Quiz #3 -- February 25, 2021

- 1. A basic assumption of the short run is that a firm:
 - A) can employ more workers and add more capital to the production process.
 - B) cannot adjust its workforce or the amount of capital it uses.
 - C) can reduce the number of workers it uses, but it cannot adjust how much capital it uses.
 - D) can freely adjust the amount of labor and capital that it employs.
- 2. Suppose that U = min{2X, 0.5Y}, where X is units of good X and Y is units of good Y. The price of good X is \$1 and the price of good Y is \$2. What is the minimum expenditure necessary to achieve a utility level of 100?
 A) \$333.33 B) \$550 C) \$1,200 D) \$450

Use the following to answer question 3.

Figure 5.6



- 3. (Figure 5.6) Garth spends his income on ice cream and coffee, and coffee sells for \$1 a cup. If ice cream sells for \$6.00 per gallon, Garth will purchase:
 A) 2 gallons.
 B) 8 gallons.
 C) 1 gallon.
 D) 6 gallons.
- 4. Natalie is a borrower and considers consumption both now and in the future to be normal goods. The interest rate increases. Natalie is ______ as a result. This means that she will borrow _____ due to the income effect.
 A) Richer, more. B) Richer, less. C) Poorer, more. D) Poorer, less.
- 5. Suppose that $MU_Y = 30$, $MU_X = 10$, $P_Y = 2 , and $P_X = 1 . Which of the following statements is TRUE?
 - A) The consumer is maximizing utility.
 - B) The consumer could increase utility by giving up 1 unit of good Y for 2 units of good X.
 - C) The consumer could increase utility by giving up 2 units of good X for 1 unit of good Y.
 - D) The consumer is receiving less marginal utility per dollar from good *Y* than from good *X*.

Use the following to answer question 6.





- 6. (Figure 6.1) The average product at L = 2 and L = 8 respectively are:
 A) 2 and 1.13. B) 0.5 and 0.89. C) 8 and 72. D) 1.5 and 0.5.
- 7. In 2010, the average household spent \$1,178 on telephone services and \$333 on nonalcoholic drinks. From this information, we can conclude that:
 - A) the substitution effect of a price change will be larger for telephone services than for nonalcoholic drinks.
 - B) an increase in the price of telephone services will cause a larger income effect than a similar increase in the price of nonalcoholic drinks.
 - C) an increase in the price of nonalcoholic drinks will cause a larger income effect than a similar increase in the price of telephone services.
 - D) the substitution effect of a price change will be larger for nonalcoholic drinks than for telephone services.

Use the following to answer question 8.

Figure 5.15



- 8. (Figure 5.15) Because of the substitution effect associated with the decrease in the price of good *X*, the quantity of good *X* purchased:
 - A) increases from 3 to 5.

- C) increases from 2 to 3.
- B) decreases from 3 to 2.
- D) increases from 2 to 5.
- 9. Suppose the price of good *X*, a Giffen good, decreases. Which of the following statements are TRUE?
 - I. The substitution effect of the price decrease causes consumers to buy less of good *X*.
 - II. The substitution effect of the price decreases causes consumers to buy more of good X.
 - III. The income effect of the price decrease causes consumers to buy more of good X.
 - IV. The income effect of the price decrease causes consumers to buy less of good X.
 - A) I and IV B) II and IV C) I and III D) II and III
- 10. The short-run production function for a firm is given by $Q = 40L^{2/3}$. What is the average product?
 - A) $AP_L = 16.67L$ B) $AP_L = 40/L$ C) $AP_L = 40/L^{1/3}$ D) $AP_L = 1/40L$

Answer Key - S21-3

- 1. C
- 2. D
- 3. C
- 4. C
- 5. C
- 6. A
- 7. B
- 8. A
- 9. B
- 10. C