KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF ECONOMICS AND MASTER OF ECONOMICS (MECOHD)

EET 801: ADVANCED MACROECONOMIC THEORY I

DATE: Friday, 12th May, 2017 TIME: 9.00 a.m. - 12.00 p.m.

INSTRUCTIONS:

Answer **ALL** questions.

QUESTION ONE

a) With the help of relevant economic methodology, explain the following concepts as used in advanced macroeconomic theory.

i) Ricardian equivalence theorem

ii) Tobin's q theory

iii) Hysteresis

(9 marks)

b) Using relevant equations and graph, demonstrate the internal and external balance of payment equilibrium in the Mundell-Felemming Model. (6 marks)

QUESTION TWO

a) The profits of a representative firm are given by the following:

$\pi = Y - wL$

Required:

i) The problem facing the firm. (5 marks)

ii) Derive and present the condition for the efficiency wage. (5 marks)

b) The evolution of a firm's capital stock is given by $K_{t+1} = K_t + I_t$ and adjustment costs are given by $C(I_t)$. Obtain and solve optimization problem and interpret your results.

(5 marks)

QUESTION THREE

i) Consider a profit maximizing firm that rents capital at a rate r_k, and facing a profit function given as $\pi(K, X_1, X_2, \ldots, X_n) - r_k K$. Where $X_1, X_2, \ldots X_n$ are exogenous variables, and K the amount of capital rented. Show that capital, K is decreasing in r_k and explain the implication. (5 marks)

ii) Suppose the firm's income that is subject to the corporate income tax is reduced by a fraction f of its investment expenditures. Derive the expression for the user cost of capital, and explain relationship between the tax credit and the firm's desired capital stock. (10 marks)

QUESTION FOUR

New classical critics of economics insisted that relations be derived from fundamentals. They said that macroeconomic relationships should be derived from profit maximization by firms and from utility maximization by consumers. The new methodology had a profound effect on macroeconomics. Five separate neutrality results overturned aspects of macroeconomics that Keynessians had previously considered incontestable. Discuss in details the neutrality results. (15 marks)