

ATTENDANCE FORM

Surname	
Initials	
Student number	
Venue	

GENERAL INSTRUCTIONS

- 1. Do not remove the staple – hand this paper in.**
- 2. Remove only the top page (this page).**
- 3. Make sure that your paper has 10 numbered pages.**

January 2020



COLLEGE	College of Business & Economics
SCHOOL	Economics
CAMPUS	APK; DFC; SWC
MODULE NAME	Economics 1B
MODULE CODE	ECO1B01
SEMESTER	Second
ASSESSMENT OPPORTUNITY	Supplementary Exam
MONTH & YEAR	January 2020

ASSESSMENT DATE	January 2020	SESSION	1
ASSESSOR(S)	Prof G Van Zyl; Dr T Zwane; Prof P Baur; Mrs Maluleka; Mr D Steyn; Ms K Mmesisi; Ms N Nkomo; Ms qwane		
MODERATOR(S)	Dr M Maleka		
DURATION	2 Hours	TOTAL MARKS	100

INFORMATION/INSTRUCTIONS

This is a fill-in paper.
The paper has 10 numbered pages.
There are THREE questions with sub-sections.
A noiseless calculator is allowed.

SURNAME	
INITIALS	
STUDENT NUMBER	
CELL NUMBER	

	Marks	Total
Q.1.1	[5]	
Q.1.2	[5]	
Q.1.3	[5]	
Q.2.1	[6]	
Q.2.2	[2]	
Q.2.3	[5]	
Q.2.4	[3]	
Q.3.3	[5]	
Q.3.4	[3]	

	Marks	Total
Q.4.1	[7]	
Q 4.2	[3]	
Q.5.1	[17]	
Q.5.2	[4]	
Q.5.3	[4]	
Q.6.1	[21]	
Q.6.2	[5]	
TOTAL		[100]

Question 1: Trade cycles

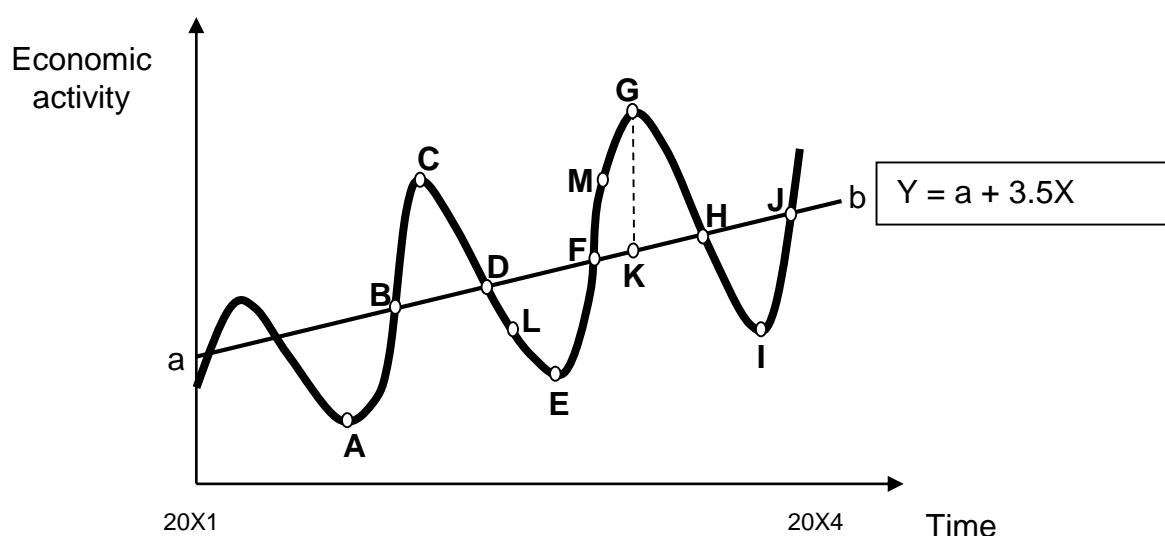
[15]

Refer to the business cycle below and answer questions that follow.

1.1 If economic authorities want to reduce the amplitude of the business cycle, what kind of economic policy would they implement at C and E and F? Refer to graph below (5)

C.
E
F

Reference cycle:



1.2 Indicate which of the descriptions do you agree or disagree (use X to indicate your option)(5)

Number	Descriptions
1	A trough can be represented by point E.
2	At point L inflation is decreasing.
3	At point M aggregate spending decreases.
4	Between points M and G real M1 money supply increases.
5	Between points M and G growth in job advertisements in a newspaper increases.

Number	Agree	Disagree
1		
2		
3		
4		
5		

1.3 Link the applicable phase of the business cycle to the descriptions that follow. (5)

Symbol	Phase of business cycle
A	Slump
B	Recession
C	Recovery
D	Boom

Number	Description
1	Short term interest rates are higher than long term interest rates.
2	Use short term debt.
3	Re-evaluate new hiring.
4	Explore potential acquisition opportunities.
5	Firms should sell unnecessary business units.

- Link the applicable symbol (for the phase of the business cycle) to the descriptions above.

