



# UNIVERSITY OF GHANA

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## COLLEGE OF HUMANITIES

### B. A. SECOND SEMESTER EXAMINATIONS: 2021/2022

### ECON102: INTRODUCTION TO ECONOMICS I1

**TIME ALLOWED: TWO (2) HOURS**

**INSTRUCTIONS: ANSWER ALL QUESTIONS.**

#### **QUESTION 1 (25 Marks)**

A. The table below shows production and prices for Socatoa Republic. Assume the base year is 1997.

Year	Quantities of Gold	Price per unit of Gold GH¢	Quantities of Timber	Price per unit of Timber GH¢	Quantities of Bauxite	Price per unit of Bauxite GH¢
1996	50	2.5	125	5	75	10
1997	75	7.5	100	4	85	15
1998	100	5	50	2	100	20

- Calculate the GDP Deflator and Inflation Rates for 1996, 1997 and 1998. **[6 Marks]**
- Assume that the market basket for the typical consumer is given by the quantities in 1996. Calculate the CPI for 1996, 1997 and 1998. **[4 marks]**
- Using the CPI, compute the inflation rate between 1996 and 1997? Between 1997 and 1998? **[3 marks]**
- What do you think account for the different inflation rates using the CPI and the GDP deflator? **[2 marks]**

B. The following is the labour market profile of Socatoa Republic for the year 2018.

Working population	300,000
Housewives	1500
Retirees	2500
Full time students	38000
Permanently disabled	12000
Lecturers	5000
Lab. Technicians	10000
Drivers	2000

Based on the above data, compute the following:

- i. The total number of people outside the labour force [2 marks]
- ii. The total number of people in the labour force [2 marks]
- iii. The labour force participation rate [2 marks]
- iv. The unemployment rate [2 marks]
- v. The employment to labour force participation rate [2 marks]

**QUESTION 2: (25 marks)**

A.

- i. Complete the following table. (3 marks)

	Country A	Country B	Country C
<b>Gross Domestic Product</b>	<b>4532</b>	<b>4804</b>	
Consumption		3320	3544
Investment	589	629	673
Government Purchases	861		977
Net Exports	-45	-58	-54

- ii. What is the largest expenditure component of GDP? (1 mark)
- iii. Does investment include the purchase of company shares and bonds? Why? (3 marks)
- iv. Do government purchases include government spending on unemployment benefit? Why? (3 marks)
- v. What does it mean to say that net exports are negative? (1 mark)

B. Suppose the base year in the following table is 2019.

Year	Gold Production (tons)	Price per ton of Gold (\$)
2019	20	5
2020	20	10
2021	20	20

- i. What is nominal GDP for 2019, 2020, and 2021? (3 marks)
- ii. What is real GDP for 2019, 2020, and 2021? (3 marks)

C.

- i. Complete the following table.

Year	Nominal GDP (Gh¢)	Real GDP (Gh¢)	GDP Deflator
2019		100	100
2020	120		120
2021	150	125	

- ii. What year is the base year? How can you tell? (2 marks)
- iii. From 2019 to 2020, did real output rise or did prices rise? Explain? (3 marks)
- iv. From year 2020 to 2021, did real output rise or did prices rise? Explain? (3 marks)

**QUESTION 3: (25 marks)**

**A.** Given the following information about the Ghanaian economy for the year 2010:

Gross domestic product at market prices ( $GDP_{MP}$ ) = GHC 36,000,000

Consumption of fixed capital = GHC 12,800,000

Subsidies ( $S$ ) = GHC 250,000

Indirect taxes ( $IT$ ) = GHC 10,000,000.

Calculate net domestic product ( $NDP$ ) at factor cost. (5 marks)

**B.** Suppose in the following year the Ghanaian economy recorded the following:

Net national product at market prices ( $NNP_{MP}$ ) = GHC 44,386,000

Net factor income from abroad ( $NFIA$ ) = GHC 63,339

Consumption of fixed capital = GHC 8,000,000

Indirect taxes ( $IT$ ) = GHC 5,600,500

Subsidies ( $S$ ) = GHC 1,500,000

Calculate the gross domestic product ( $GDP$ ) at factor cost. (5 marks)

**C.** A country called *Zigma* produces five goods: maize, cement, computers, cars, and cloth. The production of the five commodities in 2011 was 25000 units, 12000 units, 8000 units, 500 units, and 20000 units respectively. The per unit price of the five commodities are ₵120, ₵250, ₵850, ₵50,000 and ₵320 respectively. Calculate the gross domestic product ( $GDP$ ) at market prices for this economy in 2011. (*Note* ₵ denotes the country's currency). (5 marks)

**D.** Briefly explain four (4) reasons why GDP is **not** a perfect measure of well-being. (10 marks)

**QUESTION 4 (25 marks)**

**A.** For each of the following changes, represent the change by an appropriate shift of the supply and/or demand curves for the Ghana cedis against the Japanese yen. Then record whether the Ghana cedis appreciates or depreciates because of the change, by explaining the mechanism to it.

i. A new model of Toyota, made in America, is successful in sales to Ghana. (3 marks).

ii. Japan reduces its interest rate compared to that of Ghana., causing investors to sell Japanese bonds and buy Ghana bonds. (3 marks)

iii. The year of return resulted in the influx of Japanese into Ghana (3 marks)

- B.** Define and explain the difference between the following pairs of terms:
- i.** Real exchange rate and Nominal exchange rate (3 marks)
  - ii.** Balance of Trade and Balance of Payment (3 marks)
  - iii.** Fiat money and paper money (3 marks)
  - iv.** Real interest rate and nominal interest rate (3 marks)
- C.** Briefly explain four (4) functions of money. (4marks)