Tai Duc Nguyen - ECON 202 - 10/14/2019

Homework Assignment 1

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Multiple Choice Section

1. Around August 2009 the inflation rate in the US turned positive (2%). This means that in 2009

Answer:

(b) the average cost of living between 2008 and 2009 went up

2. When the economy is said to be at full employment it means that

Answer:

(c) cyclical unemployment is zero

3. Potential GDP is

Answer:

(c) equal to the amount of output that the economy could produce if all inputs were fully used

4. Among the followings, the best indicator of economic well-being in the economy is probably

Answer:

(d) an increase in real GDP per capita

5. Deflation

Answer:

(c) benefits debtors, but harms creditors

6. Nominal GDP growth in the US in 2011 was (about) 6.8%, while inflation was (about) 2.2%. The growth rate of real GDP was then

> Answer:
>
> (a) 4.6%

7. Among the followings, which one is a limitation of the CPI price index as a measure of the average cost of living in the economy?

> Answer:
>
> (b) the basket of goods on which CPI is based is not updated very frequently

8. Which of the following situations is likely to determine an increase in real GDP per capita in the US?

> Answer:
>
> (d) both a and b

9. Which of the followings is correct?

> Answer:
>
> (d) Both b. and c. are correct

10. Suppose the nominal interest rate is 2% and inflation is -1% (deflation). The real interest rate is

> Answer:
>
> (d) 3%

11. Total spending in the economy is equal to:

> Answer:
>
> (b) $C + I + G + X - IM$

12. Physical investments (I) are likely to increase when

> Answer:
>
> (b) loan rates decrease

13. Which of the followings will be most likely to shift the consumption function downward

> Answer:
>
> (b) a housing market crash

14. The nation's DI increases by $500 billion, and, as a result, consumption (C) increases by $100 billion. Therefore, the MPC equals

Answer:

(b) 0.2

15. The U.S. and Canada are major trading partners. If GDP growth in the U.S. was smaller than GDP growth in Canada we should expect NX to

Answer:

(c) decrease since exports will grow less than imports

16. Which of the followings is correct?

Answer:

(e) They are all correct except d.

17. Suppose a financial investor buys $1 million worth of equity (stock) shares issues by a US firm. Thelatter uses those $1 million to buy a new building to expand its capacity. Which of the followings is correct?

Answer:

(c) Investments I will increase by $1 million since the firm purchased a new building

18. Net exports tend to decrease if

Answer:

(d) foreign goods become relatively cheaper than domestic goods

Short Answer Section

1. Suppose that the representative basket of goods consumed in the economy in a year is made of: 150 lbs of bread, 80 bottles of water and 50 T-shirts. Prices (in USD) of each of these items,across di§erent years, are reported in the following table:

Year	1 lbs of bread	1 bottle of water	1 T-shirt
2008	$2	$1.2	$15
2009	$2.3	$1.2	$18

Year	1 lbs of bread	1 bottle of water	1 T-shirt
2010	$2.6	$1.35	$18
2011	$2.8	$1.8	$18
2012	$3	$1.8	$25

(a) Compute the value of the basket in each year.

| Answer:

Year	Value of Basket
2008	$1146
2009	$1341
2010	$1398
2011	$1464
2012	$1844

(b) Compute the CPI price index for each year, using 2008 as base year.

| Answer:

Year	CPI
2008	100 (base)
2009	117.2
2010	121.9
2011	127.8
2012	160.9

(c) Compute the CPI price index for each year, using 2010 as base year.

| Answer:

Year	CPI
2008	82.0
2009	95.9

Year	CPI
2010	100 (base)
2011	104.7
2012	131.9

(d) Compute the inflation rate of 2009, 2010, 2011 and 2012

> Answer:
>
> Taking 2010 as the base year:

Year	Inflation
2009	16.9%
2010	4.3%
2011	4.7%
2012	25.98%

20. Suppose that nominal GDP in 2011 is $15 million and in 2012 is $16 million, and that the CPI index is 125 in 2011 and 130 in 2012.

(a) Compute the growth rate of nominal GDP between 2011 and 2012.

> Answer:
>
> Growth rate of nominal GDP = $\frac{16-15}{15} * 100 = 6.67\%$

(b) Compute the value of the real GDP both in 2011 and 2012.

> Answer:
>
> Real GDP in 2011 = $\frac{15}{1.25} = \$12$ million
>
> Real GDP in 2012 = $\frac{16}{1.3} = \$13.85$ million

(c) Compute the growth rate of real GDP between 2011 and 2012. Is this result different from what you obtained at a.? Why? Explain.

> Answer:
>
> Real Growth Rate GDP = $\frac{13.85-12}{12} * 100 = 15.38\%$
>
> Real GDP in 2012 = $\frac{16}{1.3} = \$13.85$ million

This answer is different from (a) because real GDP tries to remove any effects due to inflation, or price level of one year in comparison with the previous year, while the nominal GDP does not.