Student ID:...b3044417338.....

Question 1 Fill in the blanks. You must show your work.

Year	2014	2015
Nominal gross national income (GNI) ($ billion)	291.53	
Factor income sent abroad ($ billion)	68.30	75.90
Factor income earned abroad ($ billion)	8.13	9.49
Nominal gross domestic product (GDP) ($ billion)	283.4	358.97
GDP deflator	100	100.88
Real GDP ($ billion)		

GDP_{2014}: GNP- Factor income earned aborad

GDP_{2014}: 291.53 - 8.13 = 283.4

Question 2 Fill in the blanks. You must show your work.

Year	2012	2013	2014	2015
Consumer price index (CPI)	99.08	100.55	102.51	107.52
Inflation rate (%)	–0.92	1.48	1.94	4.89
Employed (millions)	12.50	12.60	12.85	13.05
Unemployed (millions)	0.99	0.71	0.68	0.61
Population (millions)	20.75	21.48	21.82	22.02
Unemployment rate (%)	7.34	5.33	5.03	4.47

inflation rate = π

$\pi_{2014} = \frac{CPI_{2014} - CPI_{2013}}{CPI_{2013}} \times 100 = 1.94\%$

$\pi_{2015} = \frac{CPI_{2015} - CPI_{2014}}{CPI_{2014}} \times 100 = 4.89\%$

Unemployment rate = $\frac{\text{Unemployed}}{\text{employed + unemployed}} \times 100\%$

Unemployment rate 2013: $\frac{0.99}{12.50 + 0.99} \times 100 = 7.34\%$

Unemployment rate 2013: $\frac{0.71}{12.6 + 0.71} \times 100 = 5.33$

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Question 3 Calculate GDP and GNP. You must show your work.

Item	$ billion
Imports	289
Transfer payments	253
Saving	82
Exports	234
Income from employment	1160
Taxation	396
Consumer spending	745
Investment	229
Net factor income from abroad	–111
Government spending on goods and services	437

GDP: C+I+G+(X-M)

: 745+229+437+(234-289)

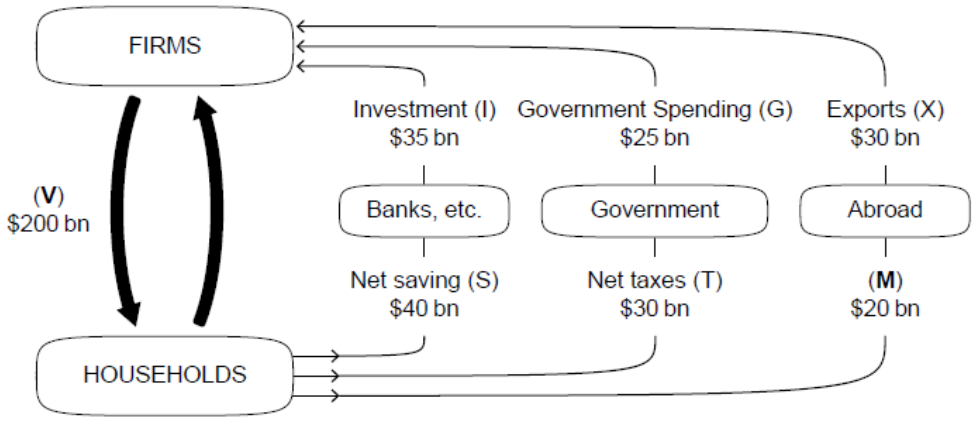
GDP = 1356

GNP: GDP - NFFI

= 1356 - (-111)

GNP = 1467

Question 4 Answer the following questions.



4.1 What do the flows (V) and (M) represent?

(V): income (M): import

4.2 Does the government run a budget deficit or surplus? By how much?

Surplus by 5 bn

4.3 Does the country run a trade deficit or surplus? By how much?

Surplus by 10 bn

4.4 Is the economy in equilibrium? Why or why not?

equilibrium because both leakage and injection are equal

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Question 5 Why does CPI tend to be higher than GDP deflator?

Year	Consumer price index (CPI)	GDP deflator	GDP ($ million)
2014	100	100	4465
2015	105.35	105.11	4814
2016	109.21	108.92	5026

CPI tends to be higher because CPI use a fixed basket, but GDP deflator are changing in cost of goods

Question 6 Answer the following questions.

	Price per unit in dollars ($)	
	2013	2014
Pizza	12.50	12.90
Chocolate milk (litres)	1.15	1.25
Jazz concert	45.00	46.00
Total cost of the typical basket		

CPI:

The typical basket of goods purchased by an average consumer consists of 10 pizzas, 100 litres of chocolate milk and 10 jazz concerts.

