



## **DBA 5204: MACROECONOMIC POLICY AND ANALYSIS**

### **EXAMINATION FOR SEPTEMBER 2020**

#### **PhD (BUSINESS ADMINISTRATION)**

**Instructions:** Attempt **question one (1)** and **any other two**.

#### **QUESTION 1 (30 MARKS)**

From a policy perspective, briefly discuss the following economic phenomenon :

- a) Estimation of gross domestic product using the expenditure approach (7 marks).
- b) The economic multiplier (8 marks)
- c) The unholy trinity in open economic systems (8 marks)
- d) Economic business cycles (7 marks)

#### **QUESTION TWO (15 MARKS)**

The following equations describe a certain economy:

$C = 400 + 0.75Y^d$  the consumption function,  $Y^d$  is disposable income

$I = 200 - 100r$  the investment function,  $r$  is interest rate

$T = 70 + 0.2Y$  the tax function,  $Y$  is gross national income

$G = 100$  the government expenditure

$X = 10$  exports

$M = 150 + 0.06Y$  imports

$M_s = 4000$  money supply

$Md = 0.2Y - 10r$       money demand

Required:

- a) Explain the LM and IS equations (5 marks)
- b) Derive the LM equation (2 marks)
- c) Derive the IS equation (2 marks)
- d) Compute the equilibrium national income (5 marks)

### **QUESTION THREE (15 MARKS)**

Policy makers employ fiscal and monetary policies to stimulate economic growth and to attain economic stabilization. Making extensive use of graphs, discuss when:

- a) The fiscal policy is potent in raising national income (7 marks)
- b) The monetary policy is impotent in raising national income (8 marks)

### **QUESTION FOUR (15 MARKS)**

Economic growth is major concern of citizens and policy makers and development practitioners worldwide. Many theories have been advanced on how economic systems reach steady state equilibrium growth.

- a) Explain the pertinent assumptions and workings of the Sollow growth model.(8 marks)
- b) Discuss the applicability of the Sollow growth model in Kenya. (7 marks)

### **QUESTION FIVE (15 MARKS)**

The Cobb- Douglas production function is a versatile tool in modeling certain economic phenomenon. As a policy researcher you are provided with a function of the form:

$$Y = A X_1^\alpha X_2^\beta X_3^\mu$$

Where Y is gross domestic product, X1 is capital, X2 is labour and X3 is a matrix of climatic variables;  $\alpha$ ,  $\beta$ , and  $\mu$  are parameters to be estimated.

- a) Explain economic parameters that the above function can be used to estimate. (5 marks)

- b) Explain the econometric estimation of the above using the Ordinary Least Squares (OLS) estimation (5 marks)
- c) Assume that you are interested in estimation of returns to scale, interpret the parameter  $\alpha$ ,  $\beta$  and  $\mu$ . (5 marks)