## UNIVERSITY OF COLOMBO, SRI LANKA FACULTY OF MANAGEMENT AND FINANCE

Bachelor of Business Administration (Semester V) Examination – July, 2022

## **FIN 3313- Corporate Finance**

## Instructions.

- 1. Time allowed is three (03) hours.
- 2. Answer <u>All</u> questions.
- 3. The use of calculators is permitted.
- 4. This paper comprises four (04) questions on six (06) pages.
- 5. This is an online and open book examination.

## 01.

i. What is the main reason that an agency relationship exists in the corporate form of organization? In this context, what kind of problems can arise? Briefly explain your opinion with appropriate examples.

(06 marks)

ii. What are the primary functions of corporate finance? Briefly explain your answer.

(05 marks)

iii. Do you think it is important that Financing strategy and Product market strategy to be aligned? Briefly explain your answer with appropriate examples

(04 marks)

iv. Kevin, your friend, is working as a credit manager in his father's firm (a medium-sized business). He had just experienced her first customer default. The customer went bankrupt and owed Rs. 300,000. The court settlement was expected to be only 30,000. Kevin was planning to inform his dad (who was not warm and fuzzy individual) and had asked you for advice on how to present it? Assume that Kevin has provided you with the following information:

Capacity utilization is less than 50%. Profit margin is 30%. This is not the first sales to the customer. He had purchased 3,300,000 worth of products over 2 years, of which 3,000,000 had been fully paid and another 30,000 payment is expected. How would you help Kevin to justify his decision to extend credit to this customer? What is the real loss to the company?

(05 Marks)

v. Briefly explain how a company can improve profitability/earnings through revenue growth and cost optimization?

(05 marks)

vi. Based on the risk and return relationship of the CAPM, provide values for the missing data in the table. (You should show relevant workings for each of the missing data)

Security	Expected Return	Beta	Standard Deviation	Non-Market Risk
А	a)	0.8	b)	9
В	19.0	1.5	c)	6
С	15.0	d)	12	0
D	7.0	0	8	e)

(05 marks)

vii. The levered company and the unlevered company are identical in every respect except that the levered company has 6% Rs. 200,000 debts outstanding. The valuation of two firms are as follows

	<b>Unlevered Company</b>	<b>Levered Company</b>
EBIT	60,000	60,000
Total cost of debt	0	12,000
Net Earnings	60,000	48,000
<b>Equity Capitalization Rate</b>	0.10	0.111
Market Value of Shares	600,000	432,000
Market Value of Debt	0	200,000
Total value of the Firm	600,000	600,000

Assume that you hold Rs. 2,000 worth of Levered company shares. Is it possible for you to reduce your outlay to earn same return through the use of arbitrage? Illustrate your answer.

(05 marks)

(Total: 35 Marks)

02.

Assume that you were recently hired by Goldarn Crave (GC) Ltd. It is a newly established

company which has one million shares outstanding. Management of the company asks you

to help to prepare its dividend policy. So, you have to make a presentation to the senior management of the GC ltd, in which you are supposed to review the theory of dividend

policy and discuss the followings.

i. Briefly explain the determinants of dividend policy to the management of GC Ltd.

(04 marks)

ii. The term "irrelevance" and "Bird-in-the-hand" have been used to describe two major

theories regarding the way dividend payouts affects the firm's value and shareholder

wealth. Explain as to what these terms means in the context of two theories and what

managerial actions are proposed by the two theories with respect to dividend payouts?

(06 marks)

iii. Assume that GC Ltd. has Rs. 4,000,000 capital budgets planned for the coming year and

its net income forecasted to be at Rs. 5,000,000. Using the passive residual approach,

determine the GC's rupee distribution to the shareholders as dividend. Then explain

what would happen if net income were forecasted to be at Rs. 3,000,000 and Rs.

4,000,000.

(04 marks)

a. If the company decided to pay annual dividends of Rs. 1 per share, determine the

required amount of external financing under each situation.

(03 marks)

b. By assuming that GC Ltd. is a growth firm, what should be the optimum payout ratio

if you follow Walters's and Gordon's Model.

(03 marks)

(Total: 20 Marks)

03.

Evergreen Corporation is a large Paper and Pulps firm. The firms compete in two businesses; Building products, Paper and Pulps. Analysts classify Evergreen as a "Paper and Pulps product" firm because 70% of its 2021 sales and 80% of its operating profit stemmed from the firm's Paper and Pulps products division.

