

**ECONOMICS 3B**  
**FINAL ASSESSMENT**  
**ATTENDANCE FORM**

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Student number	
Venue	

**REQUEST: READ THE FOLLOWING GENERAL INSTRUCTIONS AND ADHERE TO EACH ONE OF THEM:**

1. **Do not remove the staple.**
2. **Tear off (remove) only the top page (this page), complete requests 1-5, sign and hand in.**
3. Check that your paper has **17 numbered pages**.
4. Write your student number **direct after each page number at the left bottom of each page**.
5. WRITE DOWN YOUR SURNAME AND INITIALS. **THIS IS ESSENTIAL** FOR THE SORTING OF PAPERS AND THE CAPTURING OF MARKS.

**Sign in full below to confirm your adherence to these 5 requests:**

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ATTENDANCE FORM: EKN3B



**ECONOMICS 3B / EKONOMIE 3B  
FINAL ASSESSMENT**

**DEPARTMENT OF ECONOMICS**

Date November, 2015  
 Marks 100  
 Time 3 hours  
 Examiners: C Schoeman, M Sekome & B Kenge  
 Internal moderator: Arnold Wentzel

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	Marks	Total
A		15
B1		20
B2		15
B3		15
B4		15

Remarks:

B5	15		
B6	10		

<b>GRAND TOTAL</b>	/100 maximum
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## Section A – Multiple Choice

### Question 1

[15]

**Complete Section A question 1 on the answer sheet on the last page (p. 17) of the assessment paper.**

1.1 What does open market operations in the foreign exchange market involve when reserves in RSA are sterilized by the SARB?

- i. A decrease in reserve currencies held by banks by selling RSA bonds.
- ii. An increase in rand supply through printing of physical notes and coins.
- iii. An increase in ZAR supply through a reduction in foreign reserves.
- iv. The buying and selling of ZAR by the SARB in exchange for foreign buying bonds.

1.2 A decrease in the supply of dollar in the USA will result in:

- i. Capital inflows to the RSA
- ii. An appreciation in the ZAR/dollar exchange rate
- iii. A decrease in the demand for dollar denominated bonds
- iv. A depreciation in the ZAR/dollar exchange rate

1.3 If there is a decrease in the demand for South African monetary assets (bonds), what will happen to the expected return on foreign bonds?

- i. The expected foreign return on bonds will increase
- ii. The expected prices on foreign bonds will increase and return will as result decrease
- iii. The ZAR will appreciate in and the expected return on foreign bonds will increase
- iv. The effect on expected foreign interests is ambiguous.

1.4 A country with high unemployment like in South Africa will prefer a(n):

- i. The SARB to increase the repo rate
- ii. Depreciation in the ZAR/dollar exchange rate
- iii. Decrease in the expected return on ZAR bonds
- iv. Overvalued ZAR

1.5 A government in a country with high unemployment as in South Africa:

- i. Will use permanent expansionary fiscal policy to counter employment
- ii. Will use temporary fiscal policy to counter unemployment
- iii. Will use permanent monetary policy to counter unemployment
- iv. Will sterilize its reserves

1.6 A mispriced lilangeni will be to the benefit of Swaziland if it is:

- i. Relatively undervalued
- ii. Relatively overvalued
- iii. Relatively scarce
- iv. Relatively abundant

1.7 If the R/\$ spot exchange rate changes from R5.50/\$ to R5.25/\$, which of the following statements would be correct?

- i. The rand has appreciated
- ii. The exchange rate is expressed according to the direct quotation
- iii. South Africans will need more rand to pay off their foreign debt
- iv. Not one of the above statements is correct

1.8 What is the rate of return on a painting whose price rises from R420,000 to \$420,000,000 if exchange rate changes from R10/\$1 to R10.1/\$1 in the same year?

- i. 2.5%
- ii. 3%
- iii. 25%
- iv. None of the above.

1.9 The ZAR/\$ returns on deposits traded in the foreign exchange market is expected to increase if:

- i. The ZAR is undervalued
- ii. The ZAR is correctly valued (on par)
- iii. The ZAR is overvalued
- iv. Not one of the above possibilities

1.10 An investor will prefer to invest in an economic opportunity in Germany (*ceteris paribus*) rather in Greece because:

- i. The euro overvalues the economic reality in Greece
- ii. The rand undervalues the economic reality in the Greece
- iii. The rand undervalues the economic reality in Germany
- iv. The above statement is not true

1.11 In long run equilibrium (in the AA/DD model):

- i. The external value of a currency of a country reflects the true value of the real economy
- ii. Arbitrage between money assets and real assets in the economy takes place
- iii. Interest Parity and Purchasing Power Parity exist at the same time
- iv. i and iii

