

Test - 3

Name: _____

R#: _____

Roster#: _____

1. Suppose there are 70 million people in the labor force, out of which 60 million are employed, then the unemployment rate is:
 - A) 10%.
 - B) impossible to calculate.
 - C) 7%.
 - D) 14.28%.

2. Which one of the following is correct?
 - A) $\text{Unemployment Rate} = \frac{\text{Unemployed}}{\text{Labor Force}} \times 100$
 - B) $\text{Unemployment Rate} = \frac{\text{Unemployed}}{\text{Employed}} \times 100$
 - C) $\text{Unemployment Rate} = \frac{\text{Unemployed}}{\text{Population}} \times 100$
 - D) $\text{Unemployment Rate} = \frac{\text{Employed}}{\text{Labor Force}} \times 100$

3. Anna recently moved to Boston in order for her husband Joe to begin a new job as an economics professor at Harvard. Anna is an experienced surgeon who is currently interviewing with several different hospitals in Boston. Anna is currently:
 - A) structurally unemployed.
 - B) counted as employed since she is likely to receive a job offer soon.
 - C) frictionally unemployed.
 - D) cyclically unemployed.

Use the following to answer question 4:

Scenario: Employment Rate

In a group of ten people, there are three retirees, two part-time workers, two discouraged workers, one unemployed worker, and two full time workers.

4. (Scenario: Employment Rate) For this group, the unemployment rate is:
- A) 50%.
 - B) 10%.
 - C) 30%.
 - D) 20%.
5. If the CPI is 120 in Year 1 and 150 in Year 2, then the rate of inflation from Year 1 to Year 2 is _____.
- A) 25%
 - B) 50%
 - C) 20%
 - D) 10%
6. In the model of perfect competition:
- A) individual firms can influence the price, but only slightly.
 - B) no individual or firm has enough power to have any impact on price.
 - C) the price is determined by how many years are left in the product's patent.
 - D) the consumer is at the mercy of powerful firms that can set prices wherever they prefer.
7. Which of the following is true?
- A) Economic profit is always positive in the short run.
 - B) If price falls below average total cost, the firm will shut down in the short run.
 - C) Price and marginal revenue are the same in perfect competition.
 - D) Economic profit per unit is found by subtracting *AVC* from price.

Use the following to answer question 8:

Scenario: Market Basket

Suppose a market basket consists of the following goods: 50 pens, 25 notepads, and 25 paperclips. Also assume the price per unit of these goods is as follows for the years noted and 2007 is the base year.

	Price in 2007	Price in 2008
Pens	\$0.25	\$0.30
Notepads	\$0.30	\$0.25
Paperclips	\$0.10	\$0.15

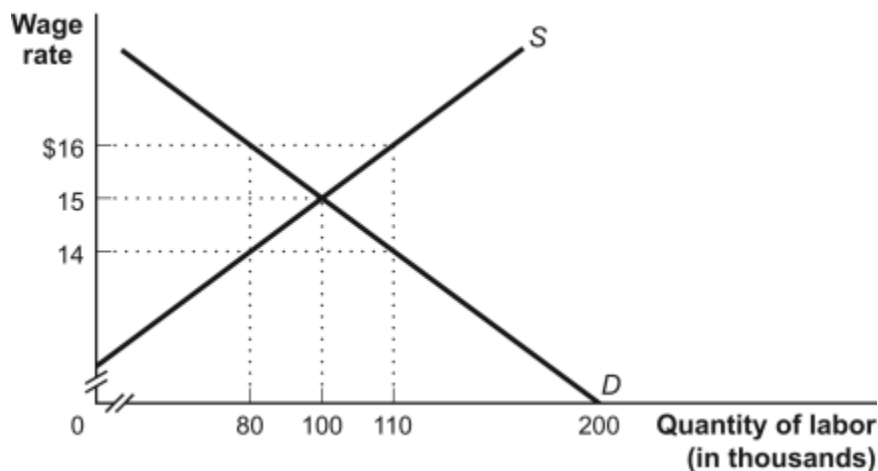
Bonus Question (5 points):

Who was awarded the Nobel Prize in Economics at 2013?

8. (Scenario: Market Basket) What is the value of the price index in 2008?
- A) 132
 - B) 111
 - C) 100
 - D) 90
9. During a recession:
- A) unemployment increases and the growth rate of real GDP decreases.
 - B) There is no relationship between unemployment and the growth rate of real GDP.
 - C) unemployment decreases and the growth rate of real GDP increases.
 - D) unemployment and the growth rate of real GDP both decrease.
10. Which of the following would be an example of an intermediate good?
- A) tires purchased from Goodyear by General Motors for newly produced electric cars
 - B) a wedding ring purchased by an engineer for his fiancée
 - C) stocks and bonds purchased by a business executive
 - D) a cellular telephone purchased by a college student

Use the following to answer question 11:

