Institute of Certified Management Accountants of Sri Lanka
Incorporated by Parliament Act No.23 of 2009

November 2021 Examination

Strategic Level
FSV – 402 Financial Strategy & Valuation

No. of Pages:12
No. of Questions: 05

Instructions to Candidates

1. Time Allowed : Writing - **Three (3) hours.**
   Reading & Software handling– **30 minutes.**
2. Total : **100** Marks
3. This paper consists of two Parts.
   Part-1: Question no. 01 (**Compulsory**)
   Part- II: Question no. 02 – 05 (**Select any 03 questions**)
4. Answer only four (04) questions **including** Question No. 01
5. The answers should be in **English** language.
6. Only non-programmable calculators are permitted to use.

This examination was conducted online on Pearson VUE platform

PART – I
Compulsory

QUESTION NO. 01

PART-A

Earth Famers are exporting organic vegetables to the high-end European market. The company is currently exporting these vegetables without any brand name. So, now it is planning on introducing its own brand name "Asia Fresh" to the international market. The project needs an initial cash injection for brand building, and subsequently, it will generate cash flows as follows..

Year	2021	2022	2023	2024	2025	2026	2027 on wards
Cash flow (Euro in Millions)	-6	0.2	2.42	2.66	2.93	3.22	2

The applicable required rate of return on similar Sri Lankan Rupee investment and Euro investments are at 15% and 12%, respectively

You are required to:

1.1. **Recommend** if the project is worthy of undertaking. You have to justify your answer by evaluating the project using an appropriate investment appraisal technique (Work out your answer from the European Market's point of view).

(08 Marks)

1.2. **Explain** transaction exposure, economic exposure, and accounting exposure to exchange rate fluctuations faced by Earth Farmers.

(08 Marks)

1.3. **Identify** three ways using which Earth Farmers can hedge the foreign currency exposure.

(04 Marks)

PART-B

XYZ Ltd is a listed company on Colombo Stock Exchange. The company has experienced a negative Free Cash Flow to Equity (FCFE) of Rs.1.2 million during the 1st quarter of 2021. This is far below the market expectations. However, prior to releasing the results for the 3rd quarter of 2021, the analysts had expected that the FCFE for the 2nd quarter (Rs.2.3 million) would remain the same in the 3rd quarter as well. As per the analysts, numerous obstacles (Eg: The lockdown) caused by the pandemic have severely impacted the actual performance in the 3rd quarter. However, such obstacles are not expected in the 4th quarter of 2021. and a better performance is expected with a forecasted annual FCFE of Rs.6 million. The long-term growth rate of the company will be 2%. Further, they believe that the share price is undervalued by Rs.5/- at the moment. The company has not yet decided the dividend payments for 2020 and 2021. However, the board of directors is determined to continue the same dividend policy into the future

year	Net Profit (Rs. Million)	Annual FCFE (Rs. Million)	Dividend paid (Rs. Million)
2016	32	30	20
2017	25	28	20
2018	30	32	20
2019	32	35	20
2020	24	13	20
2021 (forecast)	20	6	To be decided
2022 (forecast)	23	20	To be decided

You are required to:

1.4. Is issuing debt or equity the best alternative at the moment if the company wants to raise more capital? **Justify** your answer.

(04 Marks)

1.5. Discuss the most likely reasons for the FCFE and Net profit difference 2021.

(04 Marks)

1.6. Calculate the price at which one share of XYZ Ltd is currently being traded at CSE (Current trading price) if the cost of equity is 12%.

(06 Marks)

1.7. Explain the dividend policy that is currently being practiced by the company.

(03 Marks)

1.8. Recommend a dividend policy for the company that focuses on long-term stability.

(03 Marks)

[Total 40 Marks]

PART - II

Answer any three (03) questions.

QUESTION NO. 02

Part-A.

A Sri Lankan company is expecting to pay US$ 1 million for an exporter in the US after six months. The current spot exchange rate is Rs.202/US$. Current interest rates in the US and Sri Lanka are 4% and 7%, respectively, per annum.

You are required to:

2.1. **Calculate** the six month-forward exchange rate.

(03 Marks)

2.2. Suppose the 180-day forward rate is Rs.204/US$ and by the time the payment is made, the exchange rate is expected to be Rs.203.5/US$. **Discuss** the consequences if the Sri Lankan firm;

(a) does not cover its exposure,

(b) covers only 60% of the exposure and keeps the rest of the 40% uncovered.

