University Examinations 2023/2024

THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN ECONOMICS

BEC 3351: ADVANCED MACROECONOMIC THEORY

DATE: APRIL 2024   TIME: 2 HOURS

INSTRUCTIONS: *Answer question **one** and any other **two** questions*

QUESTION ONE (30 MARKS)

a) Briefly explain the following economic terms using graphical and mathematical

   illustrations where necessary   (10 marks)

   i.   Okun's law

   ii.   Philip's curve

   iii.   Potential and actual output

   iv.   Aggregate demand and aggregate supply (v) Business cycles

b) Given the following equations,

   $C = 100 + 0.8 \, Y^d$ (Consumption function)

   $I = Io — 10r$ (Investment function)

   $L = Y-l00r$ (Real money demand)

   $G= 10$ (Government purchases)

   $T = 0.25$ (Tax rate)

M = 295   (Real money supply)

    i.)   Calculate the monetary and fiscal policy multipliers and interpret them. (7 marks)

    ii.)   Suppose equilibrium income increases by 40, by how much must real money stock

    increases for the new level of income to be in equilibrium   (5 marks).

c. Explain the channels through which financial development affects economic growth (8 marks)

QUESTION TWO (20 MARKS)

a) Given that y=c(y-t)+i+g

i.   Show that the balanced budget multiplier is equal to 1   (5 marks)

ii.   Assuming that tax is a function of income, derive the general multiplier expression

    (5 marks)

b) Briefly discuss the Harrod-Domar growth model and its main assumptions

    (10 marks)

QUESTION THREE (20 MARKS)

    a)   An economy is in equilibrium if the change in inventory equals zero. Using saving

        investment balance show and explain

    i.   The equilibrium of the economy   (5 marks)

    ii. The equilibrium of the economy if the desire to save decreases   (5 marks)

    b) Discuss the limitations of Harrod-Domar Models   (10 marks)

QUESTION FOUR (20 MARKS)

    a. i.   Explain the assumptions of Neo classical growth theory   (6 marks)

        ii.   Graphically, explain the steady state of the above theory   (6 marks)

b. Using the four-quadrant diagram show the effect of the following on equilibrium r and y.

c   i. An increase in the desire to save   (4 marks)

    ii. An increase in government purchases   (4 marks)

QUESTION FIVE (20 MARKS)

    a) Explain the meaning of fiscal and monetary policy mix and show its effects on r and y.

    (Use a well labelled diagram)   (10 marks)

b. Differentiate the following terms as used in macroeconomics   (10 marks)

i. Gross domestic product (GDP) vs. Gross national products (GNP)

ii. Inflation rate vs. unemployment rate

iii. Consumer price index (CPI) vs. Wholesale price index (WPI)

iv. Growth accounting and growth theory