1.12 If the ZAR became overvalued in the foreign exchange market this may be the result of:

- i. An unexpected increase in fiscal spending to counter unemployment
- ii. An unexpected increase in the liquidity requirements by the SARB
- iii. An unexpected outflow of capital from the RSA
- iv. None of the above

1.13 An unexpected increase in fiscal spending by the Greece government to counter restrictive monetary policy of ECB in Greece will result:

- i. In the Euro to overvalue the long run real economy of Greece
- ii. In the Euro to undervalue the long run real economy of Greece
- iii. Increasing investment in Greece
- iv. i and iii

1.14 The quantity of ZAR supplied on the foreign exchange market is determined by:

- i. The export of real goods and buying of foreign bonds
- ii. The import of goods and buying of domestic bonds
- iii. The reserves available to banks to exchange for ZAR
- iv. I, ii and iii

1.15 A permanent increase in the deficit on the RSA budget will cause:

- i. An appreciation of the external value of the ZAR
- ii. A depreciation of the external value of the ZAR
- iii. A increase in the balance of the current account
- iv. None of the above

## Section B

### Question B1

[maximum 20]

"The inflation target range was determined by Government in consultation with the Reserve Bank. The 3 to 6 per cent target for South Africa reflects the desire of the authorities that the deflationary process should firmly move the economy in the direction of price stability, but that the target should not be too narrow to be fully credible. The target also provides a reasonable measure of latitude and it was felt that the band could accommodate an outcome which the Bank believed it could achieve. Furthermore a larger, more rapid reduction in inflation through demand-management policy would be costly in terms of absolute reductions in production and employment. This is largely because inflation expectations tend to be rigid, usually only changing slowly over time. The time horizon over which to target inflation is also important, given the lags in the monetary transmission mechanism (see discussion on the transmission mechanism in Section 8 that implies a target horizon of at least six to eight quarters)....."

"...The task of a central bank operating an independent monetary policy is in a sense a limited task, not least because it effectively has only one important instrument – its control over short-term interest rates. The central bank's role is essentially to use that instrument to influence aggregate demand in the economy, with the aim of keeping demand broadly in line with the supply-side capacity of the economy. The measure of its success is consistently low or steady-state inflation. Monetary policy affects the economy only after a long time lag, so policy makers need a long time horizon. Short-sighted politicians may try to engineer a boom before an election, hoping that inflation will not rise until after the votes have been counted. The inflation-targeting framework that has been adopted, involves an extremely serious but not totally inflexible target. A significant degree of central bank independence (in particular the freedom to set policy instruments and freedom from budgetary demands) is deemed an essential precondition for successful inflation targeting. A central bank shielded from political pressures is more likely to give priority to price stability; as a result financial markets will regard its policies as more credible. This enables an independent central bank to deliver lower inflation and more stable growth.

As discussed earlier, the South African Reserve Bank has the necessary degree of independence granted under the Constitution read together with the SARB Act. A tradition of independence has been developed in recent years but independence should not necessarily imply isolation. Consultation with the Minister of Finance continues in the interest of policy co-ordination. Policy is formulated with a view to ensuring inflation outcomes within the target range. If there are clear indications that with unchanged short-term interest rates, the inflation outcome in the target period will exceed the target, interest rates will be raised, and the converse if undershooting of the target is expected. To support this process, the staff of the Reserve Bank have developed a suite of econometric models aimed at understanding the inflation process and forecasting inflation."

**a)** Name and explain two prime reasons for central bank independence?

<i>Name</i>	<i>Explanation</i>
<i>Name</i>	<i>Explanation</i>

(6)

**b)** Name the instrument the SARB has available to execute monetary and explain the objective of the SARB by using this instrument?

<i>Name</i>	<i>Explanation</i>

(3)

- c) Name two measures to prevent isolation from government and explain how these measures prevent isolation of the SARB from the government of the day?

Name	Explanation
Name	Explanation

(6)

- d) Explain the reason why the SARB must be able to forecast inflation.

(3)

- f) For what reasons is the inflation target set between 3 and 6 percent?

Commented [A1]: How many reasons do you want?

