SCHOOL OF ECONOMICS AND ECONOMETRICS

ECONOMICS 1B

<u>**FINAL ASSESSMENT**</u>

ATTENDANCE FORM

Surname	
Initials	
Student number	
Venue	

GENERAL INSTRUCTIONS

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

2. **Remove <u>only</u> the top page (this page).**

3. **Make sure that your paper has 11 numbered pages.**

November 2019

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COLLEGE	College of Business & Economics
SCHOOL	Economics
CAMPUS	APK; DFC; SWC
MODULE NAME	Economics 1B
MODULE CODE	ECO1B01
SEMESTER	Second
ASSESSMENT OPPORTUNITY	Final Assessment
MONTH & YEAR	18 November 2019

| ASSESSMENT DATE	18 November 2019	SESSION	1
ASSESSOR(S)	Prof G Van Zyl; Dr T Zwane; Prof P Baur; Mrs Maluleka; Mr D Steyn; Ms K Mmelesi; Ms N Nkomo; Ms Nqwane		
MODERATOR(S)	Dr M Maleka		
DURATION	2 HOURS	TOTAL MARKS	100

INFORMATION/INSTRUCTIONS

This is a fill-in paper.
The paper has 11 numbered pages.
There are three questions with sub-sections.
A noiseless calculator is allowed.

SURNAME	
INITIALS	
STUDENT NUMBER	
CELL NUMBER	

Question 1 [10]	Question 2 [15]	Question 3 [20]	Question 4 [10]	Question 5 [20]	Question 6 [25]
	Q.2.1 (6)	Q.3.1 (8)	Q.4.1 (5)	Q.5.1 (4)	Q.6.1 (10)
Q.1.1 (4)	Q.2.2 (5)	Q.3.2 (4)	Q.4.2 (3)	Q 5.2 (4)	Q.6.2 (11)
Q.1.2 (6)	Q.2.3 (4)	Q.3.3 (3)	Q.4.3 (2)	Q.5.3 (4)	Q.6.3 (4)
		Q.3.4 (5)		Q.5.4 (3)	
				Q.5.5 (3)	
				Q.5.5 (2)	
TOTAL /100					

Question 1: Trade cycles [10]

1.1 Assume the following figure. Indicate with an **X** which of the descriptions do you agree or disagree with.**(4)**

Economic activity

G

C

M

D   F   H   J   b | Y = a + 2.8X

B   K

L

a   I

E

A

20X1   20X18   Time
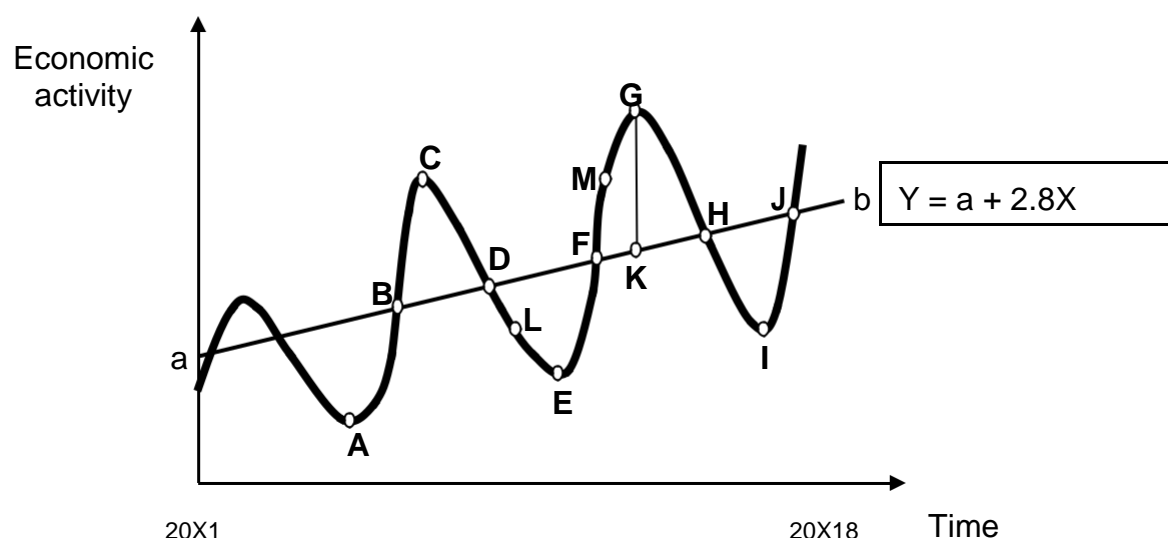
Descriptions	Agree	Disagree
The term used to describe distance between the trend line and point G is the amplitude.		
The average annual growth in economic activity between 20X1 and 20X18 according to the diagram was between 2 and 8%.		
At point L real investment decreases.		
At point L inflation is increasing.		
At point M aggregate spending increases.		
At point M employment is growing.		
Between points B and C real M1 money supply decreases.		
Between points M and G prices of shares traded on the JSE Securities Exchange increases.		

