STRATHMORE UNIVERSITY BUSINESS SCHOOL
END OF SEMESTER EXAMS FOR THE DEGREE OF BACHELOR OF FINANCIAL SERVICES
BFS1204: INTRODUCTION TO MACROECONOMICS

16th March, 2022 **Time: 2 hours**

<u>**Instructions**</u>
Attempt **Question One (Compulsory)** and any other **TWO** questions

Question 1

(a) Define the following as used in economics{10 marks}
   (i) Gross Domestic Product (GDP)
   (ii) Fiscal Policy
   (iii) Money multiplier
   (iv) Velocity of money
   (v) The IS curve

(b) Using the tenets of the quantity theory of money and the liquidity preference theory by Keynes explain any five reasons why people hold money {7 marks}

(c) Using your country as for illustrations, with the help of minimum working examples discuss the various macro economic policy objectives {6 marks}

(d) Using the aggregate demand curve, explain the trinity between inflation, exchange rates and interest rates {7 marks}

[30 marks]

Question 2

Table 1 summarizes information extracted from the national income statistics of Country Z

Table 1: **Country Z National Income Statistics**

Statistic	**Value in KES million**
Wages and salaries	350
Mixed incomes	38
Net income from abroad	15
Gross profit/rent and interest of firms government and other institutions	150
Taxes on products	71
Subsidies on products	3
Depreciation	65

Required:

(i) Use the statistics in Table 1 to calculate the GDP of country Z at markets prices {3 marks}

(ii) Use the statistics in Table 1 to calculate the gross national income of country Z at markets prices {3 marks}

(iii) Use the statistics in Table 1 to calculate the net national income of country Z at markets prices {3 marks}

(iv) State the difference between the statistic in 2(i) and 2(ii) {2 marks}

(v) State any three uses of the GDP {3 marks}

(vi) State three reasons why GDP is an approximate measure of the national income in country Z {3 marks}

(vii) State the sufficient circumstances under which the GDP of country Z can be compared with the GDP of another country {3 marks}

[20 marks]

Question 3

The following equation is a Keynesian cross model:

$$C = 120 + 0.8(Y - T)$$

Planned investments is 200; government purchases and taxes are both 400
Required:

(i) Derive an expression for planned expenditures {4 marks}

(ii) Determine the equilibrium level of income {4 marks}

(iii) Determine the new equilibrium income if government purchases increase to 420 {3 marks}

(iv) Calculate and interpret the government purchases multiplier given the findings in 3(iii) above {3 marks}

(v) Sketch the scenarios represented in 3(i)-3(iii) above in a well labelled diagram {6 marks}

[20 marks]

Question 4

Table 2 shows the money creation process in an economy with Bank A only:

Table 2: **Money Creation Process by Bank A**

Depositor	**Deposit**	**Required reserve**	**Excess Reserve**	**Money created**
A	100	20	80	80
B				
C				
D		8.19		
E				
F				
G	26.22			
H				
I				
J			10.74	

The required reserve is 20% and the initial deposit is KES100
Required:

(i) State the circumstances under which Bank A would be able to create credit{6 marks}

(ii) Complete Table 2 {7 marks}

(iii) Calculate the size of the money multiplier {3 marks}

(iv) Calculate the total amount of deposits that Bank A will be holding if the ideal money creation process occurred {2 marks}

(v) Calculate the total amount of money created by Bank A {2 marks}

[20 marks]

Question 5

The following equations describe a closed economy with government

$$Y = C + I + G$$
$$C = 50 + 0.75(Y - T)$$
$$I = 150 - 10r$$
$$(M/P)^d = Y - 50r$$
$$G = 250$$
$$T = 200$$
$$M^S = 3000$$
$$P = 4$$

Required:

(i) Using relevant equations derive the IS curve and sketch it{5 marks}

(ii) Using relevant equations derive the LM curve and sketch it {5 marks}

(iii) Calculate the level of income and interest rate that guarantee income both the goods and the money market {5 marks}

(iv) State the monetary policy tools that the monetary authority can use to increase the equilibrium income and lower the interest rate at the same time {2 marks}

(v) To state whether there is a scenario in which fiscal policy can lead to an increase the equilibrium income and lower interest rate at the same time {3 marks}

[20 marks]

Be More Be Strathmore! ☺