KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF ECONOMICS, BACHELOR OF ECONOMICS AND FINANCE, AND BACHELOR OF ECONOMICS AND STATISTICS

EET 401: MACROECONOMICS THEORY IV

DATE: FRIDAY 20TH JULY 2018 **TIME: 8.00 A.M. – 10.00 A.M.**

INSTRUCTIONS:

Answer question **ONE** and any other **TWO**.

Question One

1. Use the relevant economic tools to explain the following concepts as used in macroeconomics.
   a) Ratchet effects (3 marks)
   b) Perfect consumption smoothing or excess consumption smoothness. (3 marks)
   c) Income possibilities Curve (3 marks)
   d) Rational expectations (3 marks)
   e) Wage rigidity (3 marks)

2. You are given a logarithmic utility function of the form $U(c) = Inc_t$ and y_t as the consumer's income in period t. C_t denotes consumption in period t.
   a) Show that the ratio of marginal utilities for any two adjacent periods over time is equal to the ratio of the market interest rate and the consumer discount rate. (10 marks)
   b) State all the necessary assumptions used in (a) above to derive the expression for inter-temporal consumption model. (2 marks)
   c) Explain the implications of your result on the consumption paths in (a) above. (3 marks)

Question Two

a) Use the necessary economic methodologies to explain in details the present value (PV) criterion for investment. (10 marks)

b) In the flexible accelerator model, show that the equilibrium capital stock s a function of output, user cost of capital and the price of output. (10 marks)

Question Three

It is observed that the marginal propensity to consume (MPC) for a short run consumption function (cross-section analysis) is less than the MPC for a long run consumption function (time series analysis). For the long run consumption function the MPC is close to unit. Clearly explain the life cycle income hypothesis and the permanent income hypothesis and illustrate how these two theories explain the above observed phenomena. (20 marks)

Question Four

a) Derive and explain the Solow growth model and illustrate graphically the steady state capital-labour ratio. (10 marks)

b) Derive and explain the Harrod-Domar condition for equilibrium growth. (10 marks)

Remember to state all the underlying assumptions for both (a) and (b) above. (10 marks)

Question Five

a) Use the necessary economic methodologies to derive and explain the regressive expectations model following the Tobin's analysis on liquidity preference. (10 marks)

b) Derive and explain money supply determinants. (10 marks)