NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

QUALIFICATION: BACHELOR OF ECONOMICS HONOURS DEGREE			
QUALIFICATION CODE: 08HECO		**LEVEL:**	8
COURSE CODE:	AME820S	**COURSE NAME:** ADVANCED MACROECONOMICS	
SESSION:	JAN 2025	**PAPER:**	THEORY
DURATION: HOURS	3	**MARKS:**	100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER (S)	Prof. T. Sunde
MODERATOR:	Dr Reinhold Kamati

INSTRUCTIONS
1. Answer ALL the questions.
2. Write clearly and neatly.
3. Number the answers.

PERMISSIBLE MATERIALS
1.Ruler
2.Calculator

THIS QUESTION PAPER CONSISTS OF 3 PAGES INCLUDING THE COVER PAGE.

QUESTION 1 [25 marks]

Consider a macroeconomy that produces three goods. Use the information below to answer the following questions.

	Quantity		Price	
Product	2010	2012	2010	2012
A	100	160	$4	$4
B	40	20	$8	$16
C	20	60	$4	$4
D	30	40	$10	$12

(a) Calculate nominal and real GDP for 2010 and 2012 using 2010 as the base year. Is the economy growing? If so, by how much? **[10]**

(b) Assuming that 2010 quantities give the typical consumer's basket of goods, calculate the CPI for 2010 and 2012 using 2010 as the base year. What is the inflation rate? **[5]**

(c) Calculate the inflation rate from the GDP deflator and compare it to CPI inflation. Which measure is larger and why? **[5]**

(d) What are the differences between CPI and the GDP deflator? Which of the two is a better measure of inflation? **[5]**

QUESTION 2 [25 marks]

Consider the version of the Solow growth model with population growth but no technological progress.

(a) Explain how capital per worker, output per worker, investment per worker and consumption per worker are determined in the steady state. Use a diagram to illustrate your answer. **[10]**

(b) Use another diagram to explain what happens to capital per worker, output per worker, investment per worker and consumption per worker when the savings rate increases. **[5]**

(c) In the Solow growth model, how does the rate of population growth affect the steady state level of capital stock and income? **[5]**

(d) Explain how the rise in capital depreciation would affect capital per worker, investment per worker and output per worker. **[5]**

QUESTION 3 [25 marks]

a) This question is based on the AD-SRAS-LRAS model of the economy. Assume that the SRAS curve is upward-sloping.

(i) Assume that political instability in country X (a neighbour of Namibia) and the emergence of a terrorist group in Southern Africa have caused households and businesses to be uncertain about the future of the Namibian economy. In response, households and businesses are delaying large purchases/projects until the situation is more under control. Use the AD-SRAS-LRAS diagram to discuss the predicted short-run and long-run impacts on the price level, real GDP and unemployment. **[10]**

(ii) What policy options are available to the Bank of Namibia in the short and long run? Use the AD-SRAS-LRAS diagram to support your discussion. **[5]**

b) Suppose Namibia is a small, open economy, and some foreign countries begin to subsidize investment by instituting an investment tax credit. **[10]**

(i) What happens to the world investment demand as a function of the world interest rate?

(ii) What happens to the world interest rate?

(iii) What happens to investment in Namibia?

(iv) What happens to Namibia's trade balance?

(v) What happens to the nominal and real exchange rates in Namibia?

QUESTION 4 [25 marks]

(a) Discuss why it is easier for the Central Bank to deal with ***demand than supply shocks***. **[10]**

(b) The Open Economy in the Short Run: the Mundell-Fleming Model. Answer the following sub-questions:

(i) Draw a graph describing a small open economy with a fixed exchange rate. In your graph, show the fixed exchange rate, the IS* curve, and the equilibrium income, and label both axes correctly (do not draw the LM* curve at this point). **[5]**

(ii) Suppose in this economy with a fixed exchange rate, the central bank sets the money supply at greater than the money demand. Add an LM* curve to your graph that reflects this monetary policy. Discuss the process through which the money market returns to equilibrium. **[5]**

(iii) Draw another graph describing a small open economy with floating exchange rate. In your graph, show the IS* curve, the LM* curve, the equilibrium exchange rate and income, and label both axes correctly. **[5]**