KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER

MAIN EXAM

FOR THE DEGREE OF BACHELOR OF COMMERCE

COURSE CODE: ECO221

COURSE TITLE: INTERMEDIATE MACROECONOMICS

DATE: 12TH APRIL, 2023   TIME: 2.00PM – 4.00PM

INSTRUCTIONS TO CANDIDATES

1. Answer a total of **three** questions; question **one** and any other **two** questions.

2. Question **one** carries **30 marks** and each of the other two questions carry **20** marks each.

TIME: 2 Hours

KIBU Observes ZERO tolerance to examination cheating
This Paper Consists of 2 Printed Pages. Please Turn Over.

QUESTION ONE

a) Use a well labelled diagram to show the effect of a contractionary fiscal policy on the IS-LM model.   (4 marks)

b) Define the following terms giving an illustration in each case.
i) Endogenous variables   (2 marks)
ii) Exogenous variables   (2 marks)
iii) Economic model   (2 marks)

c) Discuss five goals that the government achieves using the fiscal policy.   (10 marks)

d) Given the following data on a hypothetical economy;

$$C = 100 + 0.8Yd \text{ (Consumption function)}$$
$$I = 10 - 10r \quad \text{(Investment function)}$$
$$G = 10 \text{ (government spending)}$$
$$T = 0.25Y \text{ (tax function)}$$
$$L = Y - 100r \text{ (Real money demand)}$$
$$M = 295 \text{ (Real money supply)}$$

Required;

Compute the general equilibrium income and interest rate that clears both the goods and money markets.   (10mks)

QUESTION TWO

a) Discuss instruments of monetary policy used by the Central Bank to ensure stability and development of the economy, especially the financial sector   (6 marks)

b) Consider the following economy:

$$C = 100 + 0.8Y^d$$
$$I = 50 - 25r$$
$$G = T = 50$$
$$MS/P = 200$$
$$Md = Y - 25r$$

   i.   Derive the equations for IS and LM curves   (4marks)
   ii. Calculate the equilibrium levels of output and interest.   (6marks)

c) List four macroeconomic issues that concern economists.   (4marks)

QUESTION THREE

a) Explain the three Keynesian motives of holding money.   (6marks)

b) Given the Keynesian National Income model

$Y = C + I_o + G_o$, where $C = a + bY^d$, $Y^d = Y - T$. Derive the equilibrium conditions for Y and C in terms of a and b.   (8 marks)

c) i) Define the IS curve.   (2 marks)

ii) Discuss the effect of a reduction in taxes on the IS curve. (4 marks)

QUESTION FOUR

a) Graphically analyze the effect of an increase in aggregate demand to an economy that operates at less than full employment. (8 marks)

b) Imagine an economy defined by the following model:

$C = 140 + 0.9 (Y^d)$.

This is the consumption function where 140 is autonomous consumption, 0.9 is the marginal propensity to consume, and Y^d is disposable (i.e. after tax income).

$Y^d = Y- T$, where Y is national income (or GDP) and T = Tax Revenues = $0.3Y$; note that 0.3 is the average income tax rate.

I = Investment = 400

G = Government spending = 800

X = Exports = 600

M = Imports = $0.15Y$

Required;
a) Compute the general equilibrium income and interest rate that clears both the goods and money markets. (8 marks)
b) List four types of inflation classified on the basis of speed or intensity. (4 marks)

QUESTION FIVE

The following equations describe an economy.

$Y = C + I + G$ $(M/P)^d = Y - 20r$

$C = 120 + 0.5(Y - T)$ $M = 600$

$I = 100 - 10r$ $P = 2$

$G = 50$

$T = 40$

a) Identify each of the variables and briefly describe their meanings.   (6 marks)

b) From the above list, use the relevant equations to derive the IS curve. Graph the IS curve on an appropriately labelled graph.   (5 marks)

c) From the above list, use the relevant set of equations to derive the LM curve. Graph the LM curve on the same graph you used in part (ii) above.   (4 marks)

d) Determine the equilibrium level of income and equilibrium interest rate in this economy.

(5 marks)