

**PART I – MULTIPLE CHOICES QUESTIONS (TOTALLY 60 POINTS)**

- QUESTIONS #01 AND #02 CARRY NO POINTS.**
- IF YOU ANSWER INCORRECTLY QUESTIONS #1 OR #2, YOU LOSE SOME OR ALL POINTS OF PART I.**
- QUESTIONS #03 - #27 EACH CARRY 2.4 POINTS. IF YOU ANSWER INCORRECTLY, THERE IS NO POINT DEDUCTION.**
- ANSWER ALL QUESTIONS.**
- ANSWER ONLY ON THE PROVIDED SCANTRON.**
- USE ONLY 2B PENCILS.**
- CHOOSE ONLY ONE ANSWER FOR EACH QUESTION.**
- CHOOSE THE BEST ANSWER.**
- CHOOSE THE BEST ANSWER IF YOU CANNOT FIND THE CORRECT ANSWER.**

1. What is the version of your exam paper (see the cover page of this exam question book)?

- A) Version A.
- B) Version B.
- C) Version C.
- D) Version D.

2. Who is the course instructor of your section of ECO2011?

- A) Prof. Peng Zhang.
- B) Prof. Yue Cao.
- C) Prof. Emily Zheng.
- D) Prof. Barick Chung.

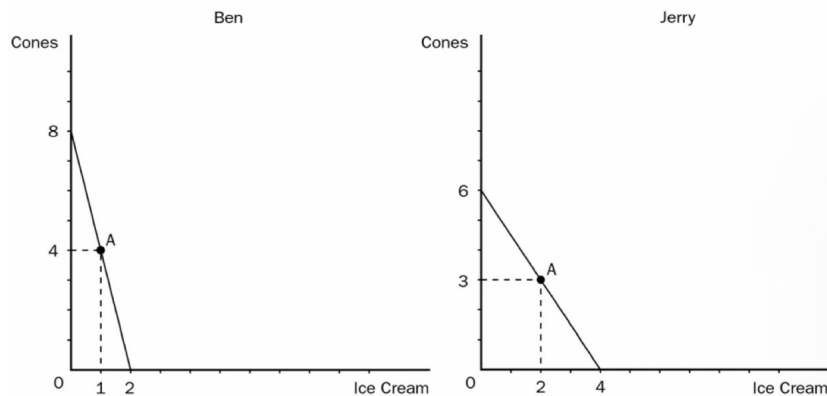
3. Which of the following is most likely to increase consumer surplus in the market for cotton T-shirts?

- A) The price of industrial sewing machines used to produce garments increases.
- B) Consumer incomes fall and cotton T-shirts are normal goods.
- C) The price of polyester T-shirts falls.
- D) Weather conditions provide for an extremely productive cotton harvest.
- E) None of the above is correct.

4. A production possibilities frontier will be a straight line if
- A) increasing the production of one good by x units entails no opportunity cost in terms of the other good.
  - B) increasing the production of one good by x units entails a constant opportunity cost in terms of the other good.
  - C) the economy is producing efficiently.
  - D) the economy is engaged in trade with at least one other economy.
  - E) None of the above is correct.
5. The production possibility frontier illustrates that:
- A) the economy will automatically end up at full employment.
  - B) an economy's productive capacity increases proportionally with its population.
  - C) if all resources of an economy are being used efficiently, more of one good can be produced only if less of another good is produced.
  - D) economic production possibilities have no limit.
  - E) None of the above is correct.
6. An increase in the price of wheat, an important ingredient in the production of bread, combined with an increase in the number of people consuming bread, will result in which of the following changes in the bread market?
- A) Both the equilibrium price and quantity will increase.
  - B) Equilibrium quantity will decrease, but equilibrium price may decrease, increase, or stay the same.
  - C) Both the equilibrium price and quantity will decrease.
  - D) Equilibrium price will increase, but equilibrium quantity may decrease, increase, or stay the same.
  - E) None of the above is correct.
7. A beneficial technological change enhances the production of cranberries. At the same time, scientists discover the health benefits of cranberries. This will result in:
- A) an increase in both the equilibrium price and quantity in the cranberry market.
  - B) an increase in the equilibrium quantity and an uncertain impact on the equilibrium price of cranberries.
  - C) a decrease in both the equilibrium price and quantity in the cranberry market.
  - D) a decrease in the equilibrium price and an uncertain impact on the equilibrium quantity of cranberries.
  - E) None of the above is correct.

