**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ AP Macro Unit 2 Study Guide**

**Part 1: GDP**

1. **Define GDP and explain what economic goal it is used to measure.**
2. **What is the formula for GDP? Explain the parts of the formula as well as the categories of goods that are not included in GDP.**
3. **Define nominal and real GDP.**
4. **Describe the three ways of measuring GDP (expenditures approach, income approach and value-added approach).**
5. **Define GDP per Capita and explain what it is used for.**
6. **Use the following table to answer the questions below:**

| **Year** | **Nominal GDP** | **Real GDP**  **(in 1960 dollars)** | **Population** | **GDP Deflator** | **Real GDP per capita** |
| --- | --- | --- | --- | --- | --- |
| 1960 | $1526.40 | $1,526.40 | 35 |  |  |
| 1970 | 2678.90 | 2236.87 | 40 |  |  |
| 1980 | 3659.80 | 3125.90 | 42 |  |  |

1. Calculate the GDP Deflator for each year and enter it in the table.
2. Which year is the base year? How do you know?
3. Calculate the Real GDP per capita for each year and enter it in the table.
4. In which year was the standard living the best for this country? How do you know?
5. What is the Real GDP Growth Rate from 1960 to 1980? Real GDP/capita growth rate? Did the country’s standard of living for the average person grow more or less than the country’s overall wealth? Why?
6. What is the Inflation Rate between 1960 to 1980? 1970 to 1980?
7. Give the components of the Expenditure and Income Approaches to calculating GDP.

| Expenditure Approach | Income Approach |
| --- | --- |
| a.  b.  c.  d. | a.  b.  c.  d. |

1. Explain the net exports component of GDP.
2. List three transactions counted as investment spending in GDP.

a.

b.

c.

1. List five DIFFERENT types of transactions that would be EXCLUDED from a calculation of GDP.

a.

b.

c.

d.

e.

1. The difference between nominal and real is:
2. Label each part as you answer it below. For each letter, indicate whether the purchase is “counted” or “not counted” in 2011 GDP. You MUST give a one sentence explanation for each. If “counted”, tell into which component of GDP it falls. If “not counted”, give the reason why it is not counted.
3. The value of a bag of flour purchased in 2011 by a father who wants to make a birthday cake for his child.
4. Commission earned by a real estate agent in 2011 for the sale of a house built in 1950.
5. Auto parts sold by AutoZone in 2011.
6. General Motors’ December 2010 inventory of cars sold in January 2011.
7. Using the table below, give the total GDP for this country: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Table 8.1A**

Consumption expenditures $1,500

Total government spending 590

Investment Spending 355

Imports 50

Exports 70

1. Give two problems associated with using GDP as a measure of economic progress.

**Part 2: CPI and GDP Deflator**

1. **Define inflation, deflation, disinflation and hyperinflation.**
2. **Define the GDP deflator and give the formula for calculating the deflator.**
3. **How do you use the GDP deflator to calculate inflation?**
4. **What are the five steps for calculating the CPI and inflation using the CPI?**
5. **What are similarities and differences between these two price indices?**
6. **Use the following information to answer the questions below--SHOW YOUR WORK:**

| **Year** | **Product** | **P** | **Q** | **Year** | **Product** | **P** | **Q** | **Year** | **Product** | **P** | **Q** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1990 | Soda | $.75 | 20 | 2000 | Soda | $.95 | 25 | 2010 | Soda | $1.15 | 35 |
|  | Fries | .80 | 10 |  | Fries | 1.00 | 12 |  | Fries | 1.20 | 15 |
|  | Big Mac | 2.75 | 15 |  | Big Mac | 3.00 | 20 |  | Big Mac | 3.30 | 23 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Total |  |  |  | Total |  |  |  | Total |

1. Assume the market basket for this country includes only Soda, Fries, and Big Macs. (Very Unhealthy!) Calculate the total value of the market basket for each year using the year 2000 as the base year.

1990 –

2000 –

2010 –

1. Still using the year 2000 as the base year, calculate the CPI for each of the three years shown in the table.

1990 –

2000 –

2010 –

1. Using 2000 as the base year, calculate the inflation rate between the years
   1. 1990 and 2000
   2. 2000 and 2010
   3. 1990 and 2010
2. Give two reasons why the CPI tends to overstate inflation by approximately 1%:
3. Assume now that the prices and quantities shown in the table are the only goods calculated in a country’s GDP and assume that 1990 is the base year. Calculate:
4. Nominal GDP for each year

1990 –

2000 –

2010 –

* 1. Real GDP for each year using 1990 as the base year.

