

UNIVERSITY OF SWAZILAND
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
MAIN EXAMINATION
MAY 2018

TITLE OF PAPER: PRINCIPLES OF MACROECONOMICS

COURSE CODE: ECO 102/ ECO 104/ ECON 104 – IDE

TIME ALLOWED: 2 HOURS

INSTRUCTIONS: SECTION A IS COMPULSORY AND CARRIES 40 MARKS

ANSWER ANY TWO (2) OTHER QUESTIONS IN SECTION B. EACH QUESTION CARRIES 30 MARKS

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR.

SECTION A

QUESTION ONE: COMPULSORY

PART I: MULTIPLE CHOICE QUESTIONS

WRITE THE CORRECT ANSWER IN YOUR ANSWER BOOKLET. (1 MARK EACH = 20 MARKS)

1. Suppose you buy a government bond for E950 that matures in one year, at which time the Central Bank will pay you E1,000. How much interest will you earn on your investment of E950?
 - a) 4.75%
 - b) 5.26%
 - c) 19%
 - d) 5%

2. A bank balance sheet appears as follows:

Assets		Liabilities	
Reserves	E130	Owner's equity	E100
Other non-current assets	E20	Deposits	E50

The required reserve ratio is 20%. How much can this bank lend out at present, and how much money can the banking system create as a result assuming that the banking system will lend as much as it is able to lend? i.e., assume that 100% of the value of any loan granted is withdrawn and is used for payments which form new deposits and then new loans, etc.

- a) Lend: E110; Create: E550
 - b) Lend: E110; Create: E110
 - c) Lend: E80; Create: E160
 - d) Lend: E120; Create: E600
3. A reserve ratio of 0.10 means that a bank loans out _____ percent of its _____
 - a) 10; deposit liabilities
 - b) 10; excess reserves
 - c) 90; deposit liabilities
 - d) 90; excess reserves
 4. The amount of money that an individual wishes to hold is determined by
 - a) the price level and the interest rate

- b) the price level and real income
 c) real income
 d) real income and the interest rate
5. An increase in the Lilangeni price of a foreign currency usually
 a) benefits Swazi importers
 b) benefits Swazi exporters
 c) benefits both importers and exporters in Swaziland
 d) harmful to both importers and exporters in Swaziland
6. As the interest rate _____, the opportunity cost of holding money _____ and individuals choose to hold _____ money.
 a) increases, increases, more
 b) decreases, decreases, more
 c) increases, decreases, less
 d) decreases, increases, more
7. Based on the table below, which of the following statements are correct?

Scenario	Reserve ratio (%)	Cheque deposit	Actual reserves	Required reserves	Excess reserves
1	10	20000	i	2000	3000
2	30	ii	5000	6000	iii

- (i) The correct value for (i) is 1000
 (ii) The value of (ii) is 1667
 (iii) The value of (iii) is -1000
 (iv) Additional money that can be created in scenario 1 is 30000
- a) Only (ii) is correct.
 b) Only (iii) is correct.
 c) Only (i) and (ii) are correct.
 d) Only (iii) and (iv) are correct.

8. If a nation has a comparative advantage in the production of a good,
- it can produce that good at a lower opportunity cost than its trading partner.
 - it can produce that good using fewer resources than its trading partner.
 - it can benefit by restricting imports of that good.
 - it must be the only country with the ability to produce that good.
9. The data below shows the resources required to produce tractors and wheat in two countries (A and B):

	Units of Resources Required	
	Country A	Country B
To produce 1 tractor	10	8
To produce 1 tonne of wheat	8	4

Which one of the following statements is correct?

