EC101 DD/EE. Problem Set 3

Multiple Choice [MC] questions have only one correct answer. Other kinds of questions may have more than one correct answer. You should understand why your answers are correct. If you don’t understand the meaning of a question, you may write to your own TF, but do not expect him/her to give you answers. The problem set will not be graded, but the way you discuss the problems in your discussion section will affect your discussion-section score.

1. Bob buys a basketball for $30. What can you conclude about his willingness to pay (WTP)?

2. Give three examples of important advances in technology that changed productivity.

3. Did the advances you listed in the previous question have negative effects on workers or businesses? Explain.

4. Suppose you were the first person to open a sandwich shop on Commonwealth Avenue.
   i. What inputs would you need to use? Are those inputs primary factors or intermediate goods?
   ii. Draw an example of a supply curve for your sandwich shop and explain its meaning.
   iii. Now suppose the price of bread decreases, how would that change your supply curve? Explain.
   After operating the sandwich shop for a year, you earned a lot. One of your classmates is really envious and decides to open a burger place next to you.
   iv. How would this change the demand for your sandwiches? What about your supply curve?
   v. Suppose in response, you decided to give BU students 20% off for purchasing your sandwiches. Would this affect the sales of chips and drinks in your shop?

5. [MC] Part of the reason that Michael Jordan earned millions of dollars each year while school teachers were earning about $30,000 is because
   a. The supply of superstar basketball players is very low, while the supply of qualified teachers is much larger.
   b. Demand for Michael Jordan's talents is very high since he can generate so much revenue for a firm.
   c. Consumers enjoy basketball to the point that they are willing to spend lots of money and time attending games and watching commercials.
   d. ALL of the Above

6. Consider the market for peanut butter in Spain.
   i. Draw an example of market supply and demand curves for peanut butter.
   ii. Show what would happen to price and quantity of peanut butter in equilibrium if many Spanish suddenly became addicted to peanut butter and jelly sandwiches.
   iii. What would happen to price and quantity of peanut butter if the price of jelly doubles?

7. Can you think of reasons why some countries had high rates of economic growth and became wealthy, but other countries remained poor?

8. [MC] What would happen if there were large wage increases for workers in the computer-manufacturing industry?
   a. The supply curve of computers would shift left, and the price of computers would increase.
   b. The supply curve of computers would shift right, and the price of computers would decrease.
   c. The demand curve of computers would shift left, and the price of computers would decrease.
   d. The demand curve of computers would shift right, and price of computers would increase.
9. How would the following events affect the demand of Product X?
   i. X becomes more popular
   ii. The price of Y, a substitute for X, decreases.
   iii. Consumers expect their incomes to increase in the future.

10. How would the supply of new houses be affected in the following situations?
    i. The price of land increases.
    ii. The price of cement decreases.
    iii. There is a major advance in construction technology.

11. [MC] When the price of tomatoes increases, people buy fewer onions. This implies that onions and tomatoes are
    a. normal goods.
    b. complements.
    c. substitutes.
    d. inferior goods.

12. [MC] The figure illustrates the market for chairs. If the price of a chair is $40, there is a

   ![Diagram of market for chairs]

   a. shortage of chairs and the price will rise.
   b. surplus of chairs and the price will rise.
   c. shortage of chairs and the price will fall.
   d. surplus of chairs and the price will fall.

13. [MC] Which of the following is NOT a capital good?
    a. the feeling of friendship and teamwork within a football team
    b. a hunter’s rifle
    c. a professional gambler’s skills
    d. the wood that goes into making a piece of furniture

14. Suppose your mother tells you to go to the store to buy milk. You take some money from her purse, go to the store, and return with a bottle of cheap milk, which cost $1. Your mother gets upset because she wanted you to buy the fat-free, organic, humane-certified milk, which costs $5. She is an economist, so she tells you her willingness to pay is $2 for the cheap milk and $10 for the organic milk.
    i. Suppose a friend gives your mother a bottle of the organic milk. What is its value to her (in dollars)?
    ii. How much consumer surplus did your mother obtain from the transaction you made for her?
    iii. How much consumer surplus would she have obtained if you had bought the organic milk?
15. When a very destructive hurricane strikes a city or a country, water service is often interrupted.
   i. How is the demand and supply of bottled water likely to change if tap water becomes unavailable?
   ii. Suppose the government forces the price to be the same as it was before the hurricane. What would you expect to happen?

16. Which of the following would cause movement along the demand curve, and which would cause the entire demand curve to shift?
   i. The Kardashians talk about their favorite makeup line on TV.
   ii. Wholefoods decide to take 20% off on their grocery products.
   iii. People are afraid that the price of oil next month will rise because of tensions in the Middle East.
   iv. Chipotle discovers E-Coli bacteria in its burritos.

17. How will the availability of primary factors be affected if women delay having children because of a recession?

18. Explain why a textile manufacturer is willing to sell more T-shirts when the price of T-shirts is higher.