



“Investing in Africa’s future”

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE)

NMEC102: ECONOMIC PRINCIPLES 11

END OF SECOND SEMESTER FINAL EXAMINATION

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 1-6 write the correct option against each question for example (Q1. C)

1. Which of the following is a widely used measure of the standard of living? **(1 mark)**
 - a. Nominal output (income) per employed person
 - b. Nominal output (income) per head of population
 - c. Real output (income) per head of population
 - d. Real output (income) per employed person
 - e. Real output (income) per unit of capital
2. The marginal propensity to consume **(1 mark)**
 - A. equals 1
 - B. is between 0 and 1
 - C. is negative
 - D. exceeds 1
 - E. can be any one of the above depending upon circumstances.
3. Of the following items, which *one* would be considered an investment in the UK national income accounts? **(1 mark)**
 - A. The purchase of a new lorry by a road haulier.
 - B. The purchase of 100 shares of UK stock on the London Stock Exchange.
 - C. The purchase of a 100-year old house that was just put on the protected historic sites list in the year in question.
 - D. The purchase of a British government bond.
 - E. All of the above.
4. Which *one* of the following most accurately represents the function where money is generally acceptable in ways that help us avoid a barter economy? **(1 mark)**
 - a. Unit of account
 - b. Medium of exchange
 - c. Store of value
 - d. Standard of deferred payment
 - e. Double-coincidence of wants
5. Other things equal, which one of the following will lead to an increase in aggregate demand? **(1 mark)**
 - A. An increase in taxes
 - B. An increase in imports
 - C. A decrease in the rate of government spending
 - D. A decrease in the interest rate
 - E. A decrease in the money supply
6. The suggestion that holdings of money depends on providing for possible unexpected events 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

7. **Fill in the blanks to make the following statements correct.**

- a. 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)**
- b. 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 _____. In the simple model in this chapter, the marginal propensity to spend is the same as the marginal propensity to consume because _____. **(3 marks)**
- c. Paper money and coins that are not convertible into anything with intrinsic value, but are declared by the government to be legal tender, are known as _____. **(1 mark)**

8. **Fill in the blanks to make the following statements correct.**

- a. If actual national income is \$200 billion and desired aggregate expenditure is \$180 billion, inventories may begin to _____, firms will _____ the level of output, and national income will _____. **(3 marks)**
 - b. If actual national income is \$200 billion and desired aggregate expenditure is \$214 billion, inventories may begin to _____, firms will _____ the level of output, and national income will _____. **(3 marks)**
 - c. If households experience an increase in wealth that leads to an increase in desired consumption, the AE curve will shift _____. Equilibrium national income will _____ to the level indicated by the intersection of the AE curve with the _____ line. **(3 marks)**
 - d. When autonomous desired expenditure increases by \$10 billion, national income will increase by _____ than \$10 billion. The magnitude of the change in national income is measured by the _____. **(2 marks)**
 - e. The larger is the marginal propensity to spend, the _____ is the multiplier. Where z is the marginal propensity to spend, the multiplier is equal to _____. **(2 marks)**
9. In this question you will see a description of a particular type of measurement used for national output/income and a list of terms. Try to match the *lettered* description with its correct *numbered* term. **(6 marks)**

DESCRIPTIONS

- a. GNP minus the depreciation of physical assets.
- b. Pensions paid by the government to residents of that country.
- c. The gross income received by residents minus the direct taxes they pay.

- d. The value of incomes received by residents of a country from their ownership of resources, wherever these are located (but excluding direct taxes and subsidies).
- e. Inward payments received by residents from their ownership of overseas property minus outward payments made by residents from their ownership of domestic property.
- f. The value of incomes received by residents located within a country (including indirect taxes and subsidies).

TERMS

- i. Disposable income
- ii. Net property income from Abroad
- iii. GDP at market prices
- iv. GDP at factor cost
- v. GNP at market prices
- vi. GNP at factor cost
- vii. Net national product (NNP)
- viii. Transfer payment

10. Discuss the reasons for government intervention in the economy (7 marks)

SECTION B:

Question 1

- a. With the aid of a Keynesian frame diagrams explain how changes in the following affect the position the consumption function.
 - i. Household wealth (2)
 - ii. Inflation expectations (2)
 - iii. Interest rates (2)
- b. With the aid of a circular flow diagram indicate the flow of goods and services and expenditures within a 4 sector economy. Clearly indicate the major players in the economy, expenditure components, injections and withdrawals (6)
- c. GDP can be calculated in three different ways, which should all result in the same figure. Outline each of the 3 methods of measuring GDP explaining the components of each method (4)
- d. In producing a packet of crisps costing 50c to the consumer Cairns Foods P/L will need to purchase potatoes from a farmer for 25c. The manufacturer sells the packet of crisps to the wholesaler for 35c. The wholesaler the sell the crisps to the retailer for 40c after adding further value adding. Calculate the value added at each stage of production. How much will be included for calculating the GDP of this economy? (4)