- Country A has a comparative advantage in the production of wheat.
 - Country B has a comparative advantage in the production of wheat.
 - Country A has an absolute and comparative advantage in the production of tractors.
 - Country B has an absolute and comparative advantage in the production of tractors.
10. Suppose the economy is initially in the long-run equilibrium. Then suppose there is a drought that destroys much of the maize crop. According to the AD-AS model, what happens to prices and output in the **short-run**?
- Prices rise; output rises.
 - Prices rise; output falls.
 - Prices fall; output falls.
 - Prices fall; output rises.
11. A country's government runs a deficit when which of the following occurs in a given year?
- The amount of new loans to developing nations exceed the amount of loans paid off by developing countries.
 - Government spending exceeds tax revenues.
 - The debt owed to foreigners exceeds debt owed to the country's citizens.
 - The amount borrowed exceeds the interest payment on national debt.
 - Interest payments on the national debt exceed spending on goods and services.

12. A high marginal propensity to consume implies which of the following?
- A small change in consumption when income changes.
 - A high savings rate.
 - A high marginal tax rate.
 - An equilibrium level of income near full employment.
 - A low marginal propensity to save.
13. Suppose that an economy with lump-sum taxes and no international trade, autonomous investment spending increases by E2 million. If the marginal propensity to consume is 0.75, equilibrium income will change by a maximum of
- 0.5 million
 - 1.5 million
 - 2.0 million
 - 8.0 million
 - 15.0 million
14. Which of the following best illustrates an improvement in the country's standard of living.
- An increase in real per capita gross domestic product.
 - An increase in nominal per capita gross domestic product.
 - Price stability.
 - A balanced budget.
 - An increase in the consumer price index.
15. The official unemployment rate understates the unemployment rate in the economy because the official unemployment rate
- Ignores the duration of unemployment.
 - Ignores underemployment and discouraged workers.
 - Includes jobs created by the underground economy.
 - Excludes all unemployed teenagers.
 - Excludes frictionally unemployed workers.
16. Which of the following combinations of changes in government spending and taxes is necessarily expansionary?
- | | Government Spending | Taxes |
|-----|----------------------------|--------------|
| (a) | Increase | Increase |
| (b) | Increase | Decrease |
| (c) | Decrease | Not change |
| (d) | Decrease | Increase |
| (e) | Decrease | Decrease |
17. For an economy consisting of households and businesses only, which of the following is consistent with the circular flow of income and production?
- Households are producers of goods and services and consumers of resources.
 - Households are the users of resources, and businesses are sources of savings.
 - Households are suppliers of resources and consumers of goods and services.
 - Businesses are users of taxes and households are sources of taxes.
 - Businesses are suppliers of resources and consumers of goods and services.

18. Which of the following are most likely to be the effects of an increase in government expenditures?

	Unemployment Rate	GDP or Output
(a)	Increase	Increase
(b)	Increase	Decrease
(c)	Decrease	Increase
(d)	Decrease	Increase
(e)	No change	Increase

19. Which of the following individuals is considered officially unemployed?

- (a) Chris, who has not worked for more than three years and has given up on looking for work.
- (b) Kim, who is going to school full-time and is waiting until graduation before looking for a job.
- (c) Pat, who recently left his job to look for a different job in a different town.
- (d) Leslie, who retired after turning 65 only five months ago.
- (e) Lee, who is working 20 hours per week and is seeking full-time employment.

20. Based on the data below, what is the values of gross domestic product, in billions of dollars?

	National Economic Figures (billions of Emalangeni)
Consumption	3000
Government expenditure on goods and services	1000
Gross private domestic investment	700
Depreciation	300
Exports	300
Imports	500
Indirect business taxes	0

- (a) 4500
- (b) 4700
- (c) 4900
- (d) 5150
- (e) 5950

PART II: TRUE OR FALSE STATEMENTS.

