



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

DATE: 15th December 2023

Time: 13:00-15:00

Instructions

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

QUESTION ONE

(30 MARKS)

- a) You are provided with Bank A Statement of financial position extract for the financial year 2021/2022 below.

Assets		Liabilities	
Reserves	100 million	Demand deposits	350 million
Securities	100 million	Bank capital	50 million
Loans	200 million		
Total	400 million		400 million

Required:

Compute the Return on Assets (ROA), the equity multiplier and Return on Equity (ROE) if the net profit for the year was 20 million. **(3 marks)**

- b) The Central Bank regulates the minimum amount of capital that commercial banks should hold to prevent bank failure due to insolvency. The capital adequacy ratio evaluates tier 1 and tier 2 capital against the risk weighted assets. You are required to briefly explain the meaning of tier 1 and tier 2 capital and their relevance to the banks. **(4 marks)**

- c) Describe the relationship between lending rates offered by commercial banks on the prevailing inflation rate within a given market. **(3 marks)**
- d) Discuss the **three motives** for holding money according to Keynes in his liquidity preference theory of the demand for real money balances. **(6 marks)**
- e) Growth of money supply is vital for the process of economic development and for the achievement of price stability in the economy. Discuss **three** factors that determine the money supply in Kenya and state whether each factor is positively or negatively related to money supply. **(9 marks)**
- f) Lilian is a member of Imara Bank. She makes a new deposit of Kshs. 1,000,000 in her checking account. The cash reserve ratio/statutory minimum reserve requirement for all banks is currently set at 4.25%.

Required:

- i) Compute the change in demand deposits on the bank's statement of financial position from this transaction. **(1 mark)**
- ii) Suppose that Imara Bank lends out all the excess reserves from Lilian's deposit to Eric, what will be the amount of the loan? **(2 marks)**
- iii) Assume that John deposits the loan proceeds in Fanaka Bank. The bank loans out all its excess reserves from Eric's deposit to Paul. What will be the amount loaned out to Paul? **(2 marks)**

QUESTION TWO (20 MARKS)

- a) Central banks serve as crucial national authorities responsible for monetary policy implementation, banking regulation, and financial service provision. Discuss four main goals of central banks in their conduct of monetary policy. **(8 marks)**
- b) Imagine you are an economist advising a group of policymakers who are considering implementing inflation targeting as a monetary policy strategy for your country. Provide them with a concise assessment of the advantages and disadvantages of this approach. **(4 marks)**
- c) To influence the money supply and interest rates, the Central Bank of Kenya employs various monetary policy tools. Explain how the Central Bank uses reserve requirements, open market operations and the Central bank rate to conduct monetary policy. **(8 marks)**

QUESTION THREE (20 MARKS)

- a) You are provided with the following extract from the CBK annual report FY 2021/2022 showing the reserve money and its components for FY 2019/20, FY 2020/21 and FY 2021/22.

Table 5.3: Reserve Money and its Components

	End Period Level (KSh Billion)			Annual Growth Rate (Percent)			Annual Absolute Change (KSh Billion)		
	2019/20	2020/21	2021/22	2019/20	2020/21	2021/22	2019/20	2020/21	2021/22
1. Net Foreign Assets	918.1	835.8	637.9	-2.4	-9.0	-23.7	-22.9	-82.3	-197.9
2. Net Domestic Assets	-491.2	-386.0	-116.1	2.0	21.4	69.9	10.0	105.2	269.9
2.1 Government Borrowing (net)	-62.8	-50.3	159.3	66.9	19.9	416.9	126.9	12.5	209.6
2.2 Commercial banks (net)	-131.0	-6.1	61.5	514.2	95.3	1107.0	-109.7	124.9	67.7
2.3 Other Domestic Assets (net)	-300.7	-332.8	-340.7	-2.4	-10.7	-2.4	-7.1	-32.1	-7.9
3. Reserve Money	426.9	449.8	521.8	-2.9	5.4	16.0	-12.9	22.9	72.0
3.1 Currency outside banks	210.9	225.9	251.6	7.1	7.1	11.4	13.9	15.0	25.7
3.2 Bank reserves	216.0	223.9	270.2	-11.0	3.6	20.7	-26.8	7.9	46.3
3.2.1 Required Reserves	153.5	167.0	181.0	-12.2	8.8	8.4	-21.4	13.5	14.0
3.2.2 Cash in Till	46.9	51.2	53.9	-10.7	9.2	5.3	-5.6	4.3	2.7
3.2.3 Excess Reserves	15.5	5.6	35.3	1.6	-63.7	524.9	0.2	-9.9	29.6

Source: CBK

The demand deposits amounted to 1350 billion in FY 2019/20, 1409.9 billion in FY 2020/21 and 1552.2 billion in FY 2021/22.

Required:

- i) Calculate the value of the currency deposit ratio for the three financial years **(3 marks)**
 - ii) Calculate the value of the excess reserve ratio for the three financial years **(3 marks)**
 - iii) Given a Cash Reserve Requirement (CRR) of 4.25%, calculate the value of the money multiplier for the three financial years. **(3 marks)**
 - iv) What does the money multiplier for the three years tell us? **(3 marks)**
- b) Discuss the Gold Standard monetary system and explain why it was abandoned. **(4 marks)**
- c) Money is defined as anything that is generally accepted as payment for goods and services or in the repayment of debts and is distinct from income and wealth. Discuss four attributes of money. **(4 marks)**

QUESTION FOUR**(20 MARKS)**

- a) Explain **four** factors that determine money demand according to the portfolio theories of money demand. State whether an increase or decrease in each factor can increase the demand for money. **(8 marks)**

- b) The IS-LM curve is a Keynesian macroeconomic model that shows how the market for economic goods (IS) interacts with the loanable funds market (LM) or money market. Discuss **four** factors that can shift the IS curve to a new position and discuss the effect of an increase in each factor on the curve. **(8 marks)**
- c) You are provided with data below for money supply (M) and the annual nominal Gross Domestic Product (PY) for an economy for four years: P is the price level and Y is aggregate output (income).

	2019 (Billion)	2020 (Billion)	2021 (Billion)	2022 (Billion)
M	285	300	315	330.75
PY	2,700	3,000	3,300	3,630

Required:

In accordance with the quantity theory of money demand compute the velocity of money for each year. **(4 marks)**

QUESTION FIVE (20 MARKS)

- a) Explain the meaning of off-balance-sheet activities and discuss three examples of the off-balance-sheet activities. **(8 marks)**
- b) Discuss the major benefits of getting assets off the balance sheet through loan sales and securitisation. **(6 marks)**
- c) Describe the composition of a bank's balance sheet providing examples of each key component **(6 marks)**