1.2. What will happen to the following aggregate at the latter stage of an economic slowdown (6)

Economic aggregate	Explanation
Income	
Spending	
Employment	
Economic growth	
Inflation rate	
Current account of the balance of payment	

3

Question 2: Money, interest rates and financial markets [15]

2.1 Link the following concepts to the descriptions below (6)

Number	Descriptions
1	Central Bank buys financial instruments with the aim of stimulating the economy.
2	Commercial banks collectively need to borrow funds from the SARB.
3	The difference between the face value of paper money and the cost to produce that paper money.
4	Rate paid by best clients of a bank when they borrow money.
5	The current inflation band (based on CPI) set by the SARB is between 3% and 6%.
6	Money converted into gold at a fixed rate.
7	Cash backed by trust.

Symbol	Concept
A	Gold standard
B	Fiat money
C	Inflation target
D	Seigniorage
E	Prime rate
F	Quantitative easing
G	Liquidity shortage

Indicate the applicable symbol (concepts) to the descriptions above.

Number	Applicable symbol
1	
2	
3	
4	
5	
6	

2.2 Answer the following questions that relates to the supply of credit and the demand for credit (5)

Question	Answer
Can the availability of collateral limit credit extension?	
What determines commercial banks' ability to take on more risk?	
Briefly explain the shape of the M_S – curve.	
Is the supply of credit constrained by the repo-rate or factors that influence banks' willingness to lend?	
What will happen to the M_S-curve if the Reserve Bank increases the repo-rate?	

2.3 Assume that the face value of a government bond is R1OO 000 and the coupon is R9 000. The current trading price of the same bond in the market is R133 000. Determine the following (4)

Task	Answer
What is the nominal yield of this bond? (%)	
What is the current market yield of this bond? (%)	

Assume that the SARB is selling & buying these government bonds on the open market. What will happen to the market yield of these bonds on the open market if the SARB is a net seller of these bonds?	
Assume that the aim of the SARB is to conduct stimulatory monetary policy. Should it be a net seller or a net buyer of these bonds on the market?	

Question 3: International trade and finance	**[20]**

3.1 Consider the following monthly production and consumption information of Production and Non-production products. Botswana and Swaziland are trading partners.

- **Production information.**

For the same production time schedules 1) Namibia can produce 600m metric tons of production-products and 500m metric tons of non-production products and 2) Swaziland can produce respectively 140m metric tons of production-products and 120m metric tons of non-production products.

- **The pre-trade consumption pattern (in millions of metric tons).**

	Production-products	**Non-production products**
Namibia	40	320
Swaziland	100	45

Assume that the price ratio is 1:1 and that Namibia and Swaziland would trade 50m metric tons of food products for 50m metric tons of non-food products. It is clear from the data that Namibia has an absolute advantage in the production of both product lines but trade can occur based on relative advantage. Determine how **trade specialisation** could take place, the **new consumption schedule** and the **possible gains for consumers** in both Botswana and Namibia. (Show all your calculations) **(8)**

Opportunity cost ratio's and trade specialisation:

New consumption schedules and consumer gains:

3.2 South Africa is highly dependent on foreign **direct investment (FDI)**. Explain briefly, the **different avenues** that **foreign investors** can seek to invest in our country. **(4)**

3.3 The South African rand **depreciated** to R15.85/$. Explain briefly the impact on imports, exports and portfolio investment. **(3)**

Imports:

Exports:

Portfolio investment:

3.4 Assume that the following exchange rates in the currency markets are R18.80/€, 0.90HK/€ and R23.00/HK. You have R23 000 available to speculate in the currency markets. Indicate clearly how you would speculate in the currency markets. **(5)**

Question 4: The role of the government **[10]**

4.1 Indicate (with an **X**) whether you agree or disagree with the following statements that relate to the rationale for
role of government: **(5)**

Statements	Agree	Disagree
Subsidies are used to raise the price of de-merit goods and products with negative externalities.		
Indirect taxes boost consumption and output of products with positive externalities.		
The private sector cannot provide a collective good.		
The exclusion principle is economically inefficient in the case of collective goods.		
The free-rider problem is encouraged when individual consumers are excluded from the enjoyment of a product		

4.2 Link the following microeconomic effects of a tax change to the applicable descriptions below: **(3)**

Microeconomic effect of a tax change
Labour productivity.
Work Incentives.
Pattern of demand.

