EC 102 **Name:** _____
Summer 2019
Due: 7/16/2019

Problem Set 2

Multiple Choice

1. (2 points) Suppose that in 2018 exports were \$500, GDP was \$6,400, government purchases were \$1,700, imports were \$400, and investment was \$1,800. What was consumption in 2018?
    A. \$2,000
    B. \$2,800
    C. \$3,000
    D. \$3,800

2. (2 points) Which of the following is not correct?
    A. The consumer price index gives economists a way of turning dollar figures into meaningful measures of purchasing power
    B. The consumer price index is used to monitor changes in the cost of living over time
    C. The consumer price index is used by economists to measure the inflation rate
    D. The consumer price index is used to measure the quantity of goods and services that the economy is producing

3. (2 points) A legal maximum on the price at which a good can be sold is called a price
    A. floor
    B. subsidy
    C. support
    D. ceiling

4. (2 points) If in some year real GDP was \$25 billion and the GDP deflator was 68, what was nominal GDP?
    A. \$17 billion
    B. \$2.72 billion
    C. \$36.8 billion
    D. \$43 billion

5. (2 points) Rent control laws dictate
   A. the exact rent that landlords must charge tenants
   B. a maximum rent that landlords may charge tenants
   C. a minimum rent that landlords may charge tenants
   D. both a minimum rent and a maximum rent that landlords may charge tenants.

6. (2 points) A price floor will be binding only if it is set
   A. equal to the equilibrium price
   B. above the equilibrium price
   C. below the equilibrium price
   D. either above or below the equilibrium price

7. (2 points) During a presidential campaign, the incumbent argues that he/she should be reelected because nominal GDP grew by 12 percent during his/her term in office. You know that population grew by 4 percent over this period and that the GDP deflator increased by 6 percent as well. You should conclude that GDP per person
   A. grew by more than 12 percent
   B. grew, but by less than 12 percent
   C. was unchanged
   D. decreased

8. (2 points) Which of the following is the correct formula for calculating the labor force participation rate?
   A. $\frac{\text{labor force}}{\text{population of working age}} \times 100$
   B. $\frac{\text{number of unemployed}}{\text{labor force}} \times 100$
   C. $\frac{\text{number of employed}}{\text{adult population}} \times 100$
   D. $\frac{\text{number not in labor force}}{\text{labor force}} \times 100$

9. (2 points) Which of the following is not an explanation for the existence of structural employment?
   A. Job search
   B. Efficiency wages
   C. Minimum-wage laws
   D. Unions

10. (2 points) Suppose that the adult population is 6 million, the number of employed is 3.8 million, and the labor-force participation rate is 70%. What is the unemployment rate?

    A. 6.7%

    B. 9.5%

    C. 28%

    D. 10.5%

Short Answer Questions

1. (5 points) **Unemployment**
   What is the natural rate of unemployment? Why are economists willing to accept an unemployment rate above zero?

2. (5 points) **Comparing Dollar Figures**
   In 1950, President Eisenhower was earning $\$100,000$ per year as President. At the time, CPI was 24. Suppose that in 2018, CPI was 251. What is the value of Eisenhower's salary in today's dollars? How does it compare to President Trump's current salary of $\$400,000$?

3. (5 points) **Calculating GDP**
Consider an economy that produces only three types of fruit: apples, oranges, and bananas. In the base year, the production and price data are as follows:

Table 1: Prices and Quantities

Fruit	Quantity	Price
Apples	3,000	$2
Bananas	6,000	$3
Oranges	8,000	$4

In the current year, the production and price data are as follows:

Table 2: Prices and Quantities

Fruit	Quantity	Price
Apples	4,000	$3
Bananas	14,000	$2
Oranges	32,000	$5

(a) Find nominal GDP in the current year and in the base year. What is the percentage increase since the base year?

(b) Find real GDP in the current year and in the base year. By what percentage does real GDP increase from the base year to the current year?

(c) Find the GDP deflator for the current year and the base year. By what percentage does the price level change from the base year to the current year.