1990 –

2000 –

2010 –

* 1. GDP Deflator for each year using 1990 as the base year.

1990 –

2000 –

2010 –

1. Using 1990 as the base year, calculate the inflation rate between the years
   1. 1990 and 2000
   2. 2000 and 2010
   3. 1990 and 2010
2. **Define unanticipated inflation. Tell who is most likely to be hurt by it and who is most likely to be helped.**
3. **Define Inflation. Describe the GDP Deflator and the Consumer Price Index. Discuss the main differences between the two as a measure of inflation.**
4. **If the 2005 CPI is 135 and the 2009 CPI is 168, what is the rate of inflation between 2005 and 2009? Which of these years is the base year?**

**Part 3: Unemployment**

1. Define unemployment (be sure to emphasize WHO is considered unemployed).
2. Define employed
3. Explain the concept of a discouraged worker.
4. Define the following types of unemployment, tell whether it is short run or long run, and give an example for each.
5. Frictional:
6. Structural:
7. Cyclical:
8. If the population is 5678, the number of employed people is 2345 and the number of unemployed people is 36, then the unemployment rate is \_\_\_\_\_\_\_\_\_\_\_\_\_ and the labor force participation rate is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5. Use the following data to answer the questions:

**The following is the 2003 data for males and females ages 16 and over in the imaginary country of Utopia.**

**1. Not in labor force**

**a. male: 10 million**

**b. female: 12 million**

**2. Unemployed**

**a. male: 7 million**

**b. female: 4 million**

**3. Employed**

**a. male: 100 million**

**b. female: 100 million\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

a) State each of the following for Utopia:

1. Total adult population
2. Total number in the adult labor force
3. Labor Force Participation Rate
4. Unemployment rate
   1. Give three categories of people who would not be in the Utopian labor force.
   2. Give two reasons why the unemployment rate may understate employment problems in Utopia.
   3. State how an economist in Utopia would define Full Employment or the Natural Rate of Unemployment.
   4. If the Utopian economy had structural unemployment equal to 3% and frictional unemployment equal to 2.5%, then what is the the Natural Rate of Unemployment? \_\_\_\_\_\_\_\_\_\_\_

| 1. Which of the following is correct?  a. Some degree of unemployment is inevitable.  b. Other things the same an increase in the number of people who are unemployed is associated with a decrease in  real GDP.  c. Cyclical unemployment is inversely related to short-run economic fluctuations in GDP.  d. All of the above are correct.  2. Assuming everyone in the question below is in the adult population, which of the following is *not* correct?  a. Elmo works part time as a baby sitter. The BLS counts him as employed and in the labor force.  b. Anna is a full-time student not looking for a job. The BLS counts her as unemployed and in the labor force.  c. Jim is on temporary layoff. The BLS counts him as unemployed and part of the labor force.  d. Liz is seeking work, but has not found it. The BLS counts her as unemployed and in the labor force. | 3. In 2004, based on concepts similar to those used to estimate U.S. employment figures, the Japanese adult noninstitutionalized  population was 109.684 million, the labor force was 65.760 million, and the number of people  employed was 62.630 million. According to these numbers, the Japanese labor-force participation rate and  unemployment rate were about  a. 60%, 2.9%  b. 60%, 4.8%  c. 57.1%, 2.9%  d. 57.1%, 4.8%  4. Suppose some country had an adult population of about 46.5 million, the labor-force participation rate was 63.5  percent, and the unemployment rate was 5.8 percent. What were the number of people employed and the number of  people unemployed?  a. about 29.5 million and 2.7 million.  b. about 29.5 million and 1.7 million.  c. about 27.8 million and 2.7 million.  d. about 27.8 million and 1.7 million.  5. Anna has just finished high school and started looking for her first job, but has not yet found one. As a result, the  unemployment rate  a. increases, and the labor-force participation rate is unaffected.  b. increases, and the labor-force participation rate increases.  c. is unaffected, and the labor-force participation rate increases.  d. increases, and the labor-force participation rate decreases. |
| --- | --- |