



“Investing in Africa’s future”

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

NMEC102: ECONOMIC PRINCIPLES 11

END OF SECOND SEMESTER FINAL EXAMINATIONS

APRIL 2022

LECTURER: MR T MASESE

DURATION: 3 HOURS

INSTRUCTIONS

1. Answer ALL questions in Section A
2. Candidates are also to select and answer any TWO questions from Section B and any ONE question from Section C
3. DO NOT repeat material.
4. Marks will be awarded for clear, grammatically correct and well-constructed sentences

SECTION A (40 marks)

For Questions 1-7 write the correct option against each question for example (Q1. C)

1. Which *one* of the following is a component of the factor incomes approach to GDP? **(1 mark)**
 - A. Government purchases
 - B. Transfer payments
 - C. Corporate profits
 - D. Net exports
 - E. Value added
2. Which *two* of the following are consistent with the idea of discretionary fiscal policy? **(1 mark)**
 - A. The fact that the tax of unleaded petrol is lower than that on leaded petrol.
 - B. The fact that as people's incomes increase the amount that they pay in taxes also increases.
 - C. The fact that the government increases spending during a recession.
 - D. The fact that congestion charges reduce traffic in city centers.
 - E. The fact that government raises tax rates during a 'boom' period.
3. Which one of the following represents the function where money allows a comparison to be made between the value of different goods and services **(1 mark)**
 - A. Unit of account
 - B. Medium of exchange
 - C. Store of value
 - D. Standard of deferred payment
 - E. Double-coincidence of wants
4. Which *two* of the following are defined as sources of government revenue from indirect taxes? **(1 mark)**
 - A. Petroleum revenue tax
 - B. VAT
 - C. Inheritance tax
 - D. Capital gains tax
 - E. Fuel duties
5. The suggestion that holdings of money depend in part on the value of expenditures undertaken by households in any given time period is called: **(1 mark)**
 - A. precautionary demand for money
 - B. quantity theory of money
 - C. transactions demand for money
 - D. money supply multiplier
 - E. open market operations
6. Which *one* of the following is NOT a function of money? **(1 mark)**
 - A. Unit of account
 - B. Medium of exchange

- C. Store of value
 - D. Means of barter
 - E. Standard of deferred payment
7. A customer deposits \$500 in a bank. According to the 'credit multiplier' theory, if all banks have a reserve ratio of 20% then the amount of new deposits eventually created is: (1 mark)
- A. \$250
 - B. \$1,600
 - C. \$2,500
 - D. \$1,500
 - E. \$400
8. Fill in the blanks to make the following statements correct.
- A. If we measure GDP from the expenditure side, we are adding four broad categories of expenditure: _____, _____, _____, and _____. As an equation it is written as $GDP = \text{_____}$. (5 marks)
 - B. If we measure GDP from the income side, we are adding three main components of factor incomes: _____, _____ and _____. To these items we must add non-factor payments of and _____. (4 marks)
 - C. Money serves three functions: _____, _____, and _____. (3 marks)
 - D. The equation for a simple consumption function is written as $C = a + bY$. The letter a represents the _____ part of consumption. The letters bY represent the _____ part of consumption. When graphing a consumption function, the vertical intercept is given by the letter _____, and the slope of the function is given by the letter _____. (4 marks)
 - E. An example of an aggregate expenditure function is $AE = \$47 \text{ billion} + 0.92Y$. Autonomous expenditure is _____ and the marginal propensity to spend out of national income is _____. (2 marks)
9. In this question you have a description of a particular type of transaction in the circular flow of income. Try to match the *lettered* description with the correct *numbered* term (6 marks)

DESCRIPTIONS

- A. The publisher College Press Zimbabwe sells 50,000 books to South Africa.
- B. A successful advertising campaign by Quest Motors results in greater car sales in its domestic (Zimbabwe) market.
- C. A rise in the US\$: Rand exchange rate causes Quest Zimbabwe to switch from Zimbabwe based component suppliers to those located in the South Africa.
- D. The main Varichem Pharmaceuticals production plant in the Zimbabwe purchases new machinery from another Zimbabwean firm to produce its pharmaceuticals.
- E. A rise in Zimbabwean interest rates raises the amount of money placed by domestic residents in various types of interest-bearing deposit accounts.

- F. A government contract to build a major road is withdrawn because of environmental protests.