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8. Emily, Janet, and Icy are three friends shopping together at the Coco Park mall for a new cosmetic product. Emily is willing to pay \$90, Janet is willing to pay \$69, and Icy is willing to pay \$50 for the cosmetic product. If the price of the new cosmetic product is \$59, how much total consumer surplus is achieved by the three friends when they go shopping?
- A) \$9  
B) \$32  
C) \$41  
D) \$50  
E) None of the above is correct.
9. *Peng Adventures* is one of many firms offering rafting trips on the Longgang River. It costs the firm \$100 for the first raft trip per day, \$120 for the second, \$140 for the third, and \$160 for the fourth. If the market price for a raft trip was \$120 but has now increased to \$150, the gain in producer surplus for the firm is:
- A) \$20.  
B) \$70.  
C) \$80.  
D) \$90.  
E) None of the above is correct.
10. Refer to below PPF diagrams. Ben has a comparative advantage in



- A) cones and Jerry has a comparative advantage in ice cream.  
B) ice cream and Jerry has a comparative advantage in cones.  
C) neither good and Jerry has a comparative advantage in both goods.  
D) both goods and Jerry has a comparative advantage in neither good.  
E) None of the above is correct.

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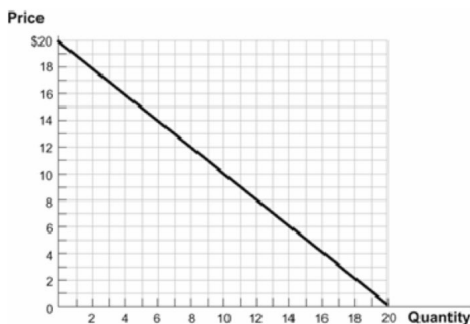
11. Suppose the demand curve for a product is given by  $Q = 180 - 2P$ . The supply curve is  $Q = 3P - 30$ . Find the market equilibrium price and quantity for the product. The market equilibrium price is \$ \_\_\_\_X\_\_\_\_ and the market equilibrium quantity is \_\_\_\_Y\_\_\_\_ (Give your answers in integers):
- A)  $X = \$30$  ,  $Y = 42$ .
  - B)  $X = \$96$  ,  $Y = 42$ .
  - C)  $X = \$42$  ,  $Y = 96$ .
  - D)  $X = \$42$  ,  $Y = 30$ .
  - E) None of the above is correct.
12. In much of the US, homeowners choose to heat their houses with either natural gas or home heating oil. Which of the following would cause an increase in the demand for natural gas?
- A) a decrease in the price of home heating oil
  - B) a large increase in the number of new households in the US
  - C) a study finds that using heating oil is safer, as explosions are less likely
  - D) a decrease in the income of consumers (assume that both demand for heating oil and demand for natural gas are normal)
  - E) None of the above is correct.
13. Suppose Barick of the SME helps a large soft drink company develop a robot machine selling bottled soft drinks that can determine your maximum willingness to pay for a soft drink, and the robot machine charges you that price when you buy the soft drink. Which of the following is likely correct?
- A) Consumer surplus is zero.
  - B) Producer surplus is zero.
  - C) The soft drink company's total revenue is zero.
  - D) The soft drink company's profit is zero because no one buys from the robot machine.
  - E) None of the above is correct.
14. Cars and parking places are complements – the owner of a car has to park the car when going shopping or to work. If there is an increase in the cost of parking, consumer surplus in the market for cars:
- A) will increase.
  - B) will decrease.
  - C) will not change.
  - D) may change, but it is impossible to tell if it will increase or decrease.
  - E) None of the above is correct.

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15. Yue is willing to buy the last ticket to the Higher Brothers concert for \$15, while Tom is willing to pay \$25. Yue is first in line and buys the last ticket available for \$15. She then resells her ticket to Tom for \$20. By reselling the ticket instead of going to the concert herself, Yue caused:
- A) the sum of the consumer and producer surplus to increase.
  - B) the sum of the consumer and producer surplus to decrease.
  - C) a deadweight loss of \$5.
  - D) consumer surplus to decrease and producer surplus to increase.
  - E) None of the above is correct.
16. Suppose a competitive market has a downward-sloping demand curve and a horizontal supply curve. If the supply curve shifts downward, what will happen to equilibrium price, equilibrium quantity, consumer surplus, and producer surplus?
- A) decrease, increase, increase, decrease
  - B) decrease, decrease, increase, no change
  - C) decrease, increase, increase, no change
  - D) decrease, increase, no change, increase
  - E) None of the above is correct.
17. Alexander has a straight-line, or linear, production possibility frontier when he produces soybeans and corn. If he uses all of his resources to grow soybeans, he can produce 200 bushels of soybeans; if he uses all of his resources for corn production, he can produce 400 bushels of corn. Which of the following combinations of corn and soybeans are not possible for him to produce?
- A) 200 bushels of soybeans and zero bushels of corn
  - B) 600 bushels of corn and 200 bushels of soybeans
  - C) 400 bushels of corn and zero bushels of soybeans
  - D) 100 bushels of soybeans and 200 bushels of corn
  - E) None of the above is correct.
18. In recent years, the world demand curve for copper shifted rightward due to continued economic growth in China and other emerging economies. Also, the costs of extracting the copper increased due to higher energy prices. As a result, we observed:
- A) higher equilibrium copper prices and unambiguously lower quantities.
  - B) higher equilibrium copper prices and unambiguously higher quantities.
  - C) higher equilibrium copper prices and either higher or lower quantities.
  - D) lower equilibrium copper prices and either higher or lower quantities.
  - E) None of the above is correct.

