

# MAASAI MARA UNIVERSITY 

## REGULAR UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR THIRD YEAR FIRST SEMESTER

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

## COURSE CODE: ECO 3110 COURSE TITLE: CORPORATE FINANCE

TIME: 11.00-1.00PM

## INSTRUCTIONS TO CANDIDATES

1. Answer Question ONE and any other THREE questions
2. Question one is compulsory and it carries 25 marks other questions are 15 marks each

## 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 the corporate firm consistent with agency theory?
(6 marks)
(c) Is it true under agency theory that a corporate manager will always undertake projects with positive net present value, under conditions of no capital rationing? Explain.
(6 marks)
d) Consider two investments, $A$ and $B$ each having the following investment characteristics;

| INVESTMENT | EXPECTED <br> RETURN (\%) | PROPOTION |
| :--- | :--- | :--- |
| A | 10 | $2 / 3$ |
| B | 20 | $1 / 3$ |

## REQUIRED:

Compute the expected return of a portfolio of the two assets.
d) Differentiate between bonds and debentures.
(4 marks)
(4 marks)

## QUESTION TWO

a) Discuss five factors to be considered when making capital structure decisions (5 marks)
b) Bidii limited has a cost of capital of $10 \%$. The company currently has 250,000 shares outstanding and selling on the stock exchange at sh 120 per share. The companys earning per share is sh. 10 and intends to maintain a dividend payout ratio of $50 \%$ at the end of the current financial year. The companys expected income for the current year is sh. 3million and the available investment proposals are estimated at cost sh. 6 million.

Required: Using the Modigliani and Miller model, show that the payment of dividends does not affect the value of the firm.
(10 marks)

## QUESTION THREE

Companies $U$ and $L$ are identical in every respect except that $U$ is unlevered while $L$ has Sh 10 million of 5\% bonds outstanding. Assume
(a) That all of the MM assumptions are met
(b) That there are no corporate or personal taxes
(c) That EBIT is Sh 2 million
(d) That the cost of equity to company $U$ is $10 \%$

## Required:

i) Determine the value MM would estimate for each firm
ii) Determine the cost of equity for both firms
iii) What is the overall cost of capital for both firms?
(4 marks)
(4 marks)
(3 marks)
iv)Suppose the value of $U$ is $\operatorname{Sh} 20$ million and that of $L$ is $\operatorname{Sh} 22$ million. Explain the arbitrage process for a shareholder who owns $10 \%$ of company L's shares.

## QUESTION FOUR

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) Discuss three legal procedures that one firm can use to acquire another firm
(6 marks)

## QUESTION FIVE

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 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Project I | shs. | 40000 | 40000 | 40000 | 40000 | 40000 |
| Project 2 | shs. | 60000 | 30000 | 20000 | 50000 | 50000 |

Required
a) Compute the after tax cash flows of both projects.
b) Calculate for each project
i) Net present value
ii) Internal Rate of Return (5 marks)
iii) Which project should be accepted and why
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