(4)



**Question B2****[15]**

**Explain in short the meaning of the following concepts:**

<b>Equilibrium exchange rate</b>	<i>Explanation</i>
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**(3)**

<b>Expected exchange rate</b>	<i>Explanation</i>
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**(3)**

<b>Expected rate of return</b>	<i>Explanation</i>
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**(3)**

<b>Liquidity</b>	<i>Explanation</i>
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**(3)**

<b>Real return</b>	<i>Explanation</i>
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**(3)**

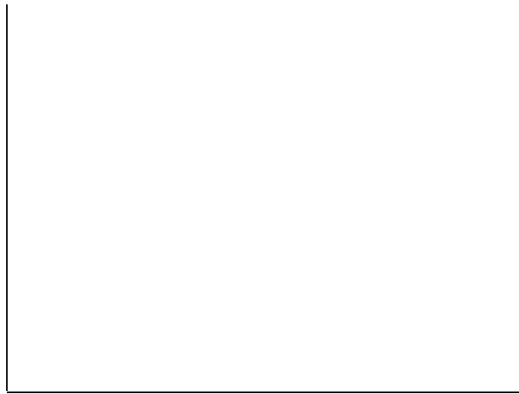
<b>Risk</b>	<i>Explanation</i>
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**(3)****Question B3****[15]**

Complete the AA-DD diagram below which should show equilibrium in the foreign exchange market if interest rate parity and purchasing parity holds. Assume an equilibrium exchange rate of R13=1 US\$ and an expected return on ZAR deposits of 10%.

(i) Label all axes and curves and fill in the equilibrium values.

(6)



(ii) Economists expect a decrease in the ZAR long run interest rate by 25 basis points (.25 of a percent) this year. On the diagram above, indicate the impact this will have on the foreign exchange market (exchange rate). Fill in the new value of the expected return on ZAR deposits on the diagram. (6)

(iii) Interpreted the impact the expected decrease in the ZAR long run interest rate will have on the long run equilibrium exchange rate (3)

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**Question B4**

**[15]**

Make use of completed diagram in B (ii) above to identify and explain the impact of an ***increase in the ZAR interest rate*** on the following:

The amount of foreign reserves in the economy	The impact it will have:
<u>An explanation of the logic which underlies the impact:</u>	

**(3)**

The ZAR/dollar exchange rate	The impact it will have:
<u>An explanation of the logic which underlies the impact:</u>	

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(3)

The demand for assets denominated in dollar	The impact it will have:
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An explanation of the logic which underlies the impact:

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(3)

The demand for assets denominated in ZAR	The impact it will have:
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An explanation of the logic which underlies the impact:

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(3)

The amount of employment in the economy	The impact it will have:
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An explanation of the logic which underlies the impact:

(3)

#### Question B5

[15]

Complete the AA-DD-XX diagram below which should show equilibrium in the foreign exchange market if **interest rate parity holds and a deficit on the current account exist**. Assume a short run exchange rate equilibrium exchange rate of R16 = 1 euro and an expected rate of return on ZAR deposits of 10%.

(i) Label all axes and curves and fill in the different equilibrium values.

(6)



**ii) By making use of the diagram in B5 (i) explain the impact an increase in the expected return from euro bonds will have on the following:**

Employment in the RSA economy	The impact it will have:
<u>An explanation of the logic which underlies the impact:</u>	

**(3)**

The ZAR/euro exchange rate	The impact it will have:
<u>An explanation of the logic which underlies the impact:</u>	

**(3)**

The demand for assets denominated in ZAR	The impact it will have:
<u>An explanation of the logic which underlies the impact:</u>	

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(3)

Current account	The impact it will have:
<u>An explanation of the logic which underlies the impact:</u>	

(3)

Question B6

[10]

Write the number of the statement in the first column with the description in the second column it can be the best associated with. The first row acts as an example.

<u>Statement</u>	<u>Description</u>	<u>Number</u>
1. Hedge uncertainty	A decrease in the expected foreign reserves results from:	10
2. A real change in expected return	The price increase in a foreign good is less than the decrease in the amount of good imports can also be described as:	
3. Deficit on the current account	Real depreciation in the exchange rate can result from:	
4. An immediate appreciation	Overvalued currency will lead to:	
5. Surplus on the current account	Undervalued currency will lead to:	
6. An increase in non-sterilised foreign reserves	The price of the good decreases by more than the increase in the amount of imports can also be described as:	
7. Price elastic import	Inflation may result from:	
8. Price elasticity of oil imports	A decrease in the expected foreign returns will result in:	
9. An excessive and long run depreciation of a currency	Foreign exchange swap can be used:	
10. Deficit on the current account	The overreaction by exchange rate results in:	

THE END



## Section A - Answer Sheet

(Remember to write your student number on the bottom of this sheet as well)

**Indicate the correct answer by a cross which fills the full space of the block.**

Question/Alternative	i	ii	iii	iv
<b>1</b>				
<b>2</b>				
<b>3</b>				
<b>4</b>				
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