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19. We consider Albert and Carrie's productions. If they spend all night writing computer programs, Albert can write 10 programs while Carrie can write 5. If they spend all night making cakes, Albert can make 6 while Carrie can make 4. This implies that:
- A) Albert has a comparative advantage in writing programs.
  - B) Albert has a comparative advantage for both programs and cakes.
  - C) Carrie has a comparative advantage in writing programs.
  - D) Carrie has a comparative advantage for both programs and cakes.
  - E) None of the above is correct.
20. In the US, rapidly increasing health care costs have been a major political concern since at least 1992. Suppose the US government sets the maximum price for a normal doctor's visit at \$20 to control rising health care costs, but the current market price is \$40. What will happen?
- A) Fewer people will try to see the doctor, and fewer doctors are willing to see patients at that price.
  - B) The same number of people will try to visit the doctor, and the same number of doctors are willing to see patients at that price.
  - C) More people will be able to see the doctor, since the price is lower.
  - D) More people will try to visit the doctor, but there will be fewer doctors willing to see patients at that price.
  - E) None of the above is correct.
21. Your economic consultant has estimated a linear demand curve for your product as shown in below figure. Suppose that as a producer, you are interested in maximizing your total revenues in this market. What is the price at which you should sell your good? What is the corresponding total revenue?



- A) \$0; \$100
- B) \$20; \$200
- C) \$10; \$100
- D) \$5; \$100
- E) None of the above is correct.

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22. In the US, where most people drive to work, gasoline fuel is a necessity. The price of a gallon of gasoline increases 10% this year. As a result, which of the following events is most likely to occur?
- A) More people will drive their cars.
  - B) The price of public transportation will decrease.
  - C) People's expenditures on gasoline will increase.
  - D) Fewer people will ride bicycles.
  - E) None of the above is correct.
23. The price elasticity of demand for grapes has been estimated to be about  $-3$ . Flash floods destroy 10% of the China's crop of grapes. Which of the following best describes how this will affect total expenditures on grapes?
- A) Total expenditures will remain unchanged.
  - B) Total expenditures will fall.
  - C) Total expenditures will rise.
  - D) Total expenditures will rise in the short run, but fall in the long run.
  - E) There is not enough information to answer the question.
24. For tobacco, the price elasticity of demand is  $-0.5$ , and the income elasticity of demand is  $+0.4$ . Which of the following statements is **INCORRECT**:
- A) An increase in the price of tobacco will increase the total revenue from sales of tobacco.
  - B) When consumer incomes increase 50%, the quantity demanded of tobacco will increase by 20%.
  - C) An increase in consumer incomes will increase the total revenue from sales of tobacco.
  - D) The quantity demanded of tobacco will fall by 20%, if there is a 10% increase in the price of tobacco.
  - E) Tobacco is a normal good.
25. When the economy suffers a downturn and the incomes of many people decrease, vacationers are more likely to take car trips than to fly. Which of the following provides one possible explanation for this phenomenon?
- A) Air travel and vacation travel by car are complementary goods.
  - B) Air travel and vacation travel by car are both normal goods.
  - C) Air travel is a normal good and vacation travel by car is an inferior good.
  - D) Air travel is an inferior good and vacation travel by car is a normal good.
  - E) None of the above is correct.



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26. Diesel fuel (a derivative of crude oil) forms a large part of transportation costs for many producers. If the price of crude oil increases at the same time that incomes fall for many consumers, one would expect the equilibrium price of many normal goods to \_\_\_\_\_, while their equilibrium quantities would \_\_\_\_\_.
- A) fall; rise
  - B) fall, rise, or stay the same; decrease
  - C) decrease; fall, rise, or stay the same
  - D) fall; fall
  - E) None of the above is correct.
27. Suppose the cross-price elasticity is  $-1.25$ , for Good X with respect to the price of Good Y. If the price of Good Y increases by 10%, then the quantity demanded of Good X will:
- A) decrease by 12.5%.
  - B) increase by 12.5%.
  - C) decrease by 8%.
  - D) increase by 8%.
  - E) None of the above is correct.

\*\*\*\*\* TURN TO NEXT PAGE \*\*\*\*\*





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QUESTION #30

In a competitive market, market demand and market supply are:  $Q_d = 99 - P$  and  $Q_s = -30 + 2 \times P$ , respectively. Suppose that the government imposes a price ceiling, which is binding and the ceiling price is equal to \$0, what will be the magnitude of deadweight loss (DWL)? Show your calculation and /or give explanations. [15 points]

Answer: DWL =          / I give up (answer or circle "I give up", if you choose "I give up", this question will not be graded, and you receive 3 points)

Calculation and /or explanation:

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\*\*\*\*\* END OF EXAM \*\*\*\*\*