



# MACHAKOS UNIVERSITY

University Examinations for 2017/2018 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BANKING, ACCOUNTING & FINANCE

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR BACHELOR OF  
SCIENCE IN AGRIBUSINESS MANAGEMENT

**KBT 432: CORPORATE FINANCE IN AGRIBUSINESS MANAGEMENT**

DATE: 11/12/2017

TIME: 2:00 – 4:00 PM

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INSTRUCTIONS: ATTEMPT QUESTION ONE AND ANY OTHER TWO QUESTIONS

**QUESTION ONE (COMPULSORY) (30 MARKS)**

- a) Describe five anti-takeover strategies available to companies to discourage merger and acquisitions. (10 marks)
- b) Highlight six assumptions of Capital Asset Pricing Models(CAPM). (3 marks)
- c) Describe the factor that influence the capital structure of an organization. (5 marks)
- d) XYZ ltd. is considering three possible capital projects for next year. Each project has a 1 year life, and project returns depend on next years 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:**

- i. Find each project expected rate of return, variance, standard deviation and coefficient of variation. (6 marks)
- ii. Compute the correlation coefficient between
- a) A and B (2 marks)
  - b) A and C (2 marks)
  - c) B and C (2 marks)

## QUESTION TWO (20 MARKS)

The Altman formula for prediction of bankruptcy is given as follows:

	<b>Working capital</b>	<b>Retained earnings</b>	<b>Earnings before interest and tax</b>	<b>Market value of equity</b>	<b>Total assets</b>	<b>Liabilities</b>	<b>Sales</b>
	<b>Sh.'000'</b>	<b>Sh.'000'</b>	<b>Sh.'000'</b>	<b>Sh.'000'</b>	<b>Sh.'000'</b>	<b>Sh.'000'</b>	<b>Sh.'000'</b>
A Ltd	4,000	60,000	10,000	20,000	200,000	120,000	200,000
B Ltd	2,000	20,000	0	5,000	100,000	80,000	120,000
C Ltd	6,000	20,000	-30,000	48,000	800,000	740,000	900,000
D Ltd.	40,000	200,000	30,000	100,000	1,800,000	1,000,000	2,000,000

$$Z \text{ score} = 1.2X_1 + 1.4X_2 + 3.3X_3 + 1X_4 + 0.6X_5$$

In this model, a Z-score of 2.7 or more indicates non-failure and a Z-score of 1.8 or less indicates failure.

You are provided with the following information in respect of four listed companies.

### Required:

- The Z-Score for each of the companies. Comment on the results obtained. (10 marks)
- It has been suggested that other ratios ought to be incorporated into Altman's bankruptcy prediction model. What is your opinion on this? (5 marks)
- List the indicators of possible business failure. (5 marks)

## QUESTION THREE (20 MARKS)

- Explain factors that influence dividend policy for companies. (10 marks)
- Identify and explain four dividend theories; highlight 2 limitations for each theory. (10 marks)

## QUESTION FOUR (20 MARKS)

- List and explain five factors that should be taken into account by a businessman in making the choice between financing by short-term and long-term sources. (10 marks)
- Evaluate five advantages of leasing from the point of view of the lessee. (8 marks)

### QUESTION FIVE (20 MARKS)

- (a) Explain fully the effect of the use of debt capital on the weighted average cost of capital of a company. (6 marks)
- (b) Millennium Investments Ltd. wishes to raise funds amounting to Sh.10 million to finance a project in the following manner:

Sh.6 million from debt; and

Sh.4 million from floating new ordinary shares.

The present capital structure of the company is made up as follows:

1. 600,000 fully paid ordinary shares of Sh.10 each
2. Retained earnings of Sh.4 million
3. 200,000, 10% preference shares of Sh.20 each.
4. 40,000 6% long term debentures of Sh.150 each.

The current market value of the company's ordinary shares is Sh.60 per share. The expected ordinary share dividends in a year's time is Sh.2.40 per share. The average growth rate in both dividends and earnings has been 10% over the past ten years and this growth rate is expected to be maintained in the foreseeable future.

The company's long term debentures currently change hands for Sh.100 each. The debentures will mature in 100 years. The preference shares were issued four years ago and still change hands at face value.

#### Required:

- (i) Compute the component cost of:
- Ordinary share capital; (3 marks)
  - Debt capital (3 marks)
  - Preference share capital. (3 marks)
- (ii) Compute the company's current weighted average cost of capital. (5 marks)