



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR SECOND
SECOND YEAR FIRST SEMESTER**

**SCHOOL OF BUSINESS AND ECONOMICS
BACHELOR IN SCIENCE IN FINANCIAL
ECONOMICS**

**COURSE CODE: ECF 2103-1
COURSE TITLE: CORPORATE FINANCE I**

DATE: 14TH DECEMBER, 2022

TIME: 1430-1630

INSTRUCTIONS TO CANDIDATES

1. Answer Question **ONE** and any other **TWO** questions
2. Question one is **compulsory** and it carries 20 marks **other** questions are 15 marks each

*This paper consists of **three** printed pages. Please turn over.*

QUESTION ONE

(a) Discuss how agency theory explains the relationship between the management and shareholders of a corporation. **(5 marks)**

(b) How is wealth maximization as a goal of a corporate firm consistent with agency theory? **(6 marks)**

(c) Show that $B_t = A (1 + r)^{-t}$

Where B_t is present value of an amount A to be received after t time period.

(2 marks)

d) Write short notes on:

- i) Agency relationship, Agency problem and Agency cost
- ii) Public offering vs Private offering

(7 marks)

QUESTION TWO

a) Define the word time value of money and describe its relevance in finance **(3 marks)**

b) Suppose you want to buy a house in 5 years from now and estimate that the initial down payment of Sh. 2 million will be required at that time. You wish to make equal annual end of year deposits in an account paying annual interest of 6%. Determine the size of the annual deposit.

(6 marks)

c) "Increased growth and size are not necessarily the same thing as increased shareholder wealth". Several control devices used by shareholders bond management to the self-interest of shareholders, discuss.

(6 marks)

QUESTION THREE

Bhasmati Rise Company is considering two mutually exclusive projects requiring an initial outlay of shs. 100,000 each and with a useful life of 5 years. The company required rate of return is 10% and the appropriate corporate tax rate is 50%. The project will be depreciated on a straight line basis. Before taxes and depreciation cash flows expected from the projects are as below:

Year	1	2	3	4	5
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Project I	shs.	40000	40000	40000	40000	40000
Project 2	shs.	60000	30000	20000	50000	50000

- a) Compute the after tax cash flows of both projects. **(3 Marks)**
- b) Calculate for each project and advice test project to chose based on:
- i) Net present value **(6 marks)**
 - ii) Internal Rate of Return **(6 marks)**

QUESTION FOUR

- a) A company has developed a new product and has to decide whether to start full production. The marketing department has estimated that the product could sell at a price of sh. 25 per unit and achieve sales of 5 000 units. Variable costs are sh. 14 per unit and fixed costs sh. 4,000 per year. The initial investment in the production plant would be sh. 100 000 with a residual value of sh. 15 000 after 5 years when the product would probably be replaced.
Should full production be started?
(5 Marks)
- b) Hilda bought a house for sh. 267,000. She put 20% as down payment and obtained a simple interest amortized loan for the balance at 4.5% interest annually for 30 years. Required:
- i. The amount of Hildah's monthly payment. **(5 Marks)**
 - ii. The total interest paid by Hildah. **(3 Marks)**
 - iii. Most lenders will approve a home loan only if the total of all the borrower's monthly payments, including the home loan payment, is no more than 38% of the borrower's monthly income. How much must Hildah make in order to qualify for the loan? **(2 Marks)**

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