

UNIVERSITY OF FORT HARE  
ALICE AND EAST LONDON

ECO 121/ECO 121E

DEGREE EXAMINATIONS

MAIN EXAMINATION

NOVEMBER 2019

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Time: 3 HOURS  
Subject: INTRODUCTION TO ECONOMICS  
(MACROECONOMICS)  
Marks: 100

This paper consists of 18 pages including the cover page

Internal Examiners

Internal Moderator: Mr S. Dlwangushe

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INSTRUCTIONS

Answer All Questions in Section A  
Answer ANY two Questions in Section B

Make use of relevant contemporary examples where applicable. The graphical illustrations must be clearly shown.

SECTION A

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ANSWER ALL QUESTIONS IN THIS SECTION

EACH QUESTION IN THIS SECTION CARRIES 1 (ONE) MARK

Question One [50 Marks]

1. Which one of the following statements is incorrect?
  - A. GDP estimated from the production side is also called gross value added (GVA).
  - B. To estimate GDP from the expenditure side, the expenditure on final goods and services should be taken into account.
  - C. GDP can also be estimated as the total value of all incomes (wages and salaries, rent, interest and profit) in the economy.
  - D. The three methods of estimating GDP should in principle yield the same results.
  - E. GDP can be estimated by adding the total value of primary inputs to total value of intermediate goods and services.
  
2. Nominal GDP calculated at market prices differs from nominal GDP at factor cost. Which of the following items would account for the difference?
  - A. Depreciation on capital equipment.
  - B. Inflation.
  - C. Interest on loans.
  - D. Indirect taxes and subsidies.
  - E. Net incomes from abroad.
  
3. GDP at \_\_\_\_ prices will be greater than GDP at \_\_\_\_\_ prices because of \_\_\_\_\_
  - A. constant; current; inflation
  - B. constant; current; depreciation
  - C. current; constant; depreciation
  - D. current; constant; deflation
  - E. current; constant; inflation
  
4. A consumer's real purchasing power refers to:
  - A. the nominal income level of the consumer.
  - B. wage income earned through employment.
  - C. the maximum volume of goods and services that the consumer can buy.
  - D. nominal GDP per capita.
  - E. real GDP deflated by the price level.

5. Which of the following would most likely contribute to a deficit (or reduce the surplus) on the South African current account?

- A. A depreciation of the Rand.
- B. A Malaysian company invests in a South African oil company.
- C. An increase in transfers from Italian citizens to their South African relatives.
- D. A decline in imports.
- E. An increase in mine workers' transfer earnings to Mozambique.

6. Which one of the following statements is incorrect?

- A. In a barter economy there has to be a double coincidence of wants before exchange can take place.
  - B. Money is not the only possible unit of account in a monetary economy.
  - C. Money is a good store of value during periods of high inflation.
  - D. Money always serves as a medium of exchange.
  - E. Modern money is not covered by a commodity such as gold.
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7. When the inflation rate is expected to exceed the target rate by a significant margin, the SARB will tend to:

- A. reduce the cost of credit to the banks.
- B. increase the repurchase rate (repo rate).
- C. purchase government bonds on the open market.
- D. decrease the repurchase rate (repo rate).
- E. use moral suasion to persuade banks to provide more loans to their clients

8. Which one of the following statements is correct?

- A. 10 per cent of the money stock in South Africa is backed by gold.
- B. 20 per cent of the money stock in South Africa is backed by gold.
- C. 5 per cent of the money stock in South Africa is backed by gold.
- D. 1 per cent of the money stock in South Africa is backed by gold.
- E. The money stock in South Africa is not backed by gold

9. Which one of the following statements regarding monetary policy is incorrect?

- A. Monetary policy in South Africa is implemented by the South African Reserve Bank (SARB).
- B. The key decision-making unit is the Monetary Policy Committee of the SARB.
- C. The key instrument of monetary policy is the repurchase rate (repo rate).
- D. The SARB's main objective is to control the growth of the money stock.
- E. The SARB pursues a formal inflation target, set by the Minister of Finance, in conjunction with the SARB.

10. Which of the following would be classed as an expansionary monetary policy?

- A. A decrease in the quantity of money.
- B. A decrease in interest rates and increase in money supply
- C. An increase in government taxation.
- D. An increase in government expenditure.

11. If the social cost of producing chickens is greater than the private cost, then we can be sure that

- A. A positive externality exists.
- B. Chicken is healthy and more should be produced.
- C. A negative externality exists.
- D. The price of chicken is too low.

