



STRATHMORE BUSINESS SCHOOL
BACHELOR OF FINANCIAL SERVICES
END OF SEMESTER EXAMINATION
BFS 1201: MONETARY AND FINANCIAL SYSTEMS

DATE: Thursday, 19th December 2024

TIME: 08:00 – 10:00

Instructions

1. This examination consists of **FIVE** questions.
2. Answer **Question ONE (COMPULSORY)** and any other **TWO** questions.

QUESTION ONE (COMPULSORY)

(30 MARKS)

- a) A bank's balance sheet is a key element in understanding its financial position. You are provided with the following extract from Bank B's statement of financial position for FY 2023:

| Assets | Amount (Ksh Million) | Liabilities | Amount (Ksh Million) |
|---------------|-----------------------------|--------------------|-----------------------------|
| Reserves | 120 | Demand Deposits | 400 |
| Securities | 150 | Bank Capital | 60 |
| Loans | 230 | | |
| Total | 500 | Total | 500 |

Required:

Calculate the Return on Assets (ROA) and Return on Equity (ROE) if the bank's net profit for the year was Ksh 25 million.

(3 marks)

- b) Identify and describe the **three** motives for holding money according to Keynes' liquidity preference theory. **(6 marks)**
- c) The Central Bank of Kenya uses various tools to regulate the money supply in the economy. Discuss three such monetary policy tools and how they influence economic activity. **(6 marks)**
- d) Hanna deposits Ksh 500,000 in her bank account. The reserve requirement is set at 5%.
- i) Compute the change in total demand deposits after the deposit and the amount available for loans. **(1 mark)**
 - ii) Calculate the amount the bank must hold as required reserves, amount available for loans and explain the significance of the reserve requirement in banking. **(4 marks)**
 - iii) If the bank lends out the available excess reserves to another customer, and this customer deposits the entire loan amount into a different bank, compute the total reserves and total loans for both banks after these transactions. **(4 marks)**
 - iv) Apply the concept of the money multiplier to calculate the maximum potential increase in the total money supply resulting from Hanna's initial deposit. **(2 marks)**
 - v) Discuss **two** practical limitations of the money multiplier model that may prevent the full realization of the calculated maximum potential increase in the money supply. **(4 marks)**

QUESTION TWO

(20 MARKS)

- a) Central banks play a critical role in an economy by managing the monetary system. Discuss **four** primary functions of a central bank. **(8 marks)**
- b) The quantity theory of money links money supply and inflation. Explain the theory and how it relates to inflation targeting as a monetary policy strategy. **(6 marks)**
- c) Explain how open market operations and the central bank rate can be used by the Central Bank of Kenya to manage the inflation rate and influence economic growth. **(6 marks)**

QUESTION THREE

(20 MARKS)

- a) Discuss the significance of the IS-LM curve in monetary economics and explain how changes in interest rates affect the positions of the IS and LM curves. **(8 marks)**
- b) You are provided with the following information for an economy over four years:

| Year | Money Supply (M) | Nominal GDP (PY) |
|-------------|-------------------------|-------------------------|
| 2020 | 350 billion | 3,500 billion |
| 2021 | 375 billion | 3,750 billion |
| 2022 | 400 billion | 4,050 billion |
| 2023 | 420 billion | 4,250 billion |

Calculate the velocity of money for each year using the quantity theory of money. **(4 marks)**

- c) Explain the difference between Tier 1 and Tier 2 capital in the context of bank regulation and capital adequacy. **(8 marks)**

QUESTION FOUR (20 MARKS)

- a) The Portfolio Theory of Money Demand explains factors that influence how much money individuals hold. Discuss **Four** key factors and indicate whether an increase in each factor will increase or decrease the demand for money. **(8 marks)**
- b) Describe the transmission mechanisms through which monetary policy affects the real economy. **(6 marks)**
- c) Explain why the Gold Standard monetary system was abandoned and discuss its implications for modern economies. **(6 marks)**

QUESTION FIVE (20 MARKS)

- a) Define off-balance-sheet activities and provide three examples of such activities in the banking sector. **(8 marks)**
- b) Discuss the major benefits of getting assets off the balance sheet through loan sales and securitization. **(6 marks)**
- c) Describe the composition of a bank's balance sheet, providing examples of each key component. **(6 marks)**