

Semester “Spring 2011”

“Macroeconomics (ECO403)”

Assignment No.01

Marks: 15

Question 01:

Consider a hypothetical economy that produces and consumes wheat, burger, clothes and drinks. Following table shows the data for two different years.

Commodities	2006		2007	
	Price (Rs)	Quantity	Price (Rs)	Quantity
Wheat	3	100	8	120
Burger	20	50	36	70
Cloth	7	5	9	15
Drinks	25	10	30	12

With the help of above data, compute:

a) Nominal GDP for 2006 and 2007.

b) Real GDP for 2006 and 2007.

(Note: Use 2006 as base year where required.)

Marks: (3+3+3+3)

Question 02:

Use the following information for a hypothetical economy and answer the questions given at the end of table.

	2006	2007
Population	221.7 million	227.7 million
Adult population	167.2 million	170.2 million
Number of Unemployed	7.0 million	8.0 million
Number of employed	107.0 million	105.0 million

a) Calculate labor force of year 2006 and 2007.

b) Calculate unemployment rate of 2006 and 2007

Marks: (0.5+0.5+1+1)

Solution:

Question- 01

Part a:

Nominal GDP for year 2006= multiply Ps & Qs from same year

$$\begin{aligned} &= 3 \cdot 100 + 20 \cdot 50 + 7 \cdot 5 + 25 \cdot 10 \\ &= 300 + 1000 + 35 + 250 = 1585 \end{aligned}$$

Nominal GDP for year 2007= $8 \cdot 120 + 36 \cdot 70 + 9 \cdot 15 + 30 \cdot 12$

$$= 960 + 2520 + 135 + 360 = 3975$$

Part b:

Real GDP for year 2006= multiply Ps & Qs from same year

$$\begin{aligned} &= 3 \cdot 100 + 20 \cdot 50 + 7 \cdot 5 + 25 \cdot 10 \\ &= 300 + 1000 + 35 + 250 = 1585 \end{aligned}$$

Real GDP for year 2007= $3 \cdot 120 + 20 \cdot 70 + 7 \cdot 15 + 25 \cdot 12$

$$= 360 + 1400 + 105 + 300 = 2165$$

Question- 02

Part a:

a. Labor force = Number of employed + number of unemployed

$$2006 = 107.0 + 7.0 = 114.0$$

$$2007 = 105.0 + 8.0 = 113.0$$

Part b:

b. Unemployment rate = Number of unemployed / Labor force x 100%

$$2006 = 7.0 / 114.0 \cdot 100 = 6.14\%$$

$$2007 = 8.0 / 113.0 \cdot 100 = 7.07\%$$