Mr. Colles, The Chief Executive Officer (CEO) and you, the newly appointed Chief Financial Officer (CFO) of Evergreen Corporation are scheduled to meet to discuss the valuation of the firm following the expected industry outlook of the Paper and Pulps Industry. The former CFO Mr. Shamal has prepared the projections for the Evergreen for the period of five years from 2022 to 2026 after considering industry dynamics prior to his transfer to the mother company of the Evergreen Corporation. The projections and the key assumptions are as follows.

(Rs. Millions)	2022E	2023E	2024E	2025E	2026E
Sales	359	371.95	385.54	396.97	308.85
Depreciations	19.38	19.28	19.21	19.17	19.14
Capital Expenditure	10.63	11.50	12.37	13.25	14.14
Change in NWC	8.26	9.18	10.91	11.60	11.66

Some key assumptions are; Cost of goods sold is projected to be 52% of sales and Selling and Distribution costs are projected to be 15% of sales. Interest expense is 10.5% of the prior year end debt and it is assumed that debt is constant over the period, which is 102 million, Income tax rate of 21% is expected.

i. As the newly appointed CFO of the Evergreen Corporation, you are supposed to complete the rest of the valuation of the company after considering the new capacity building. You can rely on the former CFOs projections in this regard and initially need to; Calculate the Operating Profit and Free Cash Flow of Evergreen Corporation for the forecasted period of five years from 2022 to 2026

(06 marks)

ii. The former CFO believes that the existing capital structure is the optimal capital structure of the company which is 20% of Debt and 70% of Equity. However, the chairman believes that Evergreen can increase its debt up to 40 to 50 percent as it can borrow from the parent company at a rate below the market interest rate. The following information is available about the Capital market.

10 years averaged historical All Share Price Index return is around 20% and 10-year averaged T-Bond rate is around 12%. Six months T-Bills rate is around 9.5%. Evergreen Corporate bonds are rated at BBB; however, country credit rating is CCC as per Moody's credit report.

Though the Building product industry is more volatile than the overall stock market, Paper and Pulps industry is expected to be less volatile. Unlevered beta is 1.5 and 0.8 for Building Product and Paper and Pulps industry, respectively.

Based on the information provided you are expected to calculate;

a. Calculate Market Risk Premium, Equity Risk Premium and the Beta for the Evergreen Corporation and justify the method that you choose to calculate the beta and the equity risk premium.

(06 marks)

b. Will you be in agreement of former CFO's opinion or Chairman's opinion regarding the optimal capital structure of the company? Why?

(03 marks)

c. What is the overall Cost of Capital of the company?

(03 marks)

d. What are the alternative methods you could have used to calculate Beta for Evergreen Corporation? Briefly explain the appropriateness of it.

(04 marks)

iii. Amuse that the Free Cash Flow to Firms are expected to grow at 2% beyond the year 2026. The Evergreen Corporation has 10 million cash and the debt is remains at 102 million. What would be the Equity Value of the company?

(03 marks)

iv. Shares of Evergreen are currently trading at the price of 160 rupees and have 2 million shares outstanding. At the board meeting, the chairman proposed to buy back 0.5 million shares at a premium of Rs. 25 rupees in the open market through a public notice. Based on your valuation of Evergreen what is your recommendation to the board in this regard? Justify your answer?

(05 marks)

(Total: 30 Marks)

04.

EXPO Ltd is a tea manufacturing chain operating in Sri Lanka, considering the acquisition of TEPO Ltd, a tea manufacturing company in Kenya, as a strategic move. Currently, EXPO has 9 million shares outstanding trading at Rs.60. The rupee value of TEPO would be 12 million. It is expected that after the acquisition, the combined firm value is expected to increase by Rs. 80 million due to the synergy impact. The board of directors of TEPO Ltd thinks of asking Rs. 18 million over the current value of the firm.

i. The Analyst of EXPO has suggested to the CEO to payoff required amount to TEPO by issuing shares at the current market price of EXPO.

a. What is your opinion on Analyst recommendation?

(02 marks)

b. How many shares of EXPO should be giving to TEPO? Why?

(02 marks)

c. How much is the NPV of the Acquisition?

(02 marks)

d. What is your recommendation to EXPO Ltd based on your calculation?

(02 marks)

ii. Briefly explain how could synergies occur from the above acquisitions?

(03 marks)

iii. CEO has come across the term Management Buy Out (MBO) and Leverage Buy Out (LBO) and ask your opinion on the how does both methods works?

(04 marks)

(Total: 15 Marks)

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