INDICATE 'TRUE' OR 'FALSE' IN YOUR ANSWER BOOKLET. (1 MARK EACH = 20 MARKS)

1. If banks choose to hold excess reserves, lending decreases and the money supply decreases.
2. Transactions demand for money arises because households and business firms use money as a store of value.
3. Credit cards are part of the M_2 money supply and are valued at the maximum credit limit of the card holder.
4. If an advanced country has an absolute advantage in the production of everything, it will benefit if it eliminates trade with less developed countries and becomes completely self-sufficient.
5. In the long run, changes in aggregate demand have no effect on the price level or the level of output in an economy.
6. When the Lilangeni appreciates, more Swazi tourists would visit England.
7. Reserve requirements permit the Central Bank of Swaziland to control the lending ability of commercial banks.
8. Fiat money is intrinsically valuable apart from being money.
9. A tariff raises the price of a good, reduces the domestic quantity demanded, increases the domestic quantity supplied, and increases the quantity imported.
10. An increase in imports of a nation will increase its national output and aggregate spending in the economy.
11. Economic phenomenon such as the rate of unemployment and inflation are studied in microeconomics.
12. Living standards growth is defined as increases in the level of production in a country or region.
13. Macroeconomics focuses on the outcomes of decisions by people and firms, whereas microeconomics is a study of how the major components of an economy interact.
14. Gross national product counts goods and services produced within the country's borders, regardless of who produced it.
15. Gross domestic product has three components: consumption, investment, and net exports.
16. Fiscal policy refers to taxation and spending policies implemented by government.
17. A factory built by U.S. nationals in Canada would be included in the Canadian GNP but not in the Canadian GDP.

18. The production of an apple contributes more to GDP than the production of gold ring because food is necessary for life itself.
19. If a lumber yard sells E1000 of lumber to a carpenter and the carpenter uses the lumber to build a garage and sells for E5000, the contribution to GDP is E6000.
20. If nominal GDP in 2000 exceeds nominal GDP in 1999, real output must have risen.

SECTION B

ANSWER ANY TWO (2) QUESTIONS

QUESTION TWO

(30 Marks)

- (a) Suppose that firms become very optimistic about future business conditions and invest heavily in new capital equipment.
- (i) Use an AD-AS diagram to show the short-run effect of this optimism on the economy. Label the new levels of prices and real output. [6]
 - (ii) Explain, in words, why the aggregate quantity of output supplied changes [4]
 - (iii) You are a local producer who wants to sell your products in the United States of America. The price of your product is E5, 000. If the Lilangeni appreciates against the Dollar, will your product look cheaper or more expensive to US consumers? Use a numerical example to explain. If local producers are competing against producers in other countries where there has been no change in the exchange rate, will they be better or worse off? [5]
- b) (i) Highlight any five Macroeconomic objectives and describe how they are measured. [10]
- (ii) List the three approaches to measuring GDP? [3]
 - (iii) What is a circular flow diagram and how is it significant in economics? [2]

QUESTION THREE

(30 Marks)

- (a) You are provided with the following information about an imaginary economy called

Keynesia:

Government expenditure	400
Exports	250
Autonomous imports	50
Autonomous consumption	150
Investment expenditure	300
Full- employment output	1 900
Marginal propensity to consume	0.75
Marginal propensity to import	0.15
Tax rate	0.25

Answer the following questions (show full calculations):

- (i) Derive the consumption function [3]
 - (ii) Derive the saving function [3]
 - (iii) Calculate the equilibrium level of income using the aggregate expenditure approach. [6]
 - (iv) What would the value of income be if the trade balance is zero? [3]
- (b) Compare and contrast the Classical and the Keynesian schools of thought. [10]
- (c) List any five reasons why the government sector is critical. [5]

QUESTION FOUR

(30 Marks)

- (a) Explain why the usual microeconomic explanations for a downward-sloping demand curve **do not** explain the downward-sloping AD curve. [10]
- (b) The short-run AS curve is typically drawn with three slopes over a range of output levels. What is the economic interpretation behind each of these three slopes? [5]
- (c) What is GDP? And how does it compare to GNP? [4]
- (d) What is the Lorenz curve? And how is it related to the Gini coefficient? [4]
- (e) What is a public good? [2]
- (f) What is an externality? [2]
- (g) What is the informal sector? [3]