

CHUKA



UNIVERSITY

## UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF  
MASTERS OF SCIENCE IN ECONOMICS

## MSEC 821: ADVANCED MACRO ECONOMICS THEORY I

STREAMS: MSEC

TIME: 3 HOURS

DAY/DATE: MONDAY 13/08/2018

2.30 PM – 5.30 PM

## INSTRUCTIONS:

Answer Question One and any other Three Questions

## Question One

(a) Given  $y = c(y - ty) + i + g$ , derive both the balanced budget multiplier and the tax rate multiplier and explain your answers. [8 marks]

(b) If mps and mpt are equal to 0.245, get  $\frac{s+t}{d}$  and interpret your results. [3 marks]

(c) Given  $Y = C + I + G + NX$ , show that net foreign investment is equal to trade balance. [4 marks]

## Question Two

(a) The real output in an economy is given as  $y = c(y - ty) + i(r)$  derive the multiplier for change in money and comment on your result. [5 marks]

(b) Explain how disequilibrium in income for a closed economy is solved using the inventory approach. [5 marks]

(c) Explain the accelerator theory of investment and discuss its major weaknesses. [5 marks]

**Question Three**

- (a) Given that an individual lives for two periods and that he inherits no asset and leaves no bequest,
- (i) Show that savings in period one equals the opposite of savings in period two. [4 marks]
  - (ii) Show graphically and explain his inter temporal budget constrain. [4 marks]
- (b) In a small open economy, investment depends on worlds interest rates. Show this graphically and explain both trade deficit and surplus. [7 marks]

**Question Four**

- (a) Briefly explain the following models of macroeconomics
- (i) Ando-Modigliani Approach [4 marks]
  - (ii) Rational expectation theory [4 marks]
- (b) Explain the important equations under Mundel-Fleming model and show graphically how equilibrium income and exchange rate are determined. [7 marks]

**Question Five**

- (a) Explain the assumptions of Solow growth model. [6 marks]
- (b) Graphically discuss the dynamics of Solow growth model. [9 marks]
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