Descriptions	Answer
Raising the value of tax on 'de-merit goods' to cause a substitution effect	
Changes to the tax and benefit system seek to reduce the risk of the 'poverty trap'	
Changes to the tax and benefit system to increase the intensity with which people work	

4.3 Read the statement from the SARB Quarterly Bulletin June 2018 and answer the questions that follow.

"South Africa's annualised real <u>economic growth rate</u> contracted by -2.2% (<u>negative</u>)…and consumer price <u>inflation</u> slowed to a <u>low</u> of 3.8% in the first quarter of 2018."

South Africa's Minister of Finance Nhlanhla Nene, intends to counter the effect of a recession. Indicate how he should use automatic stabilisation by referring to the listed aggregates. Answer using the words increase **or** <u>decrease</u> **(2)**

Aggregates	Automatic stabilisation action
Taxation.	
Budget deficits.	

Question 5: Expenditure model	[20]

5.1 Indicate how the following factors might affect consumption expenditure. **(4)**

Factor	Answer
Expectations regarding price.	
Availability and the costs of credit.	
Inventory assets.	
Age of durable goods.	

5.2 – 5.5 concern the following information.

- Autonomous consumption expenditure is $80 000 when equilibrium income is $100 000.
- Autonomous fixed capital formation is $40 000
- Autonomous government expenditure is $40 000
- The average tax rate is 25%
- Net exports is -$25 000
- The full-employment GDP is $360 000

5.2 Determine the marginal propensity to consume (MPC) and derive the savings function. Illustrate with a fully annotated figure. **(4)**

5.3 Calculate the multiplier. **(4)**

Multiplier:

5.4 Calculate the equilibrium income level (Ye) and induced consumption expenditure. **(3)**

Equilibrium income level:

Induced consumption expenditure:

5.5 Calculate the income gap and the required increase in fixed capital investment to close the gap. **(3)**

Income gap:

Required increase in fixed capital investment:

5.6 Explain briefly the impact of the following factors on fixed capital formation. **(2)**

Factor	Answer
Taxation.	
Interest rates.	

Question 6: Macroeconomic policy **[25]**

6.1 Consider a BP-curve. Assume that SA is currently experiencing balance of payment equilibrium (at income Y_o and interest i_o). The following descriptions deal with the sequence of events when the income level increases. (10)

Number	Descriptions
1	Imports will increase.
2	Imports will decrease.
3	There will be a surplus on the current account.
4	There will be a deficit on the current account.
5	Stimulatory monetary policy will be applied to resolve the situation on the current account.
6	Restrictive monetary policy will be applied to resolve the situation on the current account.
7	Interest rates will increase.
8	Interest rates will decrease.
9	There will be an inflow of capital.
10	There will be an outflow of capital.

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

Number	Agree	Disagree
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

6.2 Assume that monetary authorities begin a program of restrictive monetary policy. Indicate the impact on the following aggregates. (12)

Initial substitution impact on the economy.	
Money supply. (**increase** or **decrease**)	
Real interest rates. (**increase** or **decrease**)	
Real rates of return. (**higher** or **lower**)	
Foreigner's positions in domestic bonds, real estate & stocks.(**increase** or **decrease**)	
Financial account. (**improve** or **deteriorate**)	
Domestic investment. (**more affordable** or **less affordable**)	
Durable consumption. (**stimulate** or **depress**)	
Aggregate level of expenditure. (**increase** or **decrease**)	
Level of stock. (**increase** or **decrease**)	
Production, employment & income. (**higher** or **lower**)	
Imports. (**increase** or **decrease**)	
Current account. (**surplus** or **deficit**)	
Secondary income impact on the economy.	
Money supply in the country. (**increase** or **decrease**)	
Interest rates. (**increase** or **decrease**)	
Investment spending, aggregate spending & production. (**increase** or **decrease**)	
Income levels.(**increase** or **decrease**)	
Imports. (**increase** or **decrease**)	
Balance of payments. (**reduce** or **increase deficit**)	
Foreign financial investment. (**reduce** or **increase**)	
Exchange rate of domestic currency. (**appreciate** or **depreciate**)	
Balance of trade. (**improve** or **deteriorate**)	
Foreign financial investment. (**reduce** or **increase**)	

6.3 Assume the following descriptions that deal with short-run and long-run equilibrium. (4)

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.

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

Number	Agree	Disagree
1		
2		
3		
4		

END

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