(06 Marks)

Part-B.

ABC Ltd is acquiring PQR Ltd. ABC will give 0.5 of its shares to the shareholders of PQR for each share held by them. Following are the latest details of the two companies.

	ABC Ltd	PQR Ltd
Profit after tax (Rs. Million)	75	15
Number of shares (Million)	8	2
Price-to-earnings (P/E) ratio	13	7

You are required to:

2.3. **Calculate** post-merger earnings per share (EPS) of ABC Ltd.

(02 Marks)

2.4. If the price-to-earnings (P/E) ratio falls to 11 after the merger, **compute** the premium received by the shareholders of PQR Ltd? (using ABC's new price).

(03 Marks)

2.5. How does the wealth of the shareholders of ABC Ltd change as a result of this merger? Do you advise the shareholders of ABC Ltd to vote for this merger? **Justify** your answer.

(06 Marks)

[Total 20 Marks]

QUESTION NO. 03

Part-A.

Suppose Heladiva Bank PLC is the largest bank in Sri Lanka. It has the most widespread branch network and the country's largest deposit and loan portfolio. It accounts for one-fourth of foreign exchange business and a high proportion of corporate customers. The bank's deposit base consists of 25% of saving accounts, 15% of current accounts, and 60% of fixed deposits. The bank initially focused on the corporate sector; however, it recently has shifted the focus to retail baking due to less growth in the business sector and competition from newly established commercial banks and other financial institutes. Inline, it has expanded the branch and Automated Teller Machines (ATM) network island wide. It has introduced Internet banking also. In addition, the bank has successfully diversified into credit cards and expects an increase in its fee-based income.

The bank believes that continuous investment in technology is critical which requires Rs.10 billion investment immediately. The bank has fulfilled all the regulatory requirements of capital adequacy and has the freedom to select either debt or equity at its discretion.

You are required to:

3.1. **Identify** main categories of services offered by the bank.

(03 Marks)

3.2. **Analyze** the service portfolio using BCG matrix.

(05 Marks)

3.3. Identify the services of the bank that need more funding. **Justify** your answer.

(03 Marks)

3.4. **Recommend** a suitable source of capital for the bank while analyzing each alternative source.

(05 Marks)

Part-B.

Suppose the Sri Lankan government (rated CC) plans to raise US dollar reserves by issuing dollar-denominated bonds. However, potential investors have a concern about a change in ratings.

You are required to:

3.5. **Discuss** how the ex-post (after issuing) rating affects the value of the bonds in this scenario.

(04 Marks)

[Total 20 Marks]

QUESTION NO. 04

Part-A.

The following data relates to two companies, White PLC and Black PLC, operating in the same industry.

White PLC

Year	Earnings per Share (EPS) -Rs.	Dividend per Share -(DPS) Rs.	Price- Rs.
2016	4.60	3	49
2017	4.90	3	55
2018	4.70	3	50
2019	4.10	3	58
2020	4.80	3	61
2021	5.00	3	63

Black PLC

Year	Earnings per Share (EPS) -Rs.	Dividend per Share -(DPS) Rs.	Price- Rs.
2016	5.60	2.80	65
2017	5.90	2.95	70
2018	5.70	2.85	72
2019	5.10	2.55	85
2020	5.80	2.90	85
2021	6.00	3	78

You are required to:

4.1. **Calculate** the pay-out ratio , and price-to-earnings (P/E) ratio for both White PLC and Black PLC.

(04 Marks)

4.2. **Discuss** why the price-to-earnings ratio (P/E) of Black PLC is greater.

(04 Marks)

4.3. **Discuss** which company is most suitable for valuing using the dividend discounting method.

(03 Marks)

4.4. If Black PLC starts a constant dividend of Rs.3/- starting immediately and both companies have the cost of equity of 12%, do you **recommend** to purchase shares of two companies at the end of 2021.

(03 Marks)

<u>Part-B.</u>

A new company is considering three financing plans; All equity, 70% equity, and 20% equity. The company needs Rs.10 million. Earnings before Interest and Tax (EBIT) of the company is expected to be Rs. 1.5 million. Equity can be raised by issuing shares at Rs.100/- per share and borrowing cost is at 12% for the first Rs.7 million, and the cost will increase to 15% for borrowings above Rs.7 million. The applicable corporate tax rate is 28%.

