



**AFRICA  
UNIVERSITY**

*(A United Methodist-Related Institution)*

***“Investing in Africa’s Future”***

**FACULTY OF MANAGEMENT AND  
ADMINISTRATION**

**COURSE TITLE: MEC 204-INTERMEDIATE MACROECONOMICS**

**SEMESTER 1: FINAL EXAMINATION NOVEMBER 2013**

**LECTURER: MR. L. NGENDAKUMANA**

**TIME: 3 HOURS**

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***INSTRUCTIONS***

Answer all **questions** in section A and any two [2] questions in section **B**.

Total possible mark is **60**.

Start **each** question on a new page in your answer booklet.

The marks allocated to **each** question are shown at the end of the section.

**Show all your workings.**

Credit will be awarded for logical, systematic and neat presentations.

## SECTION A

### Question 1

(a) Derive the equilibrium price level and output for any economy with the following characteristics:

$$C = 10 - 5P \quad (\text{Consumption})$$

$$I = 20 \quad (\text{Investment})$$

$$G = 15 \quad (\text{Government expenditure})$$

$$Q_s = 5 + P \quad (\text{Aggregate supply}) \quad [1]$$

(b) What happens to production and price if government expenditure decreases to 10 [1]

(c) Using well labeled diagrams, explain what happens to the aggregate supply curve under the classical, basic Keynesian and the extreme Keynesian cases when;

i. A natural disaster destroys half of the capital stock of the country [3]

ii. New, more productive machines are invented, but only a third of the labor force is knows how to operate them [3]

(d) How does a shift in aggregate demand affect prices, real wages and output in the classical? Define the classical unemployment and explain how it arises in a given economy [4]

### Question 2

Assume that in addition to strictly autonomous investment and government spending, the economy has the following behavioral equations for consumption (C), net tax revenue (T):

$$C = a + c(Y - T)$$

$$T = \bar{T} + \bar{t}Y$$

Where:  $a = 170$ ,  $I_p = 800$ ,  $\bar{T} = 800$ ,  $c = 0.75$ ,  $\bar{t} = 0.2$ ,  $G = 1800$ ,

- What is the level of consumption when the level of income (Y) equals \$ 6000? [1]
- What is the level of saving when the level of income (Y) equals \$ 6000? [2]
- What are the levels of planned and autonomous planned expenditures when the level of income (Y) equals \$ 6000? What is the level of unintended inventory investment? [4]
- What is the value of the marginal propensity to save? What is the value of the marginal leakage rate? Why are these two magnitudes not equal? [3]
- Is the economy in equilibrium when income (Y) equals \$ 6000? If not what is the level of equilibrium income for the economy described in this question? [2]

### Question 3

- (a) Using all necessary assumptions, explain the Keynesian theory of consumption [4]
- (b) “ In consumption theory, a rise in income leads to a rise in the average propensity to consume (APC). Assess this statement using a numerical illustration. [2]
- (c) Distinguish between autonomous consumption and induced consumption using a numerical and graphical illustrations in your explanations [2]
- (d) Distinguish between flow and stock magnitude and give one example in each case [2]
- (e) Why are imports considered to be a leakage in any given economy? [2]

## SECTION B

### Question 4

- (i) For a given level of GNP, discuss what happens to personal income, disposable income, personal consumption expenditures and personal saving if
  - (a) Personal taxes go up [2]
  - (b) Personal interest income declines [2]
  - (c) Personal consumption expenditures rises [2]
  - (d) Corporate profits goes down [2]
- (ii) Government can finance its budget deficit in two ways. Outline and define each of them and briefly discuss the shortcomings of them. [4]

### Question 5

- (a) Distinguish between real gross domestic product (GDP) and real gross national product (GNP) as measurements of macroeconomic performance of nations. [2]
- (b) Using a country of your choice, outline and explain possible causes of a decline in the capacity utilization. [6]
- (c) Prescribe possible policies that can be implemented to eradicate the problems of low capacity utilization. [4]

### Question 6

- (a) Outline and discuss the various investment theories/ approaches [6]
- (b) State and define the various types of investment [3]
- (c) Outline the shortcomings in the measurement of investment spending [3]

*End of Paper*