



**UNIVERSITY OF KELANIYA - SRI LANKA**

*Centre for Distance and Continuing Education*

**Faculty of Commerce & Management Studies**

Bachelor of Business Management (General) Degree Third Examination (External) – 2021

April - 2024

**BMGT E 3065 – Business Finance**

Time : 03 hours

**Instructions:**

- I. This question paper consists of 2 Parts (Part A and B)
- II. No of Questions:  
Part A – 10  
Part B – 04
- III. All questions are compulsory.
- IV. Attach the answers to Part A to the Answer booklet.
- V. Taking Part A of the question paper outside the examination hall is strictly prohibited.

**Part A**

Underline the Correct answer.

- 1) Which of the following is not a possible goal in Financial Management?
  - a) Minimize costs.
  - b) Maximize profit.
  - c) Maintain rapidly fluctuating earning growth.
  - d) Maximize market share.

- 2) What is the task that a Finance Manager typically performs?
- a) Review overtime spending.
  - b) Evaluating proposed expansion plans
  - c) Depreciation of non-current assets
  - d) Apportioning overheads to cost units.
- 3) What does the standard deviation measure?
- a) The gain on the investment
  - b) The holding periods.
  - c) The amount of dividend
  - d) Risk
- 4) The time value of money supports the comparison of cash flows recorded at different time periods by,
- a) Discounting all cash flows to a common point in time
  - b) Using either Compounding or Discounting to get all cash flows to a common point in time.
  - c) Compounding all cash flows to a common point in time
  - d) None of the above.
- 5) If you deposit Rs. 10,000 into an account paying 12% interest compounded semiannually, how long until there is Rs. 16,000 in the account?
- a) 4.03 years
  - b) 1.27 years
  - c) 2.07 years
  - d) 1.43 years

- 6) Which of the following actions would be a characteristic of a company implementing a restrictive short-term finance policy?
- a) Maintaining a high ratio of current assets to sales
  - b) Keeping large cash balances and investments in marketable securities
  - c) Making large investments in inventory
  - d) Offering no credit sales, resulting in no accounts receivable

- 7) Which of the following is NOT an advantage of stock repurchases?
- a) Stockholders can choose whether to tender their shares.
  - b) Repurchases help avoid setting a high dividend that cannot be maintained.
  - c) Repurchased stock can be utilized in takeovers or resold to raise cash as needed.
  - d) Income received from stock repurchases is typically taxed at a higher rate than dividends.

- 8) Calculate the Degree of Operating Leverage (DOL) for the year 2023.

	2022 (LKR)	2023 (LKR)
Sales	2250	1250
EBIT	1125	450
EPS	15	9.5

- a) 1.875
  - b) -1.875
  - c) 1.25
  - d) -1.25
- 9) Based on the above information calculate the Degree of Financial Leverage (DFL) for 2023.
- a) - 0.386
  - b) 0.386
  - c) -0.55
  - d) 0.55

10) Which of the following assets are typically considered as part of current assets in financial accounting?

- a) Property, plant, and equipment
- b) Long-term investments
- c) Commercial papers
- d) Treasury bonds

(02 Marks x 10 = 20 Marks)

**Part B**

**Question No. 01**

a) Define Financial Management.

(02 Marks)

b) After completing the course unit of Business Finance, you plan to start a stationary shop near the University. How do you proceed with this idea with the knowledge of financial decision-making?

(06 Marks)

c) XYZ Company is evaluating two new machines to purchase the best machine for the production purpose. Each machine costs LKR. 150,000, and both have a life of 5 years. The two machines will be depreciated on a straight-line basis. The scrap values of the two machines are as follows.

Machine	A	B
Scrap Value	LKR 10,000	LKR 10,000

Although the first-year maintenance payment for Machine A is LKR 20,000, it is expected to rise 8% annually. The annual maintenance cost of machine B will be higher at a rate of LKR 30,000 in year 1 and it is expected to increase annually by 12%.

As the new machines will likely reduce the variable cost, the contribution will differ depending on the machine used. The contribution from each machine (excluding maintenance cost) is tabulated as follows, with the inflow of funds assumed to be at the end of each year.

Year	1	2	3	4	5
Contribution - machine A (LKR'000)	40	60	75	90	110
Contribution - machine B (LKR'000)	50	65	95	105	100
Discount Factor 12%	0.893	0.797	0.712	0.636	0.567

The Finance Manager expects the Cost of Capital to be around 12%. Taxes can be ignored.

You are required to calculate,

- I. Accounting Rate of Return (ARR) of machine A and B
- II. Net Present Value (NPV) of machine A and B
- III. Which machine will be selected? Why?

(12 Marks)

**(Total 20 Marks)**

**Question No. 02**

a) Answer the following questions related to the Time Value of Money.

- i. On 11th August 2022, Nipun borrowed LKR. 18,000 from his employer. If Kasun agrees to pay a 7% annual rate of interest, calculate the total amount he must repay if the loan is for 16 months.
- ii. If you deposit LKR. 8000 into an account paying 12% annual interest compounded semiannually; how much money will be in the account after 10 years?
- iii. How much money would you deposit today at 22.5% annual interest compounded biannually to have LKR. 30,000 in the account after 15 months?
- iv. If you invest LKR. 2,000 at an annual interest rate of 10% compounded continuously, calculate the final amount you will have in the account after 10 years.

