



**KENYATTA UNIVERSITY**

**UNIVERSITY EXAMINATIONS 2017/2018**

**FIRST SEMESTER EXAMINATION FOR THE DEGREE OF**

**BACHELOR OF COMMERCE, BACHELOR OF EDUCATION AND**

**BACHELOR OF ECONOMICS**

**EET 401: MACROECONOMICS THEORY IV**

**DATE: Thursday, 1<sup>st</sup> February 2018**

**TIME: 4.30p.m-6.30p.m**

**INSTRUCTIONS:**

- 1) Answer question one and any other two questions
- 2) Question one is compulsory and carries 30 marks
- 3) All other questions carry 20 marks each

**QUESTION ONE (30 MARKS)**

- a) Clearly distinguish between Marginal Propensity to Consume (MPC) and Average Propensity to Consume (APC). (4 marks)
- b) Given the following utility function and budget constraint; (6 marks)

$$\max_{c_t} \sum_0^T \frac{\ln c_t}{(1 + \delta)^t},$$

Subject to the constraint that

$$\sum_0^T \frac{c_t}{(1 + r)^t} = \sum_0^T \frac{y_t}{(1 + r)^t}.$$

- c) Briefly discuss each of the following four approaches to the demand for money.
  - i) Tobin's model of liquidity preference. (2 marks)
  - ii) Inventory approach to transaction demand. (2 marks)
  - iii) Friedman's modern version of quantity theory of money. (2 marks)
  - iv) Regressive expectations model. (2 marks)

- d) Using a well labelled diagram, illustrate money supply and interest rate targets with money market shocks. (6 marks)

- e) Using a well labelled diagram illustrate wage rigidity in the classical case. (6 marks)

### QUESTION TWO (20 MARKS)

- a) Kenya has recently been experiencing increasing fiscal deficit, as an economist, advise the cabinet secretary in charge of the treasury on five main options through which this budget deficit can be financed. (10 marks)
- b) Briefly discuss the Friedman approach permanent income theory of consumption. (10 marks)

### QUESTION THREE (20 MARKS)

- a) Explain the Life Cycle Hypothesis (LCH) of Franco Modigliani assumptions, and its weaknesses. (10 Marks)
- b) Using Duesenberry Approach to Relative Income derive:
- Consumption function (5 marks)
  - Marginal Propensity to Consume function (5 marks)

### QUESTION FOUR (20 MARKS)

- a) Diagrammatically show and explain the effect of assets on the IS curve (10 marks)
- b) Given a Production:
- $$Y_t = f(K_t, L_t) = AK_t^\alpha L_t^{1-\alpha} \text{ where } L_{t+1} = (1+n)L_t \text{ and } \alpha \in (0,1)$$
- Show that F exhibits a constant return to scale technology (3 marks)
  - Express output as a function of the capital labor ratio  $k_t = \frac{K_t}{L_t}$  (2 marks)
  - What is the Golden Rule value of  $k$ ? (2 marks)
  - Find the wage rate per worker and the rental rate per capital. (3 marks)

### QUESTION FIVE (20 MARKS)

- a) Discuss the similarities between Neoclassical growth models and the endogenous growth models (10 marks)
- b) Proof that Harrods warranted growth rate (Gw) is Domar's full employment rate of growth. (10 marks)