12. In order for someone to be a free rider, an activity must be undertaken that:

- A. Arranges for ride-sharing at rush hour.
- B. Creates benefits for people who can't be forced to pay for them.
- C. Beautifies a neighbourhood.
- D. Improves national defence.

13. Which one of the following statements is **incorrect**?

- ~~A. Market economies cannot function without some government involvement.~~
- B. Markets do not always produce efficient outcomes – markets sometimes fail.
- C. Markets always produce equitable outcomes.
- D. Market systems tend to experience business cycles, that is, cyclical upswings and downswings in aggregate economic activity.
- E. The transfer of ownership from a private enterprise to the government is called nationalisation.

14. A tax such as VAT would generally be viewed as:

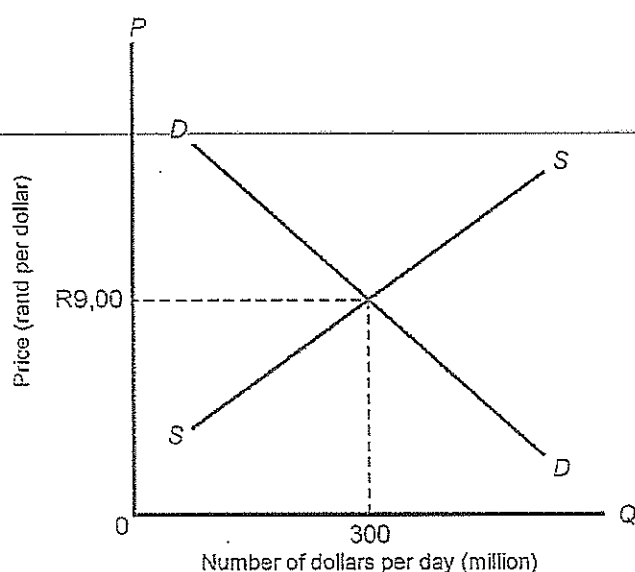
- A. progressive, because the consumption expenditure of the rich is greater than that of the poor.
- B. regressive, because low-income households spend a greater proportion of their income on goods that attract VAT.
- C. proportional, because the VAT rate is constant across goods that attract VAT.
- D. progressive, because most goods consumed by poor households are zero rated.
- E. regressive, because the VAT burden increases as household income rises.

15. Which one of the following is not a source of financing government expenditure?

- A. New York stock exchange
- B. Borrowing (public debt)
- C. Income from property (e.g. parastatals)
- D. Taxes

16. Suppose that the euro/US dollar exchange rate changes from 1,3 dollar per euro to 1,1 dollar per euro. Then:
- the euro has depreciated against the dollar
  - this will decrease the demand for Eurozone goods by the United States.
  - this will lead to a rise in exports by the United States to the Eurozone.
  - the euro has appreciated against the dollar.
  - the dollar has depreciated against the euro.

The figure below shows the demand and supply curves for dollars (in terms of the South African rand) in the foreign exchange market. Use this information to answer question 17.

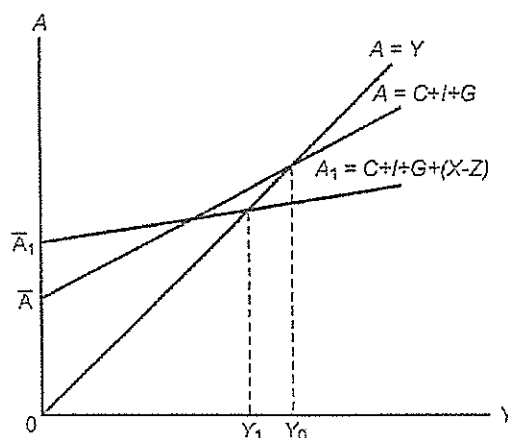


17. In this case, an increase in American tourists to South African game reserves would cause the:
- supply curve to shift to the right.
  - demand curve to shift to the left.
  - supply curve and demand curve to remain unchanged.
  - demand curve to shift to the right.
  - supply curve to shift to the left.
18. The exchange rate is  $\$0,50 = R5,00$ . If a car sells for  $\$16\ 000$ , then its cost in rands would be:
- R80 000
  - R16 000
  - R12 800
  - R160 000
  - R64 000

