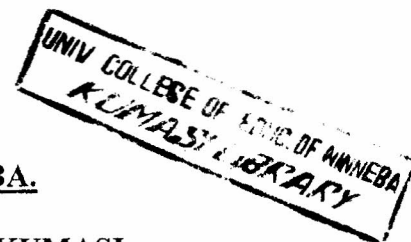# UNIVERSITY OF EDUCATION, WINNEBA.

COLLEGE OF TECHNOLOGY EDUCATION - KUMASI
DEPARTMENT OF ACCOUNTING STUDIES EDUCATION

END OF SECOND SEMESTER EXAMINATIONS MAY 2010

COURSE TITLE	MACROECONOMICS
COURSE CODE	ECO 121
DURATION	TWO HOURS
NAME OF LECTURER	WILLIAMS KWASI BOACHIE
INSTRUCTIONS	ANSWER ALL QUESTIONS

Q1. Briefly explain the term 'Dutch Disease'. Using the recent oil discovery in Ghana, explain its implications to the policy and economic planners of your country.

Q2. In a closed economy with no government expenditure or taxation, total consumption is always three-quarters of disposable income (whatever the level of national income).

   a. In the initial situation, the economy is in equilibrium where national income equals ¢200 billion. Calculate the level of planned investment.

   b. Assuming that the average and marginal propensities to save are always identical; what would be the effect of a 10% decrease is planned investment?

   c. Assume that planned investment remains at this lower level, but the government introduces a proportionate tax of 20% on all incomes together with planned government expenditure of ¢35 billion. What will be the effect on the equilibrium level of national income.

   d. The economy commences trade with another country, and its exports are equal to ¢20 billion. Imports represent a constant one-third of total consumption expenditure. What is the equilibrium level of national income?

   e. Calculate the multiplier surplus.

Q3. The following data represent an economy where money prices; wage rates and the rate of interest are constant. Study the data and answer the questions that follow:

Consumption spending (C)	=	$100 + 0.8Y_d$
Investment spending (I)	=	60
Government spending (G)	=	2400,
Income tax (T)	=	0.25 Y

1

a. What type of economy does the above information represent and why?
b. Calculate the level of disposable income (Yd) at which savings are zero.
c. Calculate the equilibrium level of national income
d. (i)   Determine the value of the multiplier

   (ii)   How much more should the government spend to increase the level of national
           income $10,000?

Q4. The following table gives information about consumption in an economy. They are in
    ¢1 billion. Use it to answer the questions below

NATINAL INCOME (Y)	20	40	60	80	100	120
CONSUMPTION (C)	20	38	56	74	92	110

a. If it is assumed that firms are investing ¢8 billion in the country under study; at what
    level will national income be in equilibrium?
b. What is the MPS in this economy?
c. Derive the saving function in this economy and use it to find the level of saving at an
   income level of ¢400 billion

Q5. a. Derive the multiplier, K, for a closed economy with no government sector

   b. You are given the following models of an open economy.

$$Y = C + I + G + X - M$$
$$C = a + bYd \qquad a > 0; \quad 0 < b < 1$$
$$Yd = Y - T$$
$$T = T_0 + tY \qquad T0 > 0; \; 0 < t < 1$$
$$I = I_0 \; ; \; G = G_0; \; X = X_0$$
$$M = M_0 + mY \quad M0 > 0: \; 0 < m < 1$$

Use the data above to derive the equilibrium income

2