

**Below I have listed some sample test questions for Macro items. For Micro items, see the old test I posted. Note: We are unlikely to get to the definitions of unemployment statistics before Exam #1. If so, disregard questions 1- 3 (and do them before the second test).**

You have the following information about the economy in 1972. The “population” in this example is 6.

**Doug Collins** is a student, and isn’t looking for a job. He is also a good free throw shooter.

**Hank Iba** is employed as the US Olympic basketball coach.

**Al Gore** has a job as a clock operator for the Olympic basketball tournament, and hates for games to end.

**George W. Bush** is working as a pilot. He also drinks a lot.

**Isaac Hayes** is working part-time as a musician and would like to get more work.

**George McGovern** has just lost his job, and is looking for a new one.

1. What is the size of the labor force in this economy?
  - a. 3
  - b. 4
  - c. 5
  - d. 6
  - e. none of the above
  
2. What is the unemployment rate in this economy?
  - a. 1/6
  - b. 2/6
  - c. 3/6
  - d. 1/5
  - e. 2/5
  
3. What is the labor force participation rate?
  - a. 3/6
  - b. 4/6
  - c. 5/6
  - d. 3/5
  - e. 4/5

Questions 4-7 refer to the following information that is required to calculate the Calista Flockhart price index. The government bureaucrats in charge have decreed the base year for this (GDP deflator type) index is 1996.

|            | 1996  |          | 1999  |          |
|------------|-------|----------|-------|----------|
|            | Price | Quantity | Price | Quantity |
| Tic-tacs   | \$3   | 2        | \$7   | 1        |
| Rice cakes | \$4   | 3        | \$4   | 4        |
| Diet Cokes | \$3   | 1        | \$2   | 5        |

4. What is (nominal) GDP in 1999?
  - a. \$21
  - b. \$33
  - c. \$10
  - d. \$60
  - e. none of the above
  
5. What is the price level in 1999 (using the GDP deflator)?
  - a.  $\$33 / \$33 = 1$
  - b.  $\$28 / \$21 = 1.25$
  - c.  $\$31 / \$21 = 1.48$
  - d.  $\$33 / \$34 = 0.97$
  - e. none of the above

## test1-samp

6. What is real GDP in 1996 (using the GDP deflator)?
- \$21
  - \$31
  - \$33
  - \$34
  - $\$31 / \$1.48 = \$20.95$
7. What is real GDP in 1999 (using the GDP deflator)?
- \$21
  - \$31
  - \$33
  - \$34
  - $\$31 / 1.48 = \$20.95$
8. How much has the price level changed between 1996 and 1999 (using the GDP deflator)? If have include some math you might have wanted to do to answer this question.
- there has been no change in the price level
  - 25% inflation  $(28 / 21) - 1 = 0.25$
  - 48% inflation  $(31 / 21) - 1 = 0.48$
  - 2.9% deflation  $(33 / 34) - 1 = -0.029$
  - none of the above

### Short Answer

9. You are told, initially, the current per-unit tax on labor is \$0.20 / hour. You are also told that the equilibrium quantity of labor (with this tax rate) is 100 hours of labor. Now, suppose that some politician gets his/her way and increases the per-unit tax rate on labor to \$0.40 / unit of labor. As a result, the equilibrium quantity of labor falls to 40 hours of labor. Call the initial situation A, the new situation B. On which side of the Laffer Curve is point B? Is it the “right” side, or the “wrong side”?
10. Which of the following transactions would increase GDP? You may assume all transactions are reported (except those of you drug dealer).
- You trade a bag of pot from your dealer in exchange for your DVD player
  - You buy a bag of pot from your dealer
  - You buy a bag of pot from your pharmacist (for legitimate legal medicinal purposes)
  - You buy a used pair of used bellbottoms from a clothing store
  - You buy a new pair of bellbottoms from a clothing store
  - The guy in the Holiday Inn commercials gets breakfast cooked by his mom
  - The guy in the Holiday Inn commercials pays for breakfast cooked by his mom
  - BMW builds a car in Greenville
  - BMW builds a new car in Germany
11. Suppose a tomato farmer claws tomatoes out of the ground and sells them to a grocery store for \$5. At the same time, a pig farmer finds a pig, raises it, and sells a bunch of bacon to the grocery store for \$10. Finally, the sandwich store owner buys all the tomatoes and bacon from the grocery store and makes BLT sandwiches for \$50. What is GDP?
12. Suppose the first two transactions occur in 2001 and the last transaction occurs in 2002. What is GDP in each year?
13. As you no know, there his been a large change in the labor force participation rates of women over the last 40 years. In 1960, there were many housewives. In 2000, there are fewer housewives. One of the implications of this change is that in 1960 a good deal of economic activity (meals, cleaning, etc) was being produced within the home, where as in 2000, more of this activity is being purchased (through markets). Also, the economy has grown from 1960 to 200. Does the calculated version of GDP we see overstate or understate economic growth. Why?

test1-samp

14. Suppose that GDP deflator in 1999 (using 1992 as a base year) was 118.2. Suppose that the GDP deflator in 2000 (also using 1992 as a base year) was 125.4. What was inflation between 1999 and 2000?
15. Suppose the price level in 1955 was 55.4 and the price level in 2002 is 127.4 (and both price levels are calculated using the same base year). The average wage in 1955 was \$17,000, while the average wage in 2002 is \$35,000. In which year did workers receive a higher real wage?
- 16. Explain why society's PPC is curved. What does this have to do with the factors of production? As we produce more of a good, what happens to the opportunity cost of producing it? Give a verbal example.**
17. What would society's PPC look like if it was made up with 1000 different people that each had the same productive abilities (each had the same opportunity costs)?
18. Fill in the following chart
- |   | <u>CPI</u> | <u>GDP Deflator</u> |                                      |
|---|------------|---------------------|--------------------------------------|
| If quality changes are ignored            | ??         | ??                  | (overstates / understates inflation) |
| If adjustments for new goods are not made | ??         | ??                  | (overstates / understates inflation) |
| Due to the substitution bias              | ??         | ??                  | (overstates / understates inflation) |
| Includes all good in GDP                  | ??         | ??                  | (yes / no)                           |
| Includes some imports and some used goods | ??         | ??                  | (yes / no)                           |
19. Consult the graph of a minimum wage on page 1 of lecture 6. Indicate the quantity of people who are newly unemployed as a result of imposing a binding minimum wage.

**Answers**

1 – 8 C D C B D A D D

9. Point B is on the wrong side of the Laffer Curve.
10. C, E, G, and H will increase GDP. The rest will not change GDP.
11. \$50
12. \$15, \$35
14.  $(125.4 - 118.2) / 118.2 = 7.2 / 118.2 = 0.061$  6.1% inflation

15. Convert 1955 wage into 2002 dollars

$\$17,000$  (on 1955 dollars) \* (Price index in 2002 / Price index in 1955) =  $\$17,000 * (127.4 / 55.4) = \$39,034$  (in 2002 dollars). Since this amount is bigger than \$35,000 (already in 2002 dollars), we can conclude real wages were higher in 1955.

Alternatively, we could convert the 2002 wage into 1955 dollars.

$\$35,000$  (in 2002 dollars) \* (Price index in 1955 / Price index in 2002) =  $\$35,000 * (55.4 / 127.4) = \$16,516$  (in 1955 dollars). Since this amount is less than \$17,000 (already in 1955 dollars), we can again conclude real wages were higher in 1955.

19.  $L_S - L_D$

The answers for questions 13, 16, 17, and 18 are intentionally omitted. You figure them out.