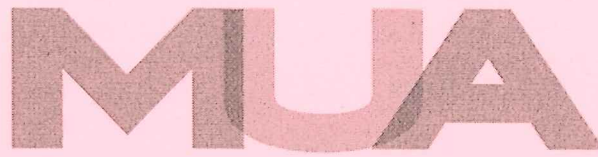


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POSTGRADUATE UNIVERSITY EXAMINATIONS  
SCHOOL OF MANAGEMENT AND LEADERSHIP  
DEGREE OF MASTER OF BUSINESS ADMINISTRATION

**BFO 501: CORPORATE FINANCE**

**DATE: 30<sup>TH</sup> NOVEMBER 2023**

**DURATION: 3 HOURS**

**MAXIMUM MARKS: 60**

**INSTRUCTIONS:**

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **FOUR (4)** questions.
4. Question **ONE** is compulsory.
5. Answer any other **TWO** questions.
6. Question **ONE** carries **30 MARKS** and the rest carry **15 MARKS** each.
7. Write all your answers in the Examination answer booklet provided.

**QUESTION ONE**

**Read the Case Study below carefully and answer the questions that follow:**

**CITY GRAPHICS LIMITED**

City Graphics Limited is evaluating a new technology for its reproduction equipment. The technology will have a three-year life and would cost Sh.800,000. Its impact on the company's cash flows is subject to risk.

In the first year, management estimates that there is an equal chance that the technology will either succeed and save the company Sh.800,000 or fail saving it nothing at all.

If the technology fails in the first year, savings in the last two years will be zero. Even worse, there is a 40% chance that additional Sh.240,000 may be required in the second year to convert back to the original process.

If the technology succeeds in the first year, the second year cash flows may be Sh.1,440,000, Sh.1,120,000 or Sh.800,000 with probabilities of 0.20, 0.60 or 0.20 respectively. Third year cash flows are then expected to be Sh.160,000 greater or Sh.160,000 less than cash flows in the second year, with equal chance of either occurring.

All the cash flows above are after taxes.

**Required:**

- a) A probability tree depicting the above cash flow possibilities. **(12 marks)**
- b) Net present values for each possibility using a risk-free rate of 5%. **(3 marks)**
- c) Examine five factors that are likely to affect City Graphics Limited cost capital during capital structure decisions **(5 marks)**
- d) "Technological risks will impact on the city graphics's cash flows." Assess any other five components of systematic risk that will affect the cashflows of City graphics limited as outlined in the Arbitrage Pricing theory **(5 marks).**
- e) Assuming that City Graphics Wants to borrow funds for acquisition of the technology required, formulate the factors to be considered when choosing between Eurocurrency or domestic markets for raising funds **(5 marks).**

## QUESTION TWO

The directors of ABC Electronics Ltd. are considering a takeover bid for XYZ Electronics Ltd. However, they recognise that there are potential problems with any proposed bid. First, the directors of ABC Ltd. believe that any take-over bid would be resisted by the directors of XYZ Ltd.

Secondly, ABC Ltd. is short of cash and so any offer made to the shareholders of XYZ Ltd. would have to be either in form of a share-for-share exchange or a loan capital-for-share exchange.

### Required:

- a) Discuss five reasons why a company seeking to maximise the wealth of its shareholders may wish to take over another company. (5 marks)
- b) Evaluate the share-for-share exchange and loan capital-for-share exchange options as methods of purchase consideration from the viewpoint of the shareholders of both companies. (5 marks)
- c) Describe five drivers of E-finance models in modern Finance (5 marks).

## QUESTION THREE

In many countries including Kenya, the concept of green corporate finance has gained increasing prominence in recent times as evidenced by the issue of green bonds in Nairobi securities exchange (CMA).

### Required:

- a) Formulate the reasons motivating the increasing interest in green financing. (5marks)
- b) Evaluate any five green financial products available in the Kenyan Market. (5 marks)
- c) Assess the main challenges in transitioning to E-finance Models in Kenya. (5 marks)

**QUESTION FOUR**

Quality Products (QP), Ltd a leading manufacturer in its field, is planning an expansion programme. It has estimated that it will need to raise an additional Sh.100 million. QP Ltd. is discussing with its investment banker the alternatives of raising the Sh.100 million through debt financing or through issuing additional shares of equity. The debt to total asset ratio in its industry is 40%. QP Ltd.'s balance sheet and income statements are as follows:

## Balance sheet as at 31 December 2001

	Sh. Million		Sh. Million
Current Assets	600	Current liabilities	200
Net fixed assets	400	Long term debt (10%)	100
		Ordinary share capital (Sh.10 par)	100
		Share premium	<u>400</u>
	<u>1,000</u>	Retained earnings	<u>1,000</u>

## Income statement for the year ended 31 December 2001

	Sh. Millions
Total revenues	<u>2,000</u>
Net operating income	260
Interest expenses	<u>10</u>
Net income before tax	250
Income taxes (at 40%)	<u>100</u>
Net income after tax	<u>150</u>

The company expects to increase its total revenue by Sh.200 million and net operating income by Sh.26 million if the expansion is undertaken. The company's effective tax rate is 40% and dividend payout has averaged about 60% of net income. At present, its cost of debt is 10% and its cost of equity is 15%. If the additional funds are raised through debt, the cost of debt will be 10% and cost equity will be 15.2%. If the funds are raised by equity, the cost of debt will be 10% and the cost of equity will be 14.8%.

The current share price at which new equity can be sold is Sh.100.

**Required:**

Calculate the effects of the alternative forms of financing on:

- a) The total value of equity of the firm. (7 marks)
- b) The firm's total debt to equity ratio (based on balance sheet figures) (2 marks)
- c) Price per ordinary share. (2 marks)
- d) Total market-value of the firm. (2 marks)
- e) The firm's weighted average cost of capital. (2 marks)

