



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN EXAMINATION**

**UNIVERSITY EXAMINATIONS  
2022/2023 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER EXAMINATIONS**

**BACHELOR OF SCIENCE IN ECONOMICS & BSC MATHEMATICS  
AND ECONOMICS**

**COURSE CODE: ECO 808**

**COURSE TITLE: ADVANCED MACROECONOMICS**

**DATE: MONDAY 05/12/2022 TIME: 2:00 -5:00**

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**INSTRUCTIONS TO CANDIDATES**

ATTEMPT QUESTION **ONE** AND ANY OTHER **THREE**

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

**QUESTION ONE COMPULSORY (40 MARKS)**

a) Differentiate between the following concepts

(i) Endogenous and exogenous variables [3 marks]

(ii) Stock and flow variables [3 marks]

(iii) Unique and multiple equilibrium [3 marks]

b) "The external value of national currency depends upon and fluctuates with its internal purchasing power ".Discuss ( 6 marks)

c) Explain the use of multiplier in economic analysis (5 marks)

d) The following data are given for an economy

$$\text{Consumption } C = 40 + 0.75y$$

$$\text{Investment } I = 140 - 10i$$

$$\text{Government expenditure } G = 100$$

$$\text{Lump sum tax } T = 80$$

$$\text{Money demand } M^d = 0.2y - 5i$$

$$\text{Money supply } M^s = 85$$

$i$  is % interest rate; other figures in Kenya shillings

- i. Find out the equilibrium income,  $Y$  and interest rate (5 Marks)
  - ii. Suppose the government increases its expenditure on education and health services by Ksh. 65 what would be its effect on equilibrium income and rate of interest? (5 marks)
- e) compare and contrast the theory with James Duesenberry's Relative income hypothesis with the Ando-modigliani Life-cycle theory of consumption (10 Marks)

**QUESTION TWO ( 20 Marks )**

a) Discuss the problems that accrue to a country for running a persistent current account deficit (10 marks)

b) Discuss policy measures for dealing with balance of payment deficits ( 10 marks)

**QUESTION THREE ( 20 Marks )**

a) You are given the following information about the commodity and money markets of a closed economy without government intervention

The commodity market;

consumption function ;  $C = 50 + 2/5 Y$

Investment function ;  $I = 790 - 21 r$

The money Market;

Precautionary and transactionary demand for money

$$M_{DT} = 1/6 Y$$

Speculative demand for money

$$M_{DS} = 1200 - 18r$$

Money Supply

$$M_S = 1250$$

**REQUIRED**

- i) Determine the equilibrium levels of income and interest rate of this economy **(8 Marks)**
- ii) Using a well labeled diagram ,illustrate the equilibrium condition in part (i) above **( 6 Marks )**
- b) "Money matters and money does not matter discuss" **(6 Marks)**

**QUESTION FOUR ( 20 Marks )**

a) Consider the monetary and expenditure sectors together under price regime Specification of the simultaneous equilibrium is given as;

Expenditure sector ;  $Y = C_o + C (Y-T,r) + I_o + I(Y,r) + G_o$

Monetary sectors ;  $L + L(Y,r) = M_o$

- i) Find equilibrium national income and interest rate **( 6 Marks )**
- ii) Provide a balanced budget multiplier for the two sectors **(6 Marks )**
- b) Distinguish the following concept **( 8 marks)**
  - i) Fixed and flexible exchange rate systems
  - ii) Expansionary and contractionary fiscal policies

**QUESTION FIVE (20 Marks)**

a) Given the following facts and figures about an economy:

$$C = 100 + 0.8Y_d$$

$$I = 1000 - 100r$$

$$G = 500$$

$$T = 0.5Y$$

$$L = 200 + 0.5Y - 10r$$

$$M = 1000$$

- i. Derive the expression for IS and LM curves and interpret them [6 mks]
- ii. Calculate the equilibrium  $r$ ,  $y$ ,  $I$  and  $C$ . [8mks]
- iii. Obtain the new expression for IS curve if MPC rises to 0.9 with exogenous consumption equal to 200. State the effect of the rise in MPC on the IS curve and Show this effect diagrammatically. [6 mks]

