ATTENDANCE FORM

|	
Surname	
Initials	
Student number	
Venue	

GENERAL INSTRUCTIONS

1. **Do not remove the staple – hand this paper in as a whole.**

2. **Remove <u>only</u> the top page (this page). The invigilators will collect it from you during the session.**

3. **Make sure that your paper has 8 numbered pages.**

ECO 100

APS assessment January 2018

Write your student number here in case any pages come loose:
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	DEPARTMENT OF ECONOMICS AND ECONOMETRICS
UNIVERSITY OF JOHANNESBURG	**APS ASSESSMENT**
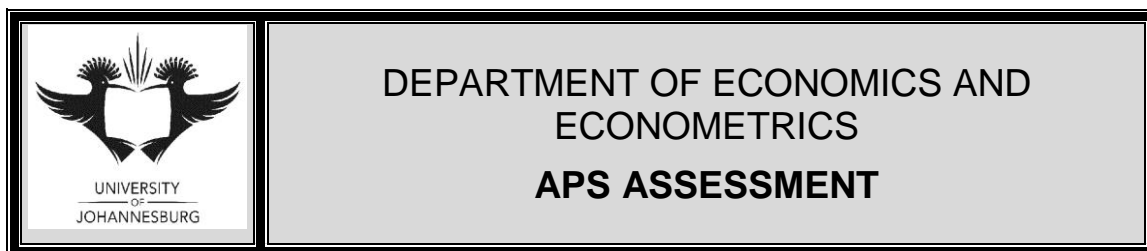
Course: **Economics 100**
Date: **8 January 2018**
Marks: **90**
Time: **2 hours**
Assessors: **Prof G van Zyl, Dr P Baur, Z Phala, F Kirsten**
Moderator: **Dr Kotie Viljoen**

1.   The paper consists of 8 pages.
2.   Noiseless calculators may be used.
3.   Answer all the questions.

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	Marks	Total	Audit
Q1.1		[4]	
Q1.2		[6]	
Q1.3		[5]	
Q2.1		[12]	
Q2.2		[4]	
Q2.3		[3]	
Q2.4		[3]	
Q2.5		[3]	
Q3.1		[4]	
Q3.2		[4]	
Q3.3		[2]	
Q3.4		[15]	
Q4.1		[4]	
Q4.2		[21]	

Total Marks /100		Audit mark	

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| QUESTION 1: | Money and interest rates | [15] |

1.1 Assume that the reserve requirement is 4%, the current repo rate is 6%, the maximum M3 money supply that can be created in the system is R400bn and the demand-for-money is expressed as:
$i = 16 – 0.04M_d$. Determine the following. **(4)**

Task	Answer
The money multiplier.	
Mo (monetary base).	
Total value of money demanded.	
What will the total value of money demanded be if the repo rate is increased to 7%.	

1.2 Assume that it is the aim of SARB to stimulate the economy. The SARB has decided to use its open-market transaction activities to achieve its aim. Explain how the SARB would implement this instrument, the impact on the market price of government bonds & on the yields of those government bonds and how the transmission mechanism will operate. **(6)**

Task	Answer
Action on open-market.	
Impact on market price & yields of government bonds.	
Transmission mechanism.	

1.3 Illustrate with a fully-annotated figure what will happen to the creation of credit money when the SARB increases the repo rate. (Do all your explanations on the figure). **(5)**

_____

| QUESTION 2: | INTERNATIONAL TRADE | [25] |

2.1   Assume that country A and country B are both producing products X and Y. Assume that both countries have 1000 hours per month available to produce the two kinds of goods. The maximum units of the two kinds of goods that country A can produce per month are respectively 800 units of product X and 500 units of product Y. The maximum units of the two kinds of products that country B can produce per month are respectively 600 units of product X and 600 units of product Y. Complete the following table and answer the questions that follow.   **(12)**

Assume the following monthly production and consumption patterns (in units) before trade takes place.

Country	Product X	Product Y
A	300	250
B	280	150

Assume that the price ratio is 1:1 and that the two countries would trade 400 units of product X for 400 units of product Y.

Calculate/determine the following:

Country	Hours taken to produce 1 unit of product	
	X	Y
A		
B		

Calculate/determine the following:

1. What is the opportunity cost for 1 unit of product X in country A?	
2. What is the opportunity cost for 1 unit of product X in country B?	
3. What is the opportunity cost for 1 unit of product Y in country A?	
4. What is the opportunity cost for 1 unit of product Y in country B?	
5. In which one of the two products should country A specialise?	
6. In which one of the two products should country B specialise?	
7. What is the new consumption pattern in country A?	
8. What are the gains of trade for country A?	
9. What is the new consumption pattern in country B?	
10. What are the gains of trade for country B?	

