



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2022/2023 ACADEMIC YEAR

THIRD YEAR FIRST SEMESTER

SCHOOL OF BUSINESS AND ECONOMICS

BSC. IN ENTREPRENEURSHIP

COURSE CODE: BSE 3107-1

COURSE TITLE: SMALL BUSINESS FINANCE

DATE: 9TH DECEMBER 2022

TIME: 1100-1300

INSTRUCTIONS TO CANDIDATES

Answer Question **ONE** and any other **TWO** Questions

This paper consists of 4 printed pages. Please turn over.

Question One

- a) Evaluate FIVE main objectives of a business entity. **(5 Marks)**
- b) Discuss the importance of capital rationing in capital budgeting. **(3 Marks)**
- c) Mr. Kimais wishes to buy a machine after 3 years. He plans to deposit Ksh. 2,000 at the end of each year into a bank savings account paying a fixed rate of interest of 7 % for the same. What is its future value 3 years from now? **(3 Marks)**
- d) Odion company issues 10% irremediable debentures of Ksh. 100,000 at a face value of Ksh.100. The company is in 35% tax bracket. Calculate the cost of debt (after tax) if the debentures are issued at:
- i) Par **(3 Marks)**
 - ii) 10% discount **(3 Marks)**
 - iii) 10% premium **(3 Marks)**

Question Two

- a) Discuss FIVE functions of a finance manager in a company. **(5 Marks)**
- b) Kim is evaluating Middlesex water company (MSEX), a publicly traded water utility. Analysis was conducted in early 2021. In the United States, about 85% of the population gets its water from government entities. A group of investor-owned water utilities however, also supplies water to the public with a market capitalization of about Ksh. 250 million as of late 2021, MSEX is among the 10 largest publicly traded U.S water utilities. The net income growth during the past 5 years has been 7% in line with the long-term growth rate of nominal U.S GDP. During the past five years, MSEX return on equity average 9% with relatively little variation, slightly below the 10% level target by some faster growing peer companies. MSEX appears to have a policy of small annual increases in the dividend rate, maintain a dividend payout ratio of at least 80%. MSEX per share dividends for 2020 were sh. 0.68. Kim forecasts a long-term earnings growth rate of 6% per year, somewhat below the 8% consensus three-to-five-year earnings growth rate forecast reported by Zack's investment research. MSEX raw beta and adjusted beta are, respectively 0.717 and 0.811 based on 60 monthly returns. The R^2 associated with beta, however is under 10%. Kim estimates that MSEX pre-tax cost of debt is 6.9%, he also estimates

required return on equity as 9.25%. MSEX current market price is sh. 18.39.

Required:

- i) Calculate the Gordon growth model estimate of value for MSEX using Kim's required return on equity estimate. **(2 Marks)**
- ii) State whether MSEX appears to be overvalued, fairly valued or undervalued. **(2 Marks)**
- iii) Justify the selection of the Gordon growth model for valuing MSEX. **(3 Marks)**
- iv) Calculate Capital Asset Pricing Model (CAPM) estimate of the required return on equity for MSEX under the assumption that beta regresses to the mean. (Assume an equity risk premium of 4.5% and a risk-free rate of 5% as of the price quotation date). **(3 Marks)**

Question Three

- a) Discuss FIVE external factors that influence an industry's growth, profitability and risk. **(5 marks)**
- b) From the following information, calculate the net present value of project X and Y and suggest which of the two projects should be accepted at a discount rate of 10%. **(5 marks)**

	Project X	Project Y
Initial Investment	Ksh. 20,000	Ksh. 30,000
Estimated Life	5 years	5 years
Scrap Value	Ksh. 1,000	Ksh. 2,000

The profits after taxation (cash flows) are as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
	Ksh.	Ksh.	Ksh.	Ksh.	Ksh.
Project X	5,000	10,000	10,000	3,000	2,000
Project Y	20,000	10,000	5,000	3,000	2,000

- c) Discuss the steps followed when conducting equity valuation.

(5 Marks)

Question Four

- a) There are two projects' Amber and Zaxo each involves an investment of Ksh. 50,000. The expected cash inflows and the certainty co-efficient are as under:

Year	Project Amber		Project Zaxo	
	Cash inflows	Certainty Coefficient	Cash inflows	Certainty coefficient
1	35,000	0.8	25,000	0.9
2	30,000	0.7	35,000	0.8
3	20,000	0.9	20,000	0.7

Risk-free cutoff rate is 10%. Suggest which of the two projects should be preferred. **(5 Marks)**

- b) Gordon is faced with a major executive decision about the choice of a project from two competing projects costing sh. 120,000 each. The criteria for the choice of a better project are based on the payback period. The following data are relative to these individual projects that are mutually exclusive.

Year	Project A (Ksh.)	Project B (Ksh.)
1	40,000	100,000
2	50,000	80,000
3	60,000	40,000
4	70,000	30,000

You are required to recommend the best project using payback period. **(6 Marks)**

- c) Highlight FOUR limitations of internal rate of return. **(4 Marks)**

///END///