

#### 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) – 2022 March - 2025

#### BMGT E 3065 – Business Finance

Time: 03 hours

# **Instructions:**

- I. This question paper consists of 2 Parts (Part A and B)
- II. Number 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 considered as an Investment?
  - a) Person's dedication to purchasing a house or flat.
  - b) Use of capital on assets to receive returns.
  - c) Usage of money on a production process of products and services.
  - d) Contributions to the capital of the country.

- 2. Which of the following statements about Financial Management is true?
  - a) Financial Management focuses on a short time frame.
  - b) Reporting financial information is the main objective of Financial Management.
  - c) The purpose of Financial Management is to collect and present the data in a meaningful manner.
  - d) Financial Management focuses on value creation.
- 3. What does the standard deviation measure?
  - a) The return on the investment.
  - b) The holding period return.
  - c) The amount of dividend.
  - d) Risk.
- 4. Ten years ago, Saman paid LKR 280.00 per share to buy 400 shares in the XYZ Company. The current share price has grown by 100%. So far, he has received 24 dividend payments. Each amounting to LKR 1.00 per share. If Saman decides to sell the shares now, what will his Holding Period Return be?
  - a) 208.57%
  - b) 54.29%
  - c) 108.57%
  - d) 88.57%
- 5. Which of the following is relevant when using the payback method?
  - a) The cash flows generated by the asset up to the payback period.
  - b) The total cash flows generated by the asset.
  - c) The timing of the first cash inflow.
  - d) The cost of the asset.
- 6. According to the Bird-in-the-Hand Theory, why do investors prefer high dividend payouts?
  - a) Investors believe dividends are riskier than future capital gains
  - b) Investors believe dividends are less risky than future capital gains
  - c) Investors are indifferent to dividend payouts
  - d) High dividends increase a company's retained earnings

7.	A firm has a beta of 1.2, a risk-free rate of 4%, and a market risk premium of 6%. What is					
	the firm's cost of equity using the Capital Asset Pricing Model (CAPM)?					
	a)	10.4%				
	b)	11.2%				
	c)	9.6%				
	d)	8.8%				
8.	According to the Signaling Hypothesis, why do investors interpret a dividend increase as					
	a positive signal?					
	a)	It shows that the firm has no investment opportunities				
	b)	It indicates that the firm is trying to manipulate stock prices				
	c)	It reflects management's confidence in future earnings growth				
	d)	It reduces the firm's	s retained earnings			
9.	Which of the following factors does not affect a firm's beta?					
	a)	Business risk				
	b)	Financial leverage				
	c)	Cyclicality of revenues				
	d)	Total assets				
10.	A company has the following financial data:					
		Current Assets	Rs. 100,000			
		Inventory	Rs. 30,000			
		Current Liabilities	Rs. 50,000			
	What is the acid test ratio?					
	a)	1.4				
	b)	1.0				
	c)	1.2				
	d)	1.6				
			(02 Marks x 10 =20 Marks)			

### Part B

#### Question No. 1

a) "Financial Management studies to answer three main questions/Decisions". Comment.

(05 Marks)

b) Briefly explain why Shareholder wealth maximization is superior to the profit maximization.

(05 Marks)

c) XYZ Company is evaluating two new machines to purchase the best machine for production purposes. 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	X	Y
Scrap Value	LKR 10,000	LKR 10,000

Although the first-year maintenance payment for Machine X is LKR 20,000, it is expected to rise 8% annually. The annual maintenance cost of machine Y 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 X (LKR'000)	40	60	75	90	110
Contribution –machine Y (LKR'000)	50	65	95	105	100
Discount Factor (12%)	0.893	0.797	0.712	0.636	0.567

You are required to calculate,

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

(10 Marks)

(Total 20 Marks)

#### Question No. 02

- a) Answer the following questions related to the Time Value of Money.
  - i. On 11th May 2018, Damith borrowed Rs. 21,000 from his Friend. If Damith agrees to pay a 12% annual rate of interest, calculate the total amount he must repay if the loan is for 22 months.
  - ii. If you deposit Rs. 10,000 into an account paying 15% annual interest compounded quarterly, how much money will be in the account after 10 years?
- iii. How much money would you need to deposit today at 15.8% annual interest compounded weekly to have Rs. 21,000 in the account after 8months?
- iv. 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?
- v. If you invest Rs. 1,750 at an annual interest rate of 8.5% compounded continuously, calculate the final amount you will have in the account after 9 years.

(10 Marks)

b) Differentiate between Systematic risk and Unsystematic risk.

(04 Marks)

c) Suppose Security X and Security Y have experienced the following returns and probabilities in the last four years.

Vaan	Security X		Security Y	
Year	Probability	Return (%)	Probability	Return (%)
2024	0.12	-20	0.15	-14
2023	0.28	22	0.18	26
2022	0.35	36	0.50	25
2021	0.25	18	0.17	20

You are required to calculate,

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

(06 Marks)

(Total 20 Marks)

# Question No. 3

- Compare and contrast the Dividend Irrelevance Theory, Bird-in-the-Hand Theory, and Tax a) Preference Theory. Explain the key arguments of each theory and discuss which theory you (06 Marks) believe is most correct.
- Beta is a critical component in estimating the cost of equity. However, it can fluctuate over b) time. Explain why beta might change for a company and discuss three key factors (06 Marks) influencing beta.
- XYZ has the following capital structure. c)

Equity proportion 70%

Debt proportion

30%

Cost of equity

12%

Cost of debt

8%

Corporate tax rate

30%

Compute the Weighted Average Cost of Capital (WACC)

(04 Marks)

ii. If the firm decides to increase its debt proportion to 50%, recalculate the WACC and explain whether it benefits the company.

(04 Marks)

(Total 20 Marks)

# Question No. 04

. .

a) Nortan Corporation has the following information.

Net Income	Rs. 53,690
Net Sales	Rs. 494,000
Total Assets (Beginning of the year)	Rs. 300,000
Total Assets (End of year)	Rs. 346,390
Shareholder's Equity (Beginning of the year)	Rs. 180,000
Shareholder's Equity (End of year)	Rs. 234,390
Total Common Shares Outstanding	27,400
Market Price per Share	Rs. 15
Annual Dividend per share	Rs. 2

Calculate the following accounting ratios based on the above information.

- i. Profit Margin
- ii. Return on Assets
- iii. Earnings per Share
- iv. Price to Earnings
- v. Dividend yield ratio

(10 Marks)

b) A company follows a Residual Dividend Policy with the following financial details.

Capital Budget

Rs. 800,000

Target Capital Structure

40% Debt, 60% Equity

Forecasted Net Income

Rs. 600,000

- i. Calculate the dividend payout amount using the Residual Dividend Model.
- ii. If the capital budget increases to Rs. 1,000,000, how would that affect dividends

(06 Marks)

c) A manufacturing firm has the following details:

**Inventory Period** 

45 days

Accounts Receivable Period

30 days

Account Payables Period

20 days

- i. Calculate the Operating Cycle.
- ii. Calculate the Cash Cycle.

(04 Marks)

(Total 20 Marks)