6.1 With 2013 as the base year, calculate CPI of 2013 and 2014.

$CPI = \frac{P \cdot Q_{fixed}}{P_{base} \cdot Q_{fixed}}$

$CPI_{2013} = \frac{P_{2013} \times Q_{fixed}}{P_{base} \times Q_{fixed}} \times 100$

$CPI_{2013} = \frac{100}{100}$

$CPI_{2014} = \frac{\Sigma P_{2014} \cdot Q_{fixed}}{\Sigma P_{base} \cdot Q_{fixed}}$

$\Sigma P_{2014} \cdot Q = (12.9 \cdot 10) + (1.25 \cdot 100) + (46 \cdot 10) = 714$

p2013*Q= (12.5*10)+(1.15*100)+(45*10)=690

$\frac{P_{2014} \cdot Q}{P_{base} \cdot Q} \times 100 = \frac{714}{690} \times 100 = 103.48$

6.2 Calculate the inflation rate of 2014.

inflation rate: $\frac{103.48 - 100}{100} = 0.0348$

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Question 7 Fill in the blanks. You must show your work.

Year	Nominal GDP ($ billions)	GDP deflator	Real GDP ($ billions)	Annual real growth rate (%)	Population	Real GDP per capita ($)
2014	308.12	98.9	311.55		13273644	2.347
2015	321.99	100	321.99	3.35	13340012	2.413
2016	332.65	102.2	325.49	0.11	13473412	2.415

311.55000

3,115,5000

311.55x10^5

GDP deflator: $\frac{NGDP}{RGDP} \times 100$

Year 2014 98.9: $\frac{308.12}{RGDP} \times 100$

RGDP: 311.55

Year 2015 100: $\frac{321.99}{RGDP} \times 100$

RGDP: 321.99

Year 2016: 102.2: $\frac{332.65}{RGDP} \times 100$

RGDP: 325.49

Annual real growth rate: $\frac{New - Old}{old} \times 100$

year 2014 $\frac{321.99 - 311.55}{311.55} \times 100 = 3.35$

Year 2016 $\frac{325.49 - 321.99}{321.99} \times 100 = 0.11$

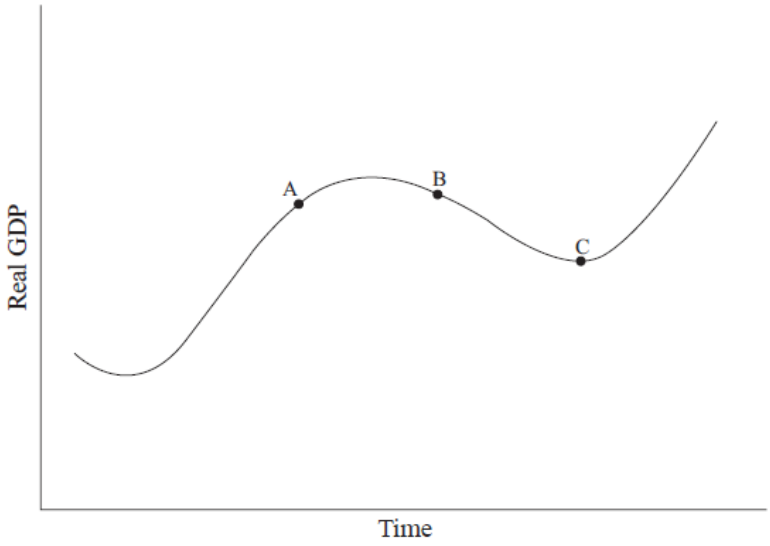
$\frac{RGDP}{per\ capita}$ =

2014: $\frac{311.55 \times 10^5}{13273644} = 0.023$

2015: $\frac{321.99 \times 10^5}{13340012}$ =

2016: $\frac{325.49 \times 10^5}{13473412}$

Question 8 Based on the data above, which position – A, B, or C – best describes the economy in 2016? Why?



A - expansion turn

B - recession

C - trough

In 2016 is stabilize because when point B that got recession it don't fall a lot and when the economy are trough is not get for long

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Question 9 Answer the following questions.

Country A is a closed economy with no government. The marginal propensity to save in the country is 0.25.

9.1 Calculate the value of the (investment) multiplier.

MPC = 0.75

$\frac{\Delta Y}{\Delta I} = \frac{1}{1-0.75} = \frac{1}{0.25} = 4$

9.2 Due to the initial investment made by firms and the multiplier effect, the (equilibrium) output in the economy has increased by $200m. Calculate the value of the initial investment.

$\frac{\Delta Y_1}{\Delta I_1} = \frac{\Delta Y_2}{\Delta I_2}$

$\frac{1}{0.25} = \frac{200M}{\Delta I}$ $\quad \Delta I = 200 \cdot 0.25 = 50M$

Country B is an open economy with government.

9.3 Do you think the multiplier effect in Country B will be larger than that of Country A? Why or why not?

Yes because in Country B will have government spending, export and import that means people have more incentive to spending and saving.