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**KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2019/2020 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR BUSINESS INFORMATION
TECHNOLOGY**

Date: 12th April, 2019
Time: 11.00am – 1.00pm

KFI 001 - INTRODUCTION TO FINANCIAL MANAGEMENT

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

- a) Explain the solution to an agency relationship between shareholders and management. (8 marks)
- b) List four reason why profit maximization goal has been criticized. (4 marks)
- c) ABC ltd just borrowed Shs 600,000 4 years loan from a bank payable at 10% p.a compounded semiannually. The loan is to be repaid in equal end period instalments.

Required

- i) Calculate the semi-annual repayment. (3 marks)
- ii) Prepare a loan amortization schedule. (6 marks)
- d) XYZ's management has set the minimum cash balance to be equal to Sh.10, 000. The standard deviation of daily cash flow is Sh.2, 500 and the interest rate on marketable securities is 9% p.a. The transaction cost for each sale or purchase of securities is Sh.20.

Required:

- i) The company's target cash balance. (3 marks)
- ii) The lower and upper cash limit. (2 marks)
- iii) Calculate the average cash balance (2 marks)
- iv) Calculate the spread (2 marks)

QUESTION TWO (20 MARKS)

- a) Distinguish between MIRR and IRR as used in capital budgeting. (4 marks)
- b) Magma Ltd. wishes to make a choice between two mutually exclusive projects. Each of these projects requires Sh.400, 000,000 in initial cash outlay. The details of the two projects are as follows:

Project A

This project is made up of two sub-projects. The first sub-project will require an initial outlay of Sh.100, 000,000 and will generate Sh.25, 600,000 per annum in perpetuity. The second sub-project will require an initial outlay of Sh.300, 000,000 and will generate Sh.85, 200,000 per annum for the 8 years of its useful life. This sub-project does not have a residual value at the end of the 8 years. Both sub-projects are to commence immediately.

Project B

This project will generate Sh.87, 000,000 per annum in perpetuity.

The company has a cost of capital of 16%.

Required:

- i) Determine the net present value (NPV) of each project. (6 marks)
- ii) Compute the internal rate of return (IRR) for each project. (6 marks)
- iii) Advise Magma Ltd. on which project to invest in, and justify your choice. (4 marks)

QUESTION THREE (20 MARKS)

- a) Explain the meaning of the term “cost of capital” and explain why a company should calculate its cost of capital with care. (4 marks)
- b) Identify and briefly explain three conditions which have to be satisfied before the use of the weighted average cost of capital (WACC) can be justified. (6 marks)
- c) Biashara Ltd. has the following capital structure:

	Sh.'000'
Long-term debt	3,600
Ordinary share capital	6,500
Retained earnings	4,000

The finance manager of Biashara Ltd. has a proposal for a project requiring Sh.45 million. He has proposed the following method of raising the funds:

- Utilize all the existing retained earnings
- Issue ordinary shares at the current market price.
- Issue 100,000 10% preference shares at the current market price of Sh.100 per share which is the same as the par value.
- Issue 10% debentures at the current market price of Sh.1, 000 per debenture.

Additional information:

1. Currently, Biashara Ltd. pays a dividend of Sh.5 per share which is expected to grow at the rate of 6% due to increased returns from the intended project. Biashara Ltd.'s price/earnings (P/E) ratio and earnings per share (EPS) are 5 and Sh.8 respectively.
2. The ordinary shares would be issued at a floatation cost of 10% based in the market price.
3. The debenture par value is Sh.1, 000 per debenture.
4. The corporate tax rate is 30%.

Required: Biashara Ltd.'s weighted average cost of capital (WACC). (10 marks)

QUESTION FOUR (20 MARKS)

- a) List the assumption of calculating Economic Order Quantity (6 marks)
- b) ABC Ltd requires 2,000 units of a component in its manufacturing process in the coming year which costs Sh.50 each. The items are available locally and the lead time in one week. Each order costs Sh.50 to prepare and process while the holding cost is Shs.15 per unit per year for storage plus 10% opportunity cost of capital. (Assume a year has 360 days)

Required

- i) How many units should be ordered each time an order is placed to minimize inventory costs? (5 marks)
- ii) What is the reorder level? (3 marks)
- iii) How many orders will be placed per year? (2 marks)
- iv) Determine the total relevant costs. (4 marks)

QUESTION FIVE (20 MARKS)

XYZ ltd. is considering three possible capital projects for next year. Each project has a 1 year life, and project returns depend on next year's state of the economy. The estimated rates of return are shown below.

STATE OF THE ECONOMY	PROBABILITY OF OCCURRENCE	RATE OF RETURN		
		A	B	C
Recession	0.25	10%	9%	14%
Average	0.50	14	13	12
BOOM	0.25	16	18	10

REQUIRED:

- a) Find each project expected rate of return, variance, standard deviation and coefficient of variation.
- b) Compute the correlation coefficient between
 - i) A and B (2 marks)
 - ii) A and C (2 marks)
 - iii) B and C (2 marks)
- c) Compute the expected return on a portfolio if the firm invests equal wealth on each asset.
- d) Compute the standard deviation of the portfolio. (3 marks)