19. A monetary system where exchange rates are freely determined in response to the demand and supply for foreign currencies may best be described as a:
- A. fixed exchange rate system.
  - B. managed float.
  - C. floating exchange rate system.
  - D. pegged exchange rate.
  - E. purchasing power parity system.
20. A tariff is:
- A. a tax on exported goods.
  - B. a source of revenue to the exporting nation.
  - C. a tax on imported goods.
  - D. a tax on foreign property.
  - E. a form of quota.
21. The MPC measures the relationship between:
- A. a change in consumption and a change in income.
  - B. change in consumption and savings.
  - C. changes in consumption and changes in savings.
  - D. the proportion of income to consumption at any given level of income.
  - E. the total level of consumption and the total level of saving.
22. In the Keynesian model the multiplier is equal to:
- A. the equilibrium level of output for a given level of aggregate expenditure.
  - B. the increase in aggregate expenditure brought about by a change in investment.
  - C. the increase in the equilibrium level of income divided by the change in autonomous expenditure.
  - D. the increase in autonomous expenditure when equilibrium income increases.
  - E. the equilibrium level of consumption corresponding to a given level of aggregate spending.
23. At the equilibrium level of income in the economy:
- A. there is an unplanned decrease in inventories.
  - B. there is an unplanned increase in inventories.
  - C. there is no unplanned change in inventories.
  - D. aggregate spending is greater than aggregate income.
  - E. aggregate spending is less than aggregate income.

24. Consider the following information: autonomous consumption spending is R50 million, investment spending is R150 million and the marginal propensity to consume is 0,80. Which one of the following statements is correct?
- The equilibrium level of income is R200 million.
  - The multiplier is 1,25.
  - The equilibrium level of income is R1 billion.
  - The multiplier is 4.
  - The equilibrium level of income is R250 million.
25. Which one of the following statements about the consumption function is incorrect?
- The intercept of the consumption function is determined by induced consumption.
  - Value of induced consumption depends, *inter alia*, on the marginal propensity to consume.
  - The value of induced consumption depends, *inter alia*, on the level of income.
  - Position of the consumption function is determined by autonomous consumption.
  - Autonomous consumption is independent of the level of income.
26. Which one of the following is not required to calculate equilibrium level of income in a Keynesian model of a closed economy (an economy without a foreign sector)?
- The stock of money in the economy.
  - Government spending.
  - The tax rate.
  - Autonomous consumption.
  - The marginal propensity to consume.

Consider the following diagram, which depicts the Keynesian model of an open economy with government, and answer Questions (27) and (28).



27.  $Y_0$  represents:

- A. the equilibrium level of income if the economy were closed.
- B. the full employment level of income.
- C. the equilibrium level of income if exports equal imports.
- D. a level of income less than aggregate expenditure.
- E. the level of income where exports equal imports.

28. The diagram depicts a situation where at equilibrium ( $Y_1$ ):

- A. domestic demand exceeds output.
- B. exports exceed imports.
- C. domestic demand is less than output.
- D. aggregate expenditure is less than output.
- E. aggregate expenditure exceeds output.

Use the data below to answer Questions (29) and (30).

*Consider a Keynesian model where:*

exports	= R10 million
marginal propensity to import out of income	= 0,35
autonomous imports	= R10 million
the tax rate	= 0,2
government spending	= R25 million
investment	= R20 million
autonomous consumption	= R15 million
the marginal propensity to consume	= 0,75

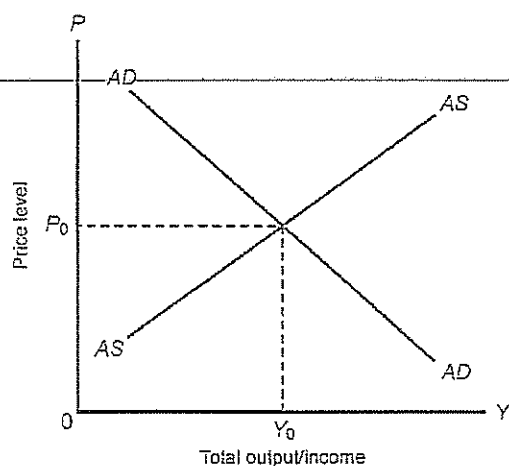
29. The value of the multiplier is:

- A. 1,333
- B. 1,667
- C. 2,5
- D. 4
- E. not possible to calculate from the information given.

30. The equilibrium level of aggregate spending is:

- A. R60 million
- B. R80 million
- C. R100 million
- D. R150 million
- E. R240 million

Consider the following diagram and answer Questions (31) and (32).