TERMS

- i. Consumption expenditure (C)
- ii. Investment expenditure (I)
- iii. Government expenditure (G)
- iv. Exports (X)
- v. Savings (S)

10. The economy of Malawi is characterized by the following equations:

$$C = 50 + 0.7YD, T = (0.2) Y, I = 75, X = 50$$

$G = 100, IM = (0.15) Y$ where C = Consumption, Y = national income, X = Exports, I = Investment, IM = Imports, T = Taxes, Yd. = Disposable income

- i. Compute the AE function and plot it in a diagram (4 marks)
- ii. What is total autonomous expenditure? (1 mark)
- iii. What is the slope of the AE function? (1 mark)
- iv. Compute the equilibrium level of national income (3 marks)
- v. Suppose X rises from 50 to 100. How does this affect the level of national income? (2 marks)
- vi. What is the simple multiplier in this model? (1 mark)

SECTION B

Question 1

- a. What are the basic determinants of investment? Explain the relationship between the real interest rate and the level of investment. Why is investment spending unstable? How is it possible for investment spending to increase even in a period in which the real interest rate rises? (8 marks)
- b. Firm A, a sheep ranch, sells \$120 worth of wool to firm B, a wool processor. Firm A pays out the \$120 in wages, rent, interest, and profit. Firm B processes the wool and sells it to firm C, a suit manufacturer, for \$180. Firm C, the manufacturer, sells the suit to firm D, a wholesaler for \$220, which sells it to firm E, a retailer for \$270. Then at last a consumer, the final user, comes in and buys the suit for \$350. Calculate the value added at each stage of the manufacturing process. How much of these amounts should we include in GDP to account for the production of the suit? (5 marks)
- c. Consumption is the most important single element in aggregate expenditure in the Zimbabwe, accounting for around half its total value. Discuss the main determinants of consumption in any economy explain how the consumption function behaves as each of these determinants increases or decreases (7 marks)

Question 2

- a. Briefly explain why people demand to hold cash. What are the main determinants of money demand? **(5 marks)**
- b. Suppose the money supply is currently \$500bn and the Central bank wishes to increase it by \$100bn. Given a required reserve of 0.25, what should it do? If it decided to change money supply by changing the required reserve ratio, what change should it make? **(3 marks)**
- c. Suppose that the linear equation for consumption in Malawi is $C = 40 + 0.8Y$ and that income (Y) is \$400 billion. Determine the (i) marginal propensity to consume (MPC) (ii) marginal propensity to save (MPS) (iii) level of consumption and savings, (iv) average propensity to consume (APC) and (v) the average propensity to save **(5 marks)**
- d. Given the following information (in millions of dollars) for Angola, calculate: gross national product (GDP), gross national product (GNP), net national product (NNP), national income (NI), personal income and disposable income **(7 marks)**
- | | |
|--|-----------|
| Payment of factor payments to the rest of the world | \$167.10 |
| Excess of exports over imports | \$1525.00 |
| Factor Payments to the rest of the World | \$178.60 |
| Depreciation | \$715.30 |
| Personal consumption | \$1300.00 |
| Indirect Taxes minus Subsidies | \$553.10 |
| Corporate Profits minus Dividends | \$348.40 |
| Firms expenditure on investment | \$1738.40 |
| Social Insurance Payments | \$626.00 |
| Personal interest income from government and consumers | \$254.30 |
| Transfer payments to persons | 963.40 |
| Personal Taxes | 742.10 |
| Government purchases of goods and services | \$2175.00 |

Question 3

- a. Suppose an economy is characterized by the following structural form: $C = 20 + 0.8Y_d$, $T = 10$, $I = 20$, $G = 10$. What is the equilibrium income? If G were increased by \$10 and T were increased by \$5, what would be the change in equilibrium income. If $T = 10 + 0.15Y$, what would equilibrium income be? What is the multiplier in this case? **(4 marks)**
- b. The table below shows data for real and nominal GDP for a hypothetical economy over several years.

Year	Nominal GDP (billions of \$)	Real GDP (billions of 2008 \$)	GDP Deflator
2006	775.3	798.4	—
2007	814.1	838.6	—
2008	862.9	862.9	—
2009	901.5	882.5	—
2010	951.3	920.6	—
2011	998.8	950.5	—

- i. Compute the GDP deflator for each year **(6 marks)**
- ii. Compute the total percentage change in nominal GDP from 2006 to 2011 **(5 marks)**
- iii. How much of this change was due to increases in prices and how much was due to changes in quantities? **(5 marks)**

SECTION C

Question 4

Why are national income measures inadequate when comparing the standard of living between developed and developing countries? Discuss **(20 marks)**

Question 5

The banks' ability to create money is controlled by the volume of reserves in the system, which is in turn controlled by the Central Bank. The Central bank has ultimate control over money supply. What are the main quantitative and qualitative instruments used to control money supply? Besides controlling money, discuss the other main functions of a country's central bank **(20 marks)**

END OF PAPER
