



# **MACHAKOS UNIVERSITY**

**University Examinations for 2022/2023 Academic Year**

**SCHOOL OF BUSINESS, ECONOMICS AND HOSPITALITY AND TOURISM**

**MANAGEMENT**

**DEPARTMENT OF ECONOMICS**

**FOURTH YEAR FIRST SEMESTER EXAMINATION FOR**

**BACHELOR OF ECONOMICS AND FINANCE**

**BACHELOR OF ECONOMICS AND STATISTICS**

**BACHELOR OF ECONOMICS**

**BACHELOR OF ARTS**

**EET 401: MACROECONOMIC THEORY IV**

**DATE:**

**TIME:**

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## **INSTRUCTIONS:**

- (i) Answer question one (Compulsory) and any other two questions**
- (ii) Do not write on the question paper**
- (iii) Show your workings clearly**

## **QUESTION ONE (COMPULSORY) (30 MARKS)**

- a) Using the intertemporal consumption optimizing model, describe consumption behaviour over time. (7 marks)
- b) Derive and explain Tobin's q theory of investment. (7 marks)
- c) Consider a Solow economy that is on its balanced-growth-path. Assume for simplicity that there is no technological progress. Demonstrate what would happen to the balanced-growth-path values if:
  - (i) There is an increase in the savings rate. (4 marks)
  - (ii) There is an increase in population growth rate. (4 marks)
- d) Using relevant illustrations, analyze the effectiveness of fiscal and monetary policy according to the monetarists. (8 marks)

## **QUESTION TWO (20 MARKS)**

- a) Derive the economy's aggregate demand curve in the static model. (8 marks)
- b) Tobin's model of portfolio balance explains why rational individual asset holders might hold their portfolios distributed among several assets of differing riskiness and expected return.

Illustrate how the individual's decision to hold money is influenced by their attitude towards risk. (12 marks)

**QUESTION THREE (20 MARKS)**

- a) Explain the Ando-Modigliani Approach to consumption behaviour clearly showing its relevance in developing countries. (10 marks)
- b) Derive the equilibrium in the extended model. (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) Using relevant illustrations, analyze the effectiveness of fiscal and monetary policy under the *Fiscalist* model. (10 marks)
- b) Derive and discuss the determinants of money supply (10 marks)

**QUESTION FIVE (20 MARKS)**

- a) Explain the stylized facts about consumption (8 marks)
- b) With reference to transactions demand for money theory where consumers are also investors, and withdraw cash only for spending and part of their income not withdrawn remains with the bankers or brokers in form of bonds. Assume a representative consumer with  $y$  as real income which he intends to spend within period  $T$ . Let the number of transactions (bank withdrawals or with the broker) be  $n$ , the cost of each transaction is  $\alpha$  and the interest rate on the bonds is  $r$ .
  - (i) Derive the expression for the optimal number of transactions (8 marks)
  - (ii) Explain the relationship between  $n$  and  $r$ ,  $T$ ,  $y$  and  $\alpha$ . (4 marks)