Do you agree? Explain with respect to major financial decisions of a firm.

(06 marks)

ii. What is the difference between the degree of operating leverage and financial leverage? Explain how the knowledge of these concepts would be useful for a Financial Manager.

(06 marks)

iii. A company has assets of Rs. 2,000,000 financed wholly by equity share capital. There are 1,00,000 shares outstanding with a book value of Rs. 20 per share. Last year profit before taxes was Rs. 375,000. The tax rate is 30 percent. The company is thinking of an expansion programme that will cost Rs. 1,000,000. The financial manager considers the three financing plans: (a) selling 50,000 shares at Rs. 20 per share, (b) borrowing Rs. 1,000,000 at an interest rate of 12 percent, or (c) selling Rs 1,000,000 of preference shares with a dividend rate of 11 per cent, The profit before interest and tax are estimated to be Rs. 550,000 after expansion.

Calculate the earnings per share and the rate of return on shareholder's equity for each of the three financing alternatives. If you are financial analyst which alternative financing method would you choose?

(07 marks)

iv. A soft drink company sells 300,000 bottles of soft drinks a year. Each bottle produced has a variable cost of Rs. 0.30 cents and Selling price Rs. 0.55 cent. Fixed operating costs are Rs.60,000. The company has current interest charges of Rs.5,000 and preferred dividends of Rs.2,200. The corporate tax rate is 30 percent.

Calculate the degree of operating leverage, the degree of financial leverage and the degree of the total leverage.

(06 marks)

(Total 25 Marks)

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