You are required to:

4.5. **Compare** the impact of three financial plans on Earning per Share (EPS).

(06 Marks)

[Total 20 Marks]

QUESTION NO. 05

Part-A.

XYZ has a net operating income of Rs.800,000/- on an investment of Rs.4,000,000/- in assets. It can raise debt at a 13% rate of interest. Assume that taxes do not exist.

You are required to:

5.1. Using the Net Income (NI) approach and a cost of equity of 18%, compute the total value of the firm and the weighted average cost of capital (WACC) if the firm has
(i) no debt,
(ii) Rs.3,000,000/- debt.

(06 Marks)

5.2. Using the Net Operating Income (NOI) approach and an overall cost of capital of 12%, compute the total firm/enterprise value, value of equity and the cost of equity if the firm has
(i) no debt,
(ii) Rs.3,000,000/- debt.

(06 Marks)

Part-B.

A new company proposes to invest Rs.10 million in a logistic facility. It is expected to earn a net operating income of Rs.1.6 million. The company wants to have an optimum mix of debt and equity. Following are additional details relating to the company.

Tax Rate	40%
Risk Free Rate	6%
Average Market Return	10%
Total Assets Value	Rs.200,000

Debt capital	Before tax Kd %	Levered Beta	Ke %	WACC%
20%	8.3	1.75		
30%	9	1.82		
40%	10	1.9		
50%	12	2		
60%	15	2.1		

You are required to:

5.3. Complete the blanks in the above table with Ke and WACC.

(05 Marks)

5.4. Determine the optimum capital structure for this company?

(03Marks)

[Total 20 Marks]

-End of the Question Paper-

Formula Sheet

Formular 01	V=EV/ECITDA
Formular 02	V=EV/EBIT
Formular 03	$ROE = \frac{NI}{BVE}$
Formular 04	$FV_t = C \times (1+r)^n$
Formular 05	$PV_t = \frac{C_n}{(1+r)^n}$
Formular 06	$PV_t = \sum_{n=0}^{N} \frac{C_n}{(1+r_n)^n}$
Formular 07	$FV_t = PV \times (1+r)^n$
Formular 08	$PV_t = \frac{C}{r}\left(1 - \frac{1}{(1+r)^N}\right)$
Formular 09	$PV_t = \frac{C}{r-g}$
Formular 10	$PI = \frac{NPV}{RC}$
Formular 11	$P = \frac{FV}{(1+YTM_n)^n}$
Formular 12	Yield Rate=C+(F-P)/n (C+P)/2
Formular 13	NOPLAT= Business Operating Income x (1 – tax rate) *FCF* = NOPAT – change in IC
Formular 14	$P = \frac{Div_1}{1+r_E} + \frac{Div_2}{(1+r_E)^2} + \cdots + \frac{Div_N}{(1+r_E)^N} + \frac{P_N}{(1+r_E)^N}$
Formular 15	$P = \sum_{n=1}^{\infty} \frac{Div_n}{(1+r_E)^n}$
Formular 16	$P_0 = \frac{Div_1}{r_E - g}$
Formular 17	$g = RR \times RONI$

Formular 18	$P_N = \frac{Div_{N+1}}{r_E - g}$
Formular 19	$FCF = EBIT \times (1 - \tau_C) + D - CD - \Delta NWC$
Formular 20	$V_0 = \frac{FCF_1}{1 + r_{WACC}} + \frac{FCF_2}{(1 + r_{WACC})^2} + \cdots + \frac{FCF_N}{(1 + r_{WACC})^N} + \frac{V_N}{(1 + r_{WACC})^N}$
Formular 21	$P/E = \frac{P_0}{EPS_1} = \frac{Div_1/EPS_1}{r_E - g} = \frac{DPR}{r_E - g}$
Formular 22	$\frac{V_0}{EBITDA_1} = \frac{FCF_1/EBITDA_1}{r_{wacc} - g_{FCF}}$
Formular 23	$R_E = R_U + \frac{D}{E}(R_U - R_D)$
Formular 24	$w = \frac{E}{E+D} r_e + \frac{D}{E+D} r_d (1 - T_m)$
Formular 25	$TV = \frac{FCF_N (1+g)}{(w-g)}$
Formular 26	$V_L = V_{UL} + T_c D$