



## AFRICAN ECONOMIC RESEARCH CONSORTIUM

*Collaborative PhD Programme in Economics for Sub-Saharan Africa*

### **COMPREHENSIVE EXAMINATIONS IN CORE AND ELECTIVE FIELDS**

**FEBRUARY 13 – MARCH 4, 2019**

### **INTERNATIONAL ECONOMICS**

**Time: 08:00 – 11:00 GMT**

**Date: Wednesday, February 27, 2019**

---

#### **INSTRUCTIONS:**

Answer a total of FOUR questions: ONE question from Section A, ONE question from Section B, and TWO questions from Section C; one of which **MUST be Question 5 or 6 and the other Question 7 or 8.**

The sections are weighted as indicated on the paper.

---

#### **SECTION A: (15%)**

**Answer only ONE Question from this Section**

##### **Question 1**

The first step in understanding trade among countries is to understand how the economies look in the absence of international trade, a state referred to as autarky.

Clearly specify the characteristics of an economy in autarky with focus on: (i) the agents in the economy, (ii) the objective of each agent, (iii) the choices that each agent must make and (iv) the constraints that each agent acts under. **[15 Marks]**

##### **Question 2**

- (a) Distinguish between devaluation and depreciation. **[5 Marks]**
- (b) Distinguish between a spot exchange rate and a forward exchange rate. **[5 Marks]**
- (c) What is a forward premium and how is it calculated? **[5 Marks]**



## SECTION B: (25%)

Answer only ONE Question from this Section

### Question 3

In a 3 x 3 Ricardian world, the constant labour costs of producing a unit of good  $j$  in country  $i$  are as follows:

		Country		
		$1$	$2$	$3$
Good	$X$	1/4	1	1
	$Y$	1	1/3	1/2
	$Z$	1	1/2	1/3

Using the concept of Goods Triangle, clearly illustrate which country will specialize in which good. Is this pattern of production an optimal assignment? **[25 Marks]**

### Question 4

- (a) Given the equation  $\ln(S) = \ln M - \ln M^* - \beta(\ln y - \ln y^*) + \varepsilon(i - i^*)$ , where  $S$  is the exchange rate defined as the number of domestic currency units per unit of foreign currency,  $M$  is the domestic money supply,  $y$  is domestic income,  $i$  is domestic interest rate. The \* represents foreign variables. Explain fully how increases in domestic income, domestic money supply and domestic interest rate will affect the exchange rate, prices and real money balances. **[15 Marks]**
- (b) Outline and explain the basic assumptions on which the specie flow mechanism is based and describe how a balance of payments deficit is corrected. **[10 Marks]**



**SECTION C: (60%)**

**Answer TWO Questions from this Section;**

**One of which MUST be Question 5 or 6 and the other Question 7 or 8**

**Question 5**

- (a) (i) Explain the Stolper-Samuelson theorem. **[5 Marks]**
- (ii) Using appropriate equations, prove the Stolper-Samuelson theorem. **[10 Marks]**
- (b) Critically analyze the increasing emphasis that is being placed on geographic proximity as a criterion for membership in Preferential Trading Agreements. **[15 Marks]**

**Question 6**

‘Trade policy is almost always redistributive in nature in the sense that it causes some members of a society to gain while others lose. The median voter ensures that the position of the majority will be followed. However, there are ways in which the minority can prevail.’ Critically analyze this statement. **[30 Marks]**

**Question 7**

- (a) Given the following Static Mundell-Fleming model:

$$y = \delta(s + p^* - p) + \gamma y - \sigma i + g; \quad \delta, \gamma, \sigma > 0; 0 < \gamma < 1 \dots \dots \dots (1) ;$$

$$m - p = \phi y - \lambda i; \quad \phi, \lambda > 0 \dots \dots \dots (2);$$

$$i = i^* \dots \dots \dots (3)$$

where  $m$  is the money demand;  $p$  is the domestic price level;  $y$  is income;  $i$  is interest rate;  $s$  is the nominal exchange rate defined as the quantity of the domestic currency per unit of the foreign currency;  $p^*$  is the foreign price level;  $g$  is a fiscal shifter; and  $i^*$  is the foreign interest rate. All variables are in natural logarithms except for the interest rates.

- (i) Assuming a small country ( $p^* = 0$ ); fixed domestic price level ( $p = 0$ ), and that there is perfect capital mobility, derive expressions for the change in domestic money supply ( $dm$ ) and the change in domestic income ( $dy$ ). **[8 Marks]**



- (ii) From your answers in (i) above, derive expressions for the impacts of a devaluation on domestic output and domestic money supply under fixed exchange rate system and explain how these two variables will be affected by the devaluation. **[8 Marks]**
- (b) “Monetary shocks are positively transmitted internationally under fixed exchange rates.” What does this statement mean? Explain how it comes about. **[7 Marks]**
- (c) ‘Fiscal shocks are positively transmitted internationally under floating exchange rates’. What does this statement mean? Explain how it comes about. **[7 Marks]**

### **Question 8**

- (a) Using examples from African markets, discuss the impacts of the 2008 global financial crisis. **[20 Marks]**
- (b) Use the Cline (1984) model to explain the Lenders’ trap. **[10 Marks]**