(08 Marks)

b) Suppose Security M and Security N have experienced the following returns and probabilities in the last four years.

Year	Security M		Security N	
	Probability	Return(%)	Probability	Return(%)
2023	0.10	-18	0.05	-15
2022	0.40	25	0.15	24
2021	0.15	13	0.35	30
2020	0.35	20	0.45	20

You are required to calculate,

- i. The Expected Return of Security M and N
- ii. The Standard Deviation of Security M and N
- iii. Which investment is riskier? Explain

(12 Marks)

(Total 20 Marks)

**Question No. 03**

"CyberTech PLC is a well-known player in the tech industry, specializing in creating software solutions. As the recently appointed Finance Manager of CyberTech PLC your responsibility is to evaluate the company's financial standing and make strategic plans. To achieve the company's growth, you are presented with the company's balance sheet, income statement, and some additional information.

**CyberTech PLC**

Statement of Financial Position

As at 31<sup>st</sup> December 2023

	<b>LKR 2023</b>	<b>LKR 2022</b>
<b>Assets</b>		
<b>Current Assets</b>		
Cash	67,500	45,000
Debtors	45,000	38,250
Inventory	27,000	22,500
Prepaid Expenses	6,750	4,500
<b>Total Current Assets</b>	<b>146,250</b>	<b>110,250</b>
<b>Non-Current Assets</b>		
<b>Property &amp; Equipment</b>		
Land	371,250	276,750
Buildings and Equipment	261,878	288,000
<b>Total Property &amp; Equipment</b>	<b>633,128</b>	<b>564,750</b>
<b>Total Assets</b>	<b>779,378</b>	<b>675,000</b>

<b>Liabilities and Shareholders' Equity</b>		
<b>Current Liabilities</b>		
Creditors	87,750	90,000
Notes Payable, Short Term	6,750	4,500
<b>Total Current Liabilities</b>	<b>94,500</b>	<b>94,500</b>
<b>Long Term Liabilities</b>		
Notes Payable, Long-Term	157,500	175,500
<b>Total Liabilities</b>	<b>252,000</b>	<b>270,000</b>
<b>Shareholders' Equity</b>		
Common Stock, LKR 1 par Value	61,650	38,250
Additional Paid in Capital	355,725	254,250
<b>Total Paid in Capital</b>	<b>417,375</b>	<b>292,500</b>
Retained Earnings	110,003	112,500
<b>Total Shareholders' Equity</b>	<b>527,378</b>	<b>405,000</b>
<b>Total Liabilities and Shareholders' Equity</b>	<b>779,378</b>	<b>675,000</b>

### CyberTech PLC

#### Statement of Profit or Loss

For the Years Ended December 31<sup>st</sup> 2023

	<b>LKR 2023</b>	<b>LKR 2022</b>
Revenues	1,111,500	1,012,500
Cost of Sales	315,000	285,750
<b>Gross Margin</b>	<b>796,500</b>	<b>726,750</b>
Operating Expenses	607,500	560,250
<b>Net Operating Income</b>	<b>189,000</b>	<b>166,500</b>
Interest Expense	16,425	18,000
<b>Net Income before Taxes</b>	<b>172,575</b>	<b>148,500</b>
Less Income Taxes (30%)	51,773	44,550
<b>Net Income</b>	<b>120,802</b>	<b>103,950</b>



Additional Information for the year 2023

1. Number of common shares outstanding	61650
2. Earnings per Share (EPS)	LKR 4.41
3. Market price per share	LKR 33.75
4. Annual dividend per share	LKR 4.5

a) Calculate the following accounting ratios for the year 2023 of CyberTech PLC and **briefly explain the significance of each ratio.**

- i. Return on total assets.
- ii. Acid-test ratios.
- iii. Accounts receivables turnover.
- iv. Times interest earned/Interest coverage ratio.
- v. Return on common shareholders' equity.

(15 Marks)

b) A dividend policy is established by the company's management and the board of directors to distribute its earnings to its shareholders.

Briefly explain five (05) types of dividend policies practices by companies.

(05 Marks)

**(Total 20 Marks)**

**Question No. 04**

a) Maintaining optimal levels of working capital helps to streamline the day-to-day operations of a company. As the finance manager of "Ocean Diamond Ltd", you have been entrusted with the responsibility of managing the company's working capital.

LKR million

Item	Beginning	Ending
Inventory	4,500	6,750
Accounts receivable	3,600	4,500
Accounts payable	1,688	2,250

LKR million

Credit sales	25,875
Cost of goods sold	18,450

Utilizing the provided information, calculate the operating cycle and cash cycle of Ocean Diamond PLC and comment on that.

(10 Marks)

b) "Sunshine PLC" is a publicly traded company in the apparel sector. The risk-free rate is currently 4.5%, and the expected market return is 15%. Therefore, given that the market risk premium is 10.5% and the beta of Sunshine PLC's stock is estimated to be 1.5.

i. Calculate the cost of equity for Sunshine PLC using CAPM.

(02 Marks)

Sunshine PLC has both equity and debt in its capital structure. The debt-to-value ratio is 50%. The interest on the company's debt is 9%. The corporate tax rate is 35%.

ii. Estimate the cost of capital for Sunshine PLC using the WACC.

(02 Marks)

c) Briefly explain the following concepts/theories

i. Determinants of beta

ii. Share holder wealth maximization.

(06 Marks)

**(Total 20 Marks)**