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2.2 Explain briefly the criteria that are normally applied if the aim of foreign investors efficiency-seeking market or strategic asset-seeking. **(4)**

<u>**Market-seeking**</u>:

<u>**Resource-seeking**</u>:

2.3 Assume the following table and use the RCA-index to complete thye table. **(3)**

		Product X	Product Y
World exports	$3000 trillion	$40 trillion	$8 trillion
Country exports	$24 trillion	$6 trillion	$2 trillion
Country share of exports			
RCA index			

2.4   Assume that you are currently in Australia and that you want to spend 900 Australian dollar (AUS-dollar) on clothing. The current SA rand/US Dollar exchange rate is 13.45/1$ and the AUS-dollar/ US Dollar exchange rate is 2.80AUS-dollar/1$. Calculate the Rand equivalent for clothing (show all your calculations). **(3)**

Calculations:

Final Answer:

2.5   Assume the following exchange rates:

 R13.45/1$ (SA rand/US dollar); £0.40/1$ (UK pound/US dollar); R19.35/1£ (SA rand/UK pound).

You have R134500 available to speculate with. Indicate how you will apply the principle of cross rate arbitrage in order to realise a profit (show all your calculations). **(3)**

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QUESTION 3:   KEYNESIAN MODEL   [13]

3.1 Assume the following descriptions.

Number	Descriptions
1	In the Keynesian model it is assumed that price changes play an important role in determining output and employment.
2	In the Keynesian model it is assumed that interest rates are fixed.
3	In the Keynesian model it is assumed that on average consumers will increase consumption with the same amount as an increase in their disposable income.
4	Engel's law states that the portion of income spends on food and other essentials will decrease as income increases.

- Indicate with which of the descriptions do you agree or disagree (use X to indicate your option). **(4)**

Number	Agree	Disagree
1		
2		
3		
4		

3.2 Indicate the impact of the following events on capital formation (**I**). **(4)**

Number	Event
1	The President fires the well-respected Minister of Finance.
2	Economic growth is expected to remain at very low levels.
3	The company tax rate is increased by 6%.
4	The SARB has increased the repo rate by 200 basis points.

The next table indicates the possible impact on capital formation (**I**) if the above events should occur.

Symbol	Impact on capital formation (I)
A	Increase.
B	Decrease.

- Indicate the applicable symbol that links the correct impact on capital formation (I) to the events described in the first table.

Number	Applicable symbol
1	
2	
3	
4	

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3.3 Assume that autonomous investment is 50 and that the savings function is -10 + (1-0.2)Y_d. **(2)**

Task	Answer
What is the equilibrium income level?	
What is the value of the multiplier?	

3.4 The following questions are based on the information provided for a four-sector model. Answer all the questions. Show all calculations and round-off to two decimal points during calculations. **(15)**

$C = 300 + 0.9Yd$

$tax = 25\%$

$I = 300$

$G = 600$

$NX = -200$

Calculate the following values:

1	Autonomous consumption spending	
2	Total autonomous spending	
3	Marginal propensity to consume (MPC)	
4	Expenditure Multiplier	
5	Equilibrium income level	
6	Calculate the contribution of Investment in this economy	
7	The net contribution of the Government sector in the economy. Hint: Remember to take all Government actions into account	
8	Due to the success of the NDP an increase in autonomous consumption expenditure of 100 is experienced. Calculate the new equilibrium income.	
9	Calculate the impact of a depreciation of the Rand, changing exports with 300 and imports with 50, on the equilibrium level of income.	
10	Calculate the marginal propensity to save	

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QUESTION 4: Macroeconomic policy   **[25]**

4.1 Assume the following descriptions that deal with short-run and long-run equilibrium.

Number	Description
1	Long-run equilibrium is the intersection of the aggregate demand curve and the short-run aggregate supply curve.
2	Long-run equilibrium is the intersection of the aggregate demand curve and the long-run aggregate supply curve.
3	Short-run equilibrium in the AD-AS model is based on equilibrium in the labour market and financial markets.
4	Short-run equilibrium in the AD-AS model is based on equilibrium in the product market and financial markets.

- Indicate with which of the descriptions do you agree or disagree (use X to indicate your option).   **(4)**

Number	Agree	Disagree
1		
2		
3		
4		

4.1 Assume that government is following an expansionary fiscal policy. Apply the AD-AS analysis and indicate the impact on the following aggregates.   **(21)**

Aggregates	Answer
Initial impact.	
AD curve. (**increase** or **decrease**)	
Income levels. (**increase** or **decrease**)	
General price level. (**increase** or **decrease**)	
Level of stock in the economy. (**depleted** or **enhanced**)	
Demand for imports. (**increase** to **decrease**)	
Current account of the balance of payments. (**weaken** or **improve**)	
Government budget deficit. (**bigger** or **smaller**)	
Demand for money. (**increase** or **decrease**)	
Interest rates. (**increase** or **decrease**)	
Capital flows. (**outflow** or **inflow**)	
Financial account of the balance of payments. (**bigger** or **smaller surplus**)	
Money supply. (**increase** or **decrease**)	
Investment spending. (**increase** or **decrease**)	
Aggregate expenditure. (**increase** or **decrease**)	
Income levels. (**increase** or **decrease**)	
Imports. (**increase** or **decrease**)	
Exchange rate. (**appreciate** or **depreciate**)	
Medium-term supply-adjustment process.	
Wages. (**higher** or **same wage levels**)	
Short-run aggregate supply curve. (**increase** or **decrease**)	
Long-term effects.	
General price level.(**increase** or **decrease**)	

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