MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

Third YEAR …… SEMESTER EXAMINATION FOR

BACHELOR OF ECONOMICS AND FINANCE

BACHELOR OF ECONOMICS AND STATISTICS

BACHELOR OF COMMERCE

BACHELOR OF ECONOMICS

BACHELOR OF ARTS

EET 301: MACROECONOMIC THEORY III

DATE: **TIME:**

INSTRUCTIONS:

(i) **Answer question one (Compulsory) and any other two questions**

(ii) **Do not write on the question paper**

(iii) **Show your workings clearly**

QUESTION ONE (COMPULSORY) (30 MARKS)

a) Distinguish between the following pair of concepts as used in macroeconomics.

i) Potential GDP and actual GDP (2 marks)

ii) Okun's law and Philips curve (2 marks)

iii) Inflation rate and interest rate (2 marks)

iv) Fiscal policy multiplier and monetary policy multiplier (2 marks)

b) Assume that you are an economist in The National Treasury and Planning. Your major aim is to stimulate the economy after the recession that was caused by the global pandemic. Using the four quadrant diagram, explain the required fiscal policy actions that would achieve this. (8 marks)

c) You have been given the following equations describing the classical labour market.

$N^s = 200 + 5\left(\frac{W}{P}\right)$ supply of Labour

$N^d = 350 - 10\left(\frac{W}{P}\right)$ *Demand for labour*

$Y = 10N + 0.05N^2$ *Production function*

$L = 0.2PY$ *Demand for Money*

$M = 5000$ *Money Supply*

Required.

Compute the equilibrium values of N, Y, P, L *and* W. (7 marks)

d) The economy's demand curve reflects the ordinary substitution effect of a rising price-reducing demand. *True or False? Explain* (4 marks)

e) Fiscal policy is less certain than monetary policy *True or False? Support your answer* (3 marks)

QUESTION TWO (20 MARKS)

a) Assuming that there is a sudden exogenous decrease in the level of investment demand in the economy, due, perhaps, to a decrease in expected returns from investment. With aid of graphs explain how equilibrium is attained in the static short run model with $p' < 1$ (12 marks)

b) Develop the labour supply function and explain why it bends backwards. (8 marks)

QUESTION THREE (20 MARKS)

a) With the aid of a diagram (s) explain the effects of a decrease in the desire to save when:

i. *i* and g are independent of y and (3 marks)

ii. *i* and g are increasing functions of y (3 marks)

b) The following data was extracted from the Kenya's Macro model

c=100+0.8yd (Consumption Function)

i=10-8r (Investment function)

L=y-50r (Real demand for money)

g=100 (Government expenditure)

T=0.25y (Tax function)

M=2950 (Nominal money supply)

P=10 (Price)

Required

i) Compute and interpret the values of both the monetary and fiscal policy multipliers (10 marks)

ii) Demonstrate when the two multipliers would be most effective? (4 marks)

QUESTION FOUR (20 MARKS)

a) Describe the differences in derivation of monopolistic and competitive firms, demand for labour curves. (10 marks)

b) Derive and show that the economy's supply curve under perfect foresight model is perfectly inelastic. (10 marks)

QUESTION FIVE (20 MARKS)

a) Inflation is a serious macroeconomic issue affecting many countries. It is unfortunate because in order to achieve high levels of economic growth and employment, some level of inflation has to be persevered. Suppose you were appointed to advise the central bank on how to solve this problem (inflation), using the four quadrant diagram, analyze the effect of the proposed policy. (10 marks)

b) Given the following equilibrium in product and money market;

$$y = c(y - t(y)) + i + g \quad \text{(Product Market)}$$

$$\frac{m}{p} = l(r) + k(y) \qquad \text{(Money Market)}$$

Required:

i) Derive and interpret the slope of the IS Curve (3 marks)

ii) Derive and interpret the slope of the LM Curve (2 marks)

c) Explain why fiscal and monetary policies are referred to as demand management policies (5 marks)