Figure: Labor Market



11. (Figure: Labor Market) At an efficiency wage of \$16, what is the unemployment rate?
- A) 20%
 - B) 27%
 - C) 73%
 - D) 10%

12. For a firm producing at any level of output *less than* the most profitable one, an increase in output adds:
- A) the same amount to total revenue as to total cost.
 - B) more to total cost than to total revenue.
 - C) to total revenue but not to total cost.
 - D) more to total revenue than to total cost.
13. In the short run, a perfectly competitive firm produces output and breaks even if:
- A) the firm produces a quantity at which $P > ATC$.
 - B) the firm produces a quantity at which $P < ATC$.
 - C) the firm produces a quantity at which $P = (TR/Q + TC/Q) \times Q$.
 - D) the firm produces a quantity at which $P = ATC$.
14. If price is greater than average total cost at the profit-maximizing quantity of output in the short run, a perfectly competitive firm will:
- A) produce at a profit.
 - B) shut down production.
 - C) produce more than the profit-maximizing quantity.
 - D) produce at a loss.
15. Which of the following is (are) true?
- A) The unemployment rate is the number of people unemployed expressed as a percentage of the population.
 - B) The labor force is the same as the population.
 - C) The labor force is the total number of people working plus those who are unemployed.
 - D) The number of people not working but who have looked for work in the past year are unemployed.
16. Inflation can be measured by:
- A) the absolute change in the GDP deflator.
 - B) the percentage change in the CPI.
 - C) the percentage change in GDP.
 - D) the absolute change in the CPI.
17. Which of the following is false? Gross domestic product:
- A) is the total production of final goods and services.
 - B) grows during an expansion.
 - C) is the total production of all final and intermediate goods and services.
 - D) is aggregate output.

18. Bob produces DVD movies for sale, which requires a building and a machine that copies the original movie onto a DVD. Bob rents a building for \$30,000 per month and rents a machine for \$20,000 a month. Those are his fixed costs. His variable cost per month is given in the accompanying table.

Quantity of DVDs	VC
0	\$0
1,000	5,000
2,000	8,000
3,000	9,000
4,000	14,400
5,000	20,000
6,000	33,000
7,000	49,000
8,000	72,000
9,000	99,000
10,000	150,000

What are Bob's average variable cost (AVC), average total cost (ATC), and marginal cost (MC – from 4,000 to 5,000) for 5,000 quantity of output, respectively?

- A) AVC: \$4, ATC: 13, MC: \$5
- B) AVC: \$5, ATC: 14, MC: \$6
- C) AVC: \$4, ATC: 12, MC: \$6
- D) AVC: \$4, ATC: 14, MC: \$6
- E) AVC: \$7, ATC: 14, MC: \$6

19. The economy of Britannica produces three goods: computers, DVDs, and pizza. The accompanying table shows the prices and output of the three goods for the years 2007, and 2008

Year	Computer		DVDs		Pizza	
	Price	Quantity	Price	Quantity	Price	Quantity
2007	\$1000	10.5	\$12	105	\$16	2
2008	\$1,050	12	\$14	110	\$17	3

What is the percent change in production of each of the goods from 2007 to 2008, respectively?

- A) Computer: 12.3%, DVDs: 3.8%, Pizza: 50%
- B) Computer: 14.3%, DVDs: 4.8%, Pizza: 50%
- C) Computer: 13.3%, DVDs: 4.8%, Pizza: 55%
- D) Computer: 14.3%, DVDs: 2.8%, Pizza: 50%
- E) Computer: 14.3%, DVDs: 4.8%, Pizza: 52%

20. A country's labor force is the sum of the number of employed and unemployed workers. The accompanying table provides data on the size of the labor force and the number of unemployed workers for different regions of the United States.

Region	Labor Force		Unemployed	
	Mar-07	Mar-08	Mar-07	Mar-08
Midwest	17,000	18,000	200	300
West	44,000	45,000	300	500

What is the number of workers employed in each of the regions in March 2007 and March 2008? Use your answers to calculate the change in the total number of workers employed between March 2007 and March 2008.

- A) MW: 16,800 – 17,700 WEST: 43,700 – 44,500, CHANGE: MW: 900, WEST: 800
- B) MW: 17,800 – 17,700 WEST: 43,700 – 42,500, CHANGE: MW: 800, WEST: 800
- C) MW: 16,800 – 17,700 WEST: 43,700 – 42,500, CHANGE: MW: 700, WEST: 500
- D) MW: 15,800 – 16,700 WEST: 43,700 – 44,500, CHANGE: MW: 900, WEST: 800
- E) MW: 16,800 – 17,700 WEST: 45,700 – 42,500, CHANGE: MW: 700, WEST: 300

Answer Key

1. D
2. A
3. C
4. D
5. A
6. B
7. C
8. B
9. A
10. A
11. B
12. D
13. D
14. A
15. C
16. B
17. C