31. The immediate effect of a decrease in government expenditure will be to:

- A. move the AD curve to the left.
- B. move the AD curve to the right.
- C. move the AS curve to the left.
- D. move the AS curve to the right.
- E. leave the curves unchanged.

32. If South Africa were to discover a plentiful supply of cheap oil, this would:

- A. move the AD curve to the left.
- B. move the AD curve to the right.
- C. move the AS curve to the left.
- D. move the AS curve to the right.
- E. have no effect on the curves.

33. When the SARB adjusts the repo rate, the volume of bank loans tends to be affected. To which channel of the broad monetary transmission mechanism does this impact belong?
- A. The money stock channel.
  - B. The interest rate channel.
  - C. The credit channel.
  - D. The exchange rate channel.
  - E. The asset price channel.
34. Which one of the following statements is **incorrect**? An expansionary monetary policy:
- ~~A. involves a decrease in interest rates.~~
  - B. may be illustrated by a rightward shift of the *AD* curve.
  - C. will always be successful in combating inflation.
  - D. tends to be less successful in stimulating the economy than an expansionary fiscal policy.
  - E. leaves the *AS* curve unchanged.
35. Stagflation refers to a situation where:
- A. economic growth is experienced and leads to an increase in the inflation rate.
  - B. high inflation rates and high employment rates are experienced simultaneously.
  - C. high inflation rates and high unemployment rates are experienced simultaneously.
  - D. a period of high inflation is followed by a period of stagnation in the economic growth rate.
36. Which one of the following statements about inflation is **true**? Inflation refers to:
- A. a sudden and self-contained increase in prices.
  - B. a small increase in prices.
  - C. “too much money chasing too few goods”.
  - D. a sustained increase in the general price level.
  - E. an increase in the purchasing power of money.

37. Which of the following statements is **incorrect**?
- A. Cost-push inflation is associated with rising prices and declining unemployment.
  - B. Attempts to decrease cost-push inflation by restrictive monetary or fiscal policy are likely to produce even greater unemployment.
  - C. Cost-push inflation may result from firms increasing their profit margins.
  - D. Cost-push inflation may follow from a depreciation of the domestic currency against the currencies of the country's major trading partners.
38. If inflation was 10% in a particular year and you received a 20% increase in income during the same year, then over the year your:
- A. real and nominal income both fell.
  - ~~B. real and nominal income both rose.~~
  - C. real income fell, but nominal income rose.
  - D. real income rose, but nominal income fell.
  - E. nominal income rose, but real income was unchanged.
39. Which one of the following is **not** a possible cause of cost-push inflation?
- A. An increase in wages.
  - B. An increase in profit margins.
  - C. A decrease in interest rates.
  - D. A decrease in productivity.
  - E. An increase in the cost of imported capital and intermediate goods.
40. Extremely high inflation is called:
- A. disinflation.
  - B. deflation.
  - C. stagflation.
  - D. hyperinflation.
  - E. bracket creep.

41. During an economic downturn, sales fall and some workers lose their jobs. This unemployment is referred to as:
- A. seasonal unemployment.
  - B. frictional unemployment.
  - C. cyclical unemployment.
  - D. structural unemployment.
  - E. technological unemployment.
42. Which of the following would NOT be expected to generate employment?
- A. Easier access to credit for small business.
  - B. Public works programmes.

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  - C. An increase in imports.
  - D. An increase in the labour intensity of production.
  - E. A decrease in the relative price of labour.
43. In an industry, if wages increase more than the productivity of workers, we would expect:
- A. an upward pressure on prices.
  - B. a decrease in unemployment.
  - C. investment in the industry to increase.
  - D. costs of production to fall.
  - E. the demand for labour to rise.
44. Which one of the following statements is incorrect? The strict definition of unemployment:
- A. includes only persons 15 years and older.
  - B. excludes persons who are in paid employment or self-employment.
  - C. excludes people who were not available for employment or self-employment during the seven days prior to the interview.
  - D. includes persons who did not take steps during the four weeks preceding the interview to find paid employment or self-employment.
  - E. is currently the official definition of unemployment in South Africa.

45. Peter worked in the automotive industry but his work is now done by a robot. Peter is:

- A. fiscally unemployed.
- B. frictionally unemployed.
- C. seasonally unemployed.
- D. cyclically unemployed.
- E. structurally unemployed.

46. The phase of the business cycle at which almost all available resources in the economy are in use is referred to as:

- A. the recovery phase.
- B. the expansion phase.
- C. the peak or boom phase.
- D. the trough phase.

