AFRICA
UNIVERSITY
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"Investing in Africa's Future"

COLLEGE OF BUSINESS, PEACE, LEADERSHIP & GOVERNANCE

COURSE TITLE: **MEC 204-INTERMEDIATE MACROECONOMICS**

SEMESTER 2: **FINAL EXAMINATION MAY 2019**

LECTURER: **MR. L. NGENDAKUMANA**

TIME: **3 HOURS**

INSTRUCTIONS

Answer **any five [5] questions.**
Total possible mark is **100.**

Start **each** question on a new page in your answer booklet.

The marks allocated to **each** question are shown at the end of the section.

Show all your workings.

Credit will be awarded for logical, systematic and neat presentations.

Question One

Find the aggregate supply when:
a. The production function is Q=3LK, labor demand $L^D = 10 - 2w/P$, labor supply is $L^S = 4w/P$, and the capital stock in the economy is fixed at K=4 **[5]**
b. Is the aggregate supply curve you derived in (a) representative of the classical, basic Keynesian, or extreme Keynesian cases? **[3]**

c. How would your answers to (a) and (b) change if the nominal wage were fixed at $ 4?

[5]
d. Using diagrams, briefly explain the link between the labor market, the production function and the aggregate supply. **[7]**

Question Two

a. Derive the equilibrium price level and output for any economy with the following characteristics:

$C = 200 - 20P$ (Consumption)
$I = 200$ (Investment)
$G = 150$ (Government expenditure)
$Q_S = 100 + 10P$ (Aggregate supply) **[4]**

b. What happens to production and prices if government expenditure decreases to 120 **[4]**
c. Using diagrams or otherwise and following from the two Keynesian conditions:

i. Discuss the effects of a technological improvement on output and the price levels **[4]**
ii. What are the effects of an aggregate demand contraction on equilibrium output and the price levels **[4]**
iii. Use a well labeled diagram to explain conditions under which unemployment arises in the classical case and its implication on the total output. Provide valid justifications to support your answer **[4]**

Question Three

a. Distinguish between stock and flow magnitudes and give an example in each case **[6]**
b. Distinguish between saving and savings magnitudes and give an example in each case **[2]**

c. "In consumption theory:
(i) A rise in income leads to a rise in the average propensity to consume (APC)". Assess this statement using a numerical illustration **[5]**
(ii) The marginal propensity to consume is always greater than the average propensity to consume. Use a numerical example in your explanations **[4]**

d. Using a numerical example and a graph distinguish between autonomous and induced saving **[6]**

Question Four

Assume that in addition to strictly autonomous investment and government spending, the economy has the following behavioral equations for consumption (C), net tax revenue (T):

$C = a + c(Y - T)$ and $T = \overline{T} - \bar{t}Y$

$$C = a + c(Y - T)$$

$$T = \overline{T} + \bar{t}Y$$

Where: $a = 350$, $I_p = 800$, $\overline{T} = 800$, $c = 0.6$, $G = 2450$, the marginal leakage rate=0.55

a. What is the level of consumption when the level of income (Y) equals $ 7000? **[5]**

b. What is the level of saving when the level of income (Y) equals $ 7000? **[5]**

c. What are the levels of planned and autonomous planned expenditures when the level of income (Y) equals $ 6000? Find the level of unintended inventory investment and interpret your result. **[5]**

d. What is the value of the spending multiplier and why is it an important magnitude? Why does it differ from the spending multiplier? **[5]**

e. Is the economy in equilibrium when income (Y) equals $ 6000? If not what is the level of equilibrium income for the economy described in this question? **[5]**

Question Five

Briefly explain the following concepts used in Macroeconomics:

a. Marginal leakage rate **[3]**
b. Real variables **[3]**
c. Stock variables **[3]**
d. Savings **[3]**
e. Capital controls **[3]**
f. Purchasing power parity **[3]**
g. Spending multiplier **[2]**

Question Six

a. Explain the concept of capitals controls and advise your country's leaders on their advantages and disadvantages once implemented **[10]**

b. After defining the concept of exchange rate, distinguish between the various types of exchange rates and highlight which one requires government intervention. **[10]**

End of Paper