Question 2

- a. From 2008 most Zimbabweans started refusing to accept Zimdollars for payments and in February 2009, the Government yield to this rejection by introducing the multicurrency system (dollarization). Why is universal acceptability such an important characteristic of money? What other characteristics of money do you think were important to Zimbabweans were no longer met by the Zimdollar. What are the main functions of money? (6)
- b. Briefly explain the main quantitative tools used by the Central bank to control the money supply. Besides controlling money supply what the other important roles played by the Central Bank. Explain each of these roles (6)
- c. Define money multiplier, required and excess reserves. Suppose that a bank's customer deposits \$4000 in her current account at MBCA. The required reserve ratio is 0.25. What are the required reserves on this deposit? What is the largest loan that the bank can make on the basis of the new deposit? If the bank chooses to hold reserves of \$3000 on this new deposit, what are the excess reserves on the new deposit? (4)
- d. If the consumption schedule of an economy is $C = 30 + 0.5Y$, and assume that investment and net exports are autonomous, i.e. planned investment and exports are independent of the level of income, $I = I_0 = 50$ and $X = X_0 = 0$. What is the equilibrium level of income? What is the multiplier for this economy? (4)

Question 3

- a. Consider the following table showing aggregate consumption expenditures and disposable income. All values are expressed in billions of constant dollars.

Disposable Income (Y_D)	Desired Consumption (C)	$APC = C/Y_D$	$MPC = \Delta C / \Delta Y_D$
0	150	—	—
100	225	—	—
200	300	—	—
300	375	—	—
400	450	—	—
500	525	—	—
600	600	—	—
700	675	—	—
800	750	—	—

- i. Compute the average propensity to consume for each level of income and fill in the table (5 marks)
- ii. Compute the marginal propensity to consume for each successive change in income and fill in the table (5)
- iii. Plot the consumption function on a scale diagram. What is its slope? (3)
- iv. Based on the above table, compute desired saving at each level of disposable income. Plot the saving function on a scale diagram. What is its slope?

- v. Show that the average propensity to save plus the average propensity to consume must equal 1. (2)
- b. Briefly explain the following concepts (i) moral suasion (ii) discretionary fiscal policy (iii) open market operations (iv) induced consumption (v) autonomous expenditure (5)

SECTION C

Question 6

In a speech that Senator Robert Kennedy gave when he was running for president in 1968, he said the following about GDP: [It] does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our courage, nor our wisdom, nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile, and it can tell us everything about America except why we are proud that we are Americans. Was Robert Kennedy right? If so, why do we care about GDP? In this light, discuss the major challenges of using GDP for comparing national living standards over time and comparing living standards of different nations (20)

Question 7

Below is a list of domestic output and national income figures for a certain year. All figures are in billions. The questions that follow ask you to determine the major national income measures by both the expenditures and the income approaches. The results you obtain with the different methods should be the same.

Personal consumption expenditures	\$245
Net foreign factor income	4
Transfer payments	12
Rents	14
Statistical discrepancy	8
Consumption of fixed capital (depreciation)	27
Social Security contributions	20
Interest	13
Proprietors' income	33
Net exports	11
Dividends	16
Compensation of employees	223
Taxes on production and imports	18
Undistributed corporate profits	21
Personal taxes	26
Corporate income taxes	19
Corporate profits	56
Government purchases	72
Net private domestic investment	33
Personal saving	20

- a. Using the above data, determine GDP by both the expenditures and the income approaches. Then determine national domestic product (NDP). (7)
 - b. Now determine NI in two ways: first, by making the required additions or subtractions from NDP; and second, by adding up the types of income and taxes that make up NI (2)
 - c. Adjust NI (from part *b*) as required to obtain PI. (1)
 - d. Adjust PI (from part *c*) as required to obtain DI. (1)
- c. Consider the following data for a hypothetical economy that produces two goods, milk and honey.

	Quantity Produced		Prices	
	Milk (Litres)	Honey (kgs)	Milk (\$/Litre)	Honey (\$/kg)
Year 1	100	40	2	6
Year 2	120	25	3	6

- a. Compute nominal GDP for each year in this economy (3)
- b. Using year 1 as the base year, compute real GDP for each year. What is the percentage change in real GDP from year 1 to year 2? (2)
- c. Using year 1 as the base year, compute the price deflator for each year. What is the percentage change in real GDP from year 1 to year 2? (2)
- d. Explain why the measures of real GDP growth (and growth in the deflator) depend on the choice of base year (2)

END OF PAPER