47. During a recession, cyclical unemployment will \_\_\_\_\_ and cyclical inflation will \_\_\_\_\_.

- A. decrease; decrease
- B. decrease; increase
- C. increase; increase
- D. increase; decrease

48. Keynesians believe that the fluctuations in economic activity (business cycles):

- A. are caused by external factors such as the inappropriate use of government policy.
- B. are caused by changes in weather patterns.
- C. are caused by structural or institutional changes.
- D. occur naturally in market economies and require government intervention.

49. Which one of the following statements is **incorrect**? Economic growth:
- A. may be measured as the annual rate of increase in real GDP.
  - B. may be measured as the annual rate of increase in GDP at constant prices.
  - C. may be measured as the annual rate of increase in GDP at current prices.
  - D. should preferably be measured on a per capita basis.

50. Which one of the following statements is **incorrect**?
- A. Exploitation of natural resources played an important role in the development of the South African economy.
  - B. The quality of the South African labour force leaves a great deal to be desired.
  - C. South Africa is a capital-rich country and exports large quantities of capital goods.
  - D. Exports of minerals and metals have played a key role in South African growth.
  - E. Import substitution played a significant role in the initial development of the South African manufacturing sector.

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## SECTION B

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ANSWER ANY TWO QUESTIONS IN THIS SECTION

EACH QUESTION CARRIES EQUAL MARKS

Question Two [25 Marks]

- a. What is meant by the consumption function? Make use of a diagram to explain the three main characteristics of the consumption function. [7]
- b. Use examples to explain the difference between absolute advantage theory and comparative (relative) advantage theory of international trade. [6]
- c. There are 4 channels through which a change in repo rate may potentially affect the price level and the level of real output in the economy. Discuss these channels. [12]

Question Three [25 Marks]

- a. Use the AD-AS model to illustrate and explain how the authorities can use monetary and fiscal policies to stimulate the economy. What side-effects would such policies have? What is the significance of the slope/condition of the AS curve in this regard? [10]
- b. What type of unemployment does each of the following statements represent? Give explanation for your answer.
- I. Workers at a clothing factory in Newcastle lose their jobs when the firm relocates to South Africa.
  - II. Workers at a factory making compact discs lose their jobs when the firm goes under due to competition from USB flash drives.
  - III. Migrant farm workers' employment is terminated when the harvest is finished.
  - IV. Workers at the BMW plant in Rosslyn are laid off as a result of a slump in motorcar sales.
  - V. University graduates that have completed their degrees and are actively looking for a job but cannot find one. [10]
- c. Calculate the equilibrium level of income if  $\bar{C} = R100 \text{ million} + 0,8Y$  and  $\bar{I} = R125 \text{ million}$ . [5]

Question Four [25 Marks]

- a. Explain the difference between the ability to pay principle and the benefit principle with regards to taxation. [4]
- b. Briefly explain the three different approaches to measuring GDP in an economy. [6]
- c. What are the main determinants of the demand for money? Explain the link between each determinant and the quantity of money demanded. [6]
- d. Draw a demand and supply curve for British pounds (on the vertical axis plot rand per British pound).
- I. What factors are likely to cause an increase in demand for British pounds (in exchange for South African Rand) and how can this be illustrated in a diagram? [7]
  - II. Does this represent an appreciation or depreciation of the South African Rand relative to the British pound? [2]

Question Five [25 Marks]

- a. Can monetary and fiscal policy be used to counteract (or combat) demand-pull inflation?  
Use a diagram (or diagrams) to explain your answer. [10]
- b. Briefly describe the various lags associated with monetary and fiscal policies. [7]
- c. A country produces only two products: gold and platinum. In 2005 the country produced 100 tons of gold at R500 000/ton and 60 tons of platinum at R1 000 000/ton.

In 2006 the country produced 90 tons of gold at R600 000/ton and 80 tons of platinum at R1 100 000/ton.

- I. Calculate the value of nominal GDP in 2005. [2]
- II. Calculate the value of GDP at current prices in 2006. [2]
- III. Calculate the value of GDP in 2006 at constant 2005 prices. [2]
- IV. When comparing the performance of the economy over time, should one calculate the growth rate in real or nominal GDP? Explain. [2]

END OF EXAM

SECTION A: MULTIPLE CHOICE ANSWER SHEET

NAME..... STUDENT NO:..... COURSE.....

Indicate your choice by making a CROSS in the choice block:

Question number	Options: choose only one				
	USE an 'X' to select your answer				
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
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