The Management University of Africa

Sponsored by the Kenya Institute of Management

POSTGRADUATE UNIVERSITY EXAMINATIONS

SCHOOL OF MANAGEMENT AND LEADERSHIP

DEGREE OF DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION

DBF 901: THEORIES OF BANKING AND FINANCE

DATE: 4TH AUGUST 2026

DURATION: 3 HOURS
MAXIMUM MARKS: 50

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 **10 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:

A) MONETARY POLICY TRANSMISSION AND BANKING STABILITY

In response to surging inflation in 2023, the Central Bank of Kenya (CBK) adopted contractionary monetary policy tools—raising the Central Bank Rate (CBR) and conducting open market operations (OMOs). Commercial banks experienced liquidity constraints and rising loan default rates, leading to tightening credit conditions.

i. Critically evaluate the theoretical underpinnings of the interest rate channel in monetary policy transmission.
(3 Marks)

ii. Discuss the interaction between monetary policy tightening and financial stability from a macroprudential perspective.
(3 Marks)

iii. Evaluate the limitations of open market operations in the context of underdeveloped capital markets. **(3 Marks)**

B) BANK RUNS, SYSTEMIC RISK, AND CENTRAL BANK RESPONSES

Following a social media-triggered rumor, Rural Trust Bank—despite its sound asset base—faced massive withdrawals. The Central Bank intervened via emergency liquidity assistance, but confidence remained low across small banks, raising systemic concerns.

i. Apply Diamond and Dybvig's model to explain the fragility of fractional reserve banking systems.
(2 Mark)

ii. Evaluate the systemic implications of bank runs in the context of financial contagion and network theory.
(2 Marks)

iii. Assess the role of central bank emergency lending in mitigating moral hazard.

(2 Mark)

C) DIGITAL FINANCE, DISINTERMEDIATION, AND REGULATORY CHALLENGES

Equity Bank's rapid digitalization led to significant outreach among the unbanked, increased transaction volumes, and improved operational efficiency. However, it also exposed the bank to cybersecurity risks and regulatory ambiguities regarding digital financial services.

i. Critically examine the impact of fintech and digital banking on the traditional intermediation function of banks.

(2 Marks)

ii. Interrogate the implications of digital financial inclusion for monetary policy effectiveness and financial stability

(2 Marks)

iii. Explore the regulatory dilemma between innovation and prudential oversight in the context of digital banking.

(2 Marks)

D) CREDIT CREATION, RESERVE REQUIREMENTS, AND THE POST-CRISIS BANKING LANDSCAPE

ABC Bank aims to maximize credit creation within a 10% reserve requirement framework. The bank engages in aggressive loan expansion supported by interbank borrowing and securitization.

i. Compare and contrast the traditional money multiplier model with the endogenous money supply view.

(3 Marks)

ii. Investigate the impact of reserve requirements on credit creation and financial intermediation post-2008.

(3 Marks)

iii. Discuss the risks associated with excessive credit creation from the perspective of the financial accelerator theory.

(3 Marks)

QUESTION TWO

Capital Structure and Shareholder Wealth – The Case of Alpha Tech Ltd

Background:

Alpha Tech Ltd is a medium-sized tech firm operating in Kenya’s ICT sector. The company has experienced rapid growth over the past five years due to the high demand for digital services. The firm's financial manager is evaluating Alpha Tech’s capital structure. Currently, the company is entirely equity-financed with 10 million outstanding shares at a market price of KES 20 per share. The company is considering raising KES 100 million to finance a new cloud-based product line.

Alpha Tech has two financing options:

1. **Option A:** Raise KES 100 million through equity by issuing new shares.
2. **Option B:** Raise KES 100 million through debt at an interest rate of 10% per annum.

The firm’s earnings before interest and tax (EBIT) are expected to be KES 30 million per year. The corporate tax rate is 30%.

Required:

a) Using the Net Income (NI) approach of capital structure theory, determine the value of the firm and the cost of capital under both financing options.

(4 Marks)

b) Using the Modigliani and Miller (MM) Proposition I (without taxes), explain whether the choice between debt and equity affects the value of AlphaTech.

(2 Marks)

c) Appraise the key risks that AlphaTech should consider when increasing debt in its capital structure, based on the Trade-Off Theory?

(2 Marks)

d) Evaluate AlphaTech's financing decision using the Pecking Order Theory. **(2 Marks)**

QUESTION THREE

a) Discuss the role of loan contracting in mitigating agency problems between borrowers and lenders. In your answer, analyse the use of covenants, collateral, and monitoring mechanisms. Provide theoretical justifications and support your discussion with empirical evidence. **(5 Marks)**

b) Appraise the role of the banking sector in promoting economic growth and stability in developing economies. Your response should incorporate theoretical underpinnings and empirical evidence, drawing on cross country comparisons where appropriate.

(5 Marks)

QUESTION FOUR

a) Synthesis empirical evidence and behavioral finance theories to provide an advanced analysis of the Efficient Market Hypothesis (EMH) and its application in real world financial markets.

(5 Marks)

b) Evaluate the relevance of Net Present Value (NPV) and Internal Rate of Return (IRR) in investment decision-making, examining their theoretical foundations, strengths and limitations.

(5 Marks)