NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF ACCOUNTING ECONOMICS AND FINANCE

QUALIFICATION :	BACHELOR OF ECONOMICS HONOURS DEGREE	
QUALIFICATION CODE: 08HECO	LEVEL:	8
COURSE CODE: AME820S	COURSE NAME: ADVANCED MACROECONOMICS	
SESSION: January 2019	PAPER:	THEORY
DURATION: 3 HOURS	MARKS:	100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER (S)	Prof. T. Sunde
MODERATOR:	Prof. J.P.S. Sheefeni

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

PERMISSIBLE MATERIALS
      1.   Ruler
      2.   Calculator

THIS QUESTION PAPER CONSISTS OF 3 PAGES

QUESTION 1 [25 MARKS]

Consider a macroeconomy that only produces two goods, A and B. The base year is 2016 and all quantities are measured in thousands. Round all your answers to the nearest tenth.

	Quantity		Prices	
Product	2016	2017	2016	2017
A	200	210	$40	$40
B	100	104	$200	$210

1.1   Calculate nominal and real GDP (Y) growth rate for both years. **[10 marks]**

1.2   Calculate the inflation rate (π) in 2017 using the GDP deflator   **[10 marks]**

1.3   The money supply (M) is $1000 in 2017. What is the velocity of money? Now assume the Central Bank wishes to target a $\pi=2\%$ inflation rate in 2018. If the growth in real GDP is expected to be the same in 2018 as in 2017, what money supply growth rate is necessary? How much new money must the Bank of Namibia inject into the economy?   **[5 marks]**

QUESTION 2 [25 MARKS]

Consider the version of the Solow model where there is population growth, but not technological progress.

2.1 Explain how the capital stock and output per worker are determined in the steady state. Illustrate your answer in a diagram.   **[10 marks]**

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

2.3 In the Solow growth model, how does the rate of population growth affect the steady state level of income?   **[5 marks]**

2.4 Explain how the golden-rule level of the capital stock, i.e. the level which maximizes per capita consumption in the steady state, is determined. How can a government see to it that this level is reached?   **[5 marks]**

QUESTION 3 [25 marks]

Starting from the equilibrium of a closed economy IS-LM model with fixed prices show how the following would affect the model. Briefly explain the reasons for the shift in each case.

3.1 An increase in government purchases financed by borrowing. [5]

3.2 An increase in government purchases financed by printing money. [5]

3.3 An increase in government purchases financed by increasing taxes by the same amount. [5]

3.4 An increase in the reserve requirement of commercial banks. [5]

3.5 Consumers are becoming fearful that the government will not support them in their retirement and decide to save more out of their disposable incomes. [5]

QUESTION 4 [25 marks]

4.1 Illustrate and explain why savings and investment do not determine interest rates in a small open economy. [4]

4.2 Using a small open economy model, illustrate and explain how the following policies influence the trade balance, savings, investment and capital flows:

    4.2.1 expansionary domestic fiscal policy [4]

    4.2.2 expansionary foreign fiscal policy [4]

    4.2.3 upward shift in investment demand [4]

4.3 Discuss how expansionary fiscal policy at home and expansionary fiscal policy abroad affect the real exchange rate, net exports and capital flows. [9]