Number	Applicable symbol
1	
2	
3	
4	
5	

Question 2: Money, interest rates and financial markets

[16]

2.1 Assume that the reserve requirement is 20%, the current repo rate is 8%, the maximum M3 money supply that can be created in the system is R200bn and the demand-for-money is expressed as $i = 20 - 0.2M_d$. Determine the following. (6 marks)

Task	Answer
The money multiplier. (2)	
Mo (monetary base). (Rbn) (1)	
Total value of money demanded. (Rbn) (1)	
Assume that the repo rate is lowered to 6%. What will the demand for money be? (Rbn) (2)	

2.2 Assume that the face value of a government bond is R150 000 and the coupon is R10 000. The current trading price of the same bond in the market is R80 000. (2)

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

2.3 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)

2.4 Briefly explain the concept of the a) gold standard and b) liquidity shortage

(3)

a)

b)

Question 3: International trade and finance

[16]

3.1 This question is based on the following weekly production and consumption information of countries Catan & Danan. (6)

- Production information.**

Assume that both countries have the same production time per month available to produce the two kinds of goods. The maximum units of the two kinds of goods that Catan can produce per month are respectively 4000 metric tons of non-food consumables and 2000 metric tons of food. The maximum units of the two kinds of products that Danan can produce per month are respectively 2000 metric tons of non-food consumables and 4000 metric tons of food.

- The pre-trade consumption pattern.**

	Non-food	Food
Catan	3000	1700
Danan	1800	5600

Assume that the price ratio is 1:1 and that the two countries would trade 2000 metric tons of non-food consumables for 2000 metric tons of food.

Answer the following questions.

Calculate/determine the following:

Task	Answer
In which one of the two products should Catan specialises?	
In which one of the two products should Dana specialises?	
What is the new consumption combination for Canan after trade?	
What is the gain of trade for Canan?	
What is the new consumption combination for Danan after trade?	
What is the gain of trade for Danan?	

3.2 Assume that country C exports \$200m of product X and \$450m of product Y. The total world exports for products X and Y are respectively \$4bn and \$5bn. Total world exports are \$100bn and the total exports of country C is \$4bn. (2)

Number	Description
1	Country C should specialise in product X if the RCA index is applied.
2	Country C should specialise in product Y if the RCA index is applied

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

Number	Agree	Disagree
1		
2		

3.3 Link the following concepts to the applicable descriptions.

(5)

Concepts
Economic integration
Free trade area
Customs union
Common market
Monetary union

Description	Concept
Members have the same tariffs toward non-member countries.	
Countries adopt a common currency.	
Free trade area combined with free movement of production factors between member counties.	
No tariffs and quotas between member countries.	
Countries reduce trade barriers among themselves.	

3.4 Assume that a South African firm is importing 20 kg of material from China at a cost of R100 000 per kilogram. The current ad valorem tariff is 25% and the authorities can also introduce a specific tariff of R1000 per kilogram. (3 marks)

Question	Answer
What is the final cost for the importer if the authorities charge the ad valorem tariff? (in Rand)	
What would the composite tariff be per kilogram of the material? (in Rand)	
What is the total revenue for government if the composite tariff is applied? (in Rand)	

Question 4: The role of the government

[10]

4.1 Match the concepts in the following table to the descriptions below.

(7)

Concepts
Externalities
Collective good
Exclusion principle
Public good
Subsidies
Indirect taxes
Developmental state

Descriptions	Concept
Good if provided to one is provided to all.	
Designed to boost consumption and output of products with positive externalities.	
Raise the price of de-merit goods and products with negative externalities.	
Products and services that cannot be provided by the private sector.	
As society benefits from the discovery of a new medical treatment.	
Essential for government to engage in development planning.	
It is economically inefficient to locate a tollgate on a road that is virtually never used.	

4.2 Assume the following microeconomic effects of a tax change.(3 marks)

Symbol	Microeconomic effect of a tax change
A	Work incentives.
B	Pattern of demand.
C	Labour productivity.

Indicate which microeconomic effects of tax changes are captured by the following descriptions.

Number	Description
1	The increase in the VAT rate results in a decrease in the sales of luxury goods.
2	Because of an income tax increase Mr Ben decides to work less hours.
3	Company tax decreases resulted in an increase in real output of firms.

- Indicate the applicable symbol that links the correct microeconomic effects of a tax change to the descriptions above.

Number	Applicable symbol
1	
2	
3	

Question 5: Total expenditure model

[25]

5.1 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. (17)

Autonomous consumption expenditure is 100; MPC is 0.8; autonomous investment is 40; planned government spending is 50; the average tax rate is 20% and planned net exports are -20 and full-employment national income is 500.

Autonomous consumption spending	(1)	
Total autonomous spending	(1)	
Marginal propensity to consume (MPC)	(1)	
Expenditure Multiplier	(1)	
Equilibrium income level	(2)	
Induced consumption expenditure. (round off to two decimal points)	(2)	
Savings. (round off to two decimal points)	(2)	
Income gap. (round off to two decimal points)	(2)	
Required government spending. (round off to two decimal points)	(3)	
Assume that the tax rate is increased to 25%. What is the slope of the total expenditure line?	(1)	
What is the new induced consumption spending at the higher tax rate (25%)	(1)	

5.2 Indicate the impact of the following events on private consumption expenditure (**C**). **(4)**

Number	Event	Increase or decrease
1	A substantial increase in lending rates.	
2	Lower VAT rates.	
3	The population growth rate has increased by 1.8% over the past year.	
4	Statistical Services of South Africa has reported higher capital formation rates for the past year.	

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

Number	Event	Increase/Decrease
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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 8%.	
4	The SARB has increased the repo rate by 300 basis points.	

Question 6: Macroeconomic policy

[26]

6.1 Match the following Impact options with the description below **(21)**
Assume that monetary authorities begin a program of restrictive monetary policy. Indicate the correct answer.

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

6.2 Consider the Keynesian transmission mechanism. The SARB decreases the repo rate to control inflation. Indicate the impact of this policy stand on the following aggregates. **(5)**

Number	Aggregates	Increase/Decrease
1	M_s	
2	M_d	
3	Interest rates.	
4	Investment spending.	
5	GDP.	

END OF PAPER