

Econ 2010 (sec 100), Fall 2010

First Midterm, Version A

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**With some comments from Edward on some of the questions.**

**Almost 80% got question 44 incorrect. People who got it correct know their demand and WTP stuff. Around 60% had difficulties with 11, 18 and 29.**

**The objective is to include questions everyone gets right and to include questions that only the best students get right. For example 98% got question three right.**

1. A severe drought in California destroys many red grapes. As a result of the drought, consumer's surplus from the consumption of grape products likely \_\_\_\_\_.
  - A) decreases because the profits of grape producers decline
  - B) is unaffected but producer surplus declines
  - C) **decreases because the price of grapes goes up**
  - D) increases because more expensive wine tastes better
  
2. If action A makes you better off and me worse off, before action A is undertaken the allocation is
  - A) **There is not enough information to tell whether the allocation is efficient before A is undertaken.**
  - B) Efficient
  - C) Inefficient

**The answer would have been “efficient” if the question had said something like, “From the current situation, there is no action that would make you better off and not make me worse off.**

3. An economy is said to have a comparative advantage in the production of a good if it can produce that good:
  - A) outside its production possibilities curve.
  - B) with more resources than another economy.
  - C) **at a lower opportunity cost than another economy.**
  - D) with a higher opportunity cost than another economy.

4. Which of these two statements is correct?
- A) The opportunity cost of activity A is always expressed by units of activity A
  - B) The opportunity cost of activity A in terms of activity B is the inverse of the opportunity cost of activity B in terms of activity A.
  - A) Only A
  - B) **Only B**
  - C) Both A and B
  - D) Neither A nor B
5. Assume that Brazil gives up 3 automobiles for each ton of coffee it produces, while Peru gives up 7 automobiles for each ton of coffee it produces.
- A) Brazil has a comparative advantage in automobile production and specialize in the production of automobiles.
  - B) Brazil has a comparative advantage in automobile production and should specialize in coffee production
  - C) Brazil has a comparative advantage in coffee production and should specialize in the production of automobiles
  - D) **Brazil has a comparative advantage in coffee production and should specialize in the production of coffee**

Use the following to answer question 6:

**Table: Consumer Surplus**

This table shows some Atlanta college students' willingness to pay to see *The Nutty Nutcracker*, by the Atlanta Ballet.

Student	Willingness to Pay
Lois	\$100
Miguel	90
Narum	65
Oscar	50
Pat	15

6. (Table: Consumer Surplus) If the price of a ticket to see *The Nutty Nutcracker* is \$50, then Narum's consumer surplus is:
- A) **\$15.**
  - B) \$240.
  - C) \$50.
  - D) \$60.

7. The existence of government intervention in markets suggests:
- A) individual actions have no side effects.
  - B) equilibrium will be achieved through this intervention.
  - C) markets can efficiently manage the allocation of goods.
  - D) **markets may not always achieve efficiency.**

**Market failure (the inability of the market system to achieve efficiency) is one of the primary reasons for government intervention. For example, public expenditures on national defense occur because the market system, left to its own devices, would produce an inefficient amount of national defense—to little.**

8. For low-skilled workers in the country of South Africa, supply for low-skilled workers is greater than demand. This could be caused by.
- A) More workers wanting to work at the equilibrium wage than the number of workers the firms want to hire at the minimum wage.
  - B) The law that says only those with a high-school education can work.
  - C) **The minimum wage set above the equilibrium wage.**
  - D) Low-skilled workers being poor, so wanting to work more at the equilibrium wage.

**We discussed a NYTimes article about this in class. Note that D) says the workers want to work more at the equilibrium wage, but, by definition of equilibrium, this cannot be true at the equilibrium wage because at the equilibrium wage everyone is working as much as they want at that wage.**

9. George purchased a large chocolate shake from Dairy Queen. Now that he is two thirds finished, he is starting to feel full. George thinks to himself, "Should I take one more sip, or stop now?" This is an example of \_\_\_\_\_.
- A) Opportunity Cost
  - B) Specialization
  - C) **A Marginal Decision**
  - D) None of the above

10. An example from the class notes: In places like Aspen, if wood-burning fireplaces and stoves are unregulated there will be too much smoke from an efficiency point of view: Aspen is a box canyon and the smoke has nowhere to go. The city government is considering requiring permits for wood-burning devices. Which of the following narratives is, in Edward's view, both correct and most informative?
- A) **This is an example where a binding quota, achieved by requiring but limiting the number of permits, can increase efficiency (achieves the efficient number of wood-burning devices) rather than causing inefficiency.**
  - B) When equilibrium is achieved in the market for permits those with the highest WTP for permits will hold all of the permits.
  - C) The city government can correct the inefficiency by requiring a permit/medallion for each wood-burning device.
  - D) Without government intervention the market is failing.

**All of the answers are correct. In Edward's view, A) is most informative.**

11. Economists believe that resources should be used as efficiently as possible to:
- A) reduce inequity.
  - B) maximize profits.
  - C) eliminate scarcity.
  - D) **help achieve society's goals.**  
**Efficiency and equity are different things. Scarcity just is; it is not something that can be eliminated. The goal is not to maximize profits.**
12. If disequilibrium exists in a market:
- A) it must be because the government has intervened in the market, resulting in the market's failure to reach equilibrium.
  - B) it will continue unless there is government intervention.
  - C) no individual would be better off doing something different.
  - D) **there are opportunities available to people to make themselves better off.**
13. Jeanette is willing to pay \$100 for the first pair of shoes, \$80 for the second pair, \$55 for the third, and \$30 for the fourth. If each pair costs \$50, Jeanette will buy \_\_\_\_\_ pairs of shoes and her total consumer surplus from the shoes is \_\_\_\_\_.
- A) **3; \$85**
  - B) 4; \$85
  - C) 3; \$235
  - D) 3; \$150

14. The United States has which type of economic system?
- A) **Mixed Economy**
  - B) Command and Control Economy
  - C) Market Economy
  - D) None of the above
15. Which is the correct statement regarding the demand curve (price on the vertical axis)?
- A) A horizontal demand curve represents inelastic demand.
  - B) It is always downward sloping.
  - C) **It represents the relationship between price and quantity demanded.**
  - D) Quantity demanded is always a decreasing function of price.
16. Which is the best definition of a *market failure*?
- A) The unregulated market equilibrium is inefficient
  - B) Production and consumption of some goods have direct negative effects on other producers and consumers
  - C) Prices are too high
  - D) Government intervention in the market place is causing inefficiency
- B) could be the cause of one type of market failure (an externality) but it is not a definition of market failure.**
17. An individual or country that has a comparative advantage in the production of one good:
- A) Must not have an absolute advantage in the good's production
  - B) **May or may not have an absolute advantage in the good's production**
  - C) Must not have an absolute advantage in the production of the other good
  - D) Must have an absolute advantage in the good's production
18. I have \$20 in my pocket and it will still be there in the morning if I do not spend it tonight. My first choice is to go out tonight and spend the \$20 on drinks. I know if I go out drinking I will not get in a fist fight with my roommate. I know I will fight him if I stay home. My second choice is to stay home, spend the \$20 on pizza and some music downloads, and fight my roommate. Note that I do not like getting in fights with my roommate. Given all this, the opportunity cost of my going out, measured in dollars, is less than \$20
- A) False
  - B) **True**
- It is \$20 plus the fight, which is a negative. This was in the notes and we went over it in class**

19. Is the following statement true or false? "General Electric (GE) is a large centrally planned economy."  
A) **True**  
B) False
20. The market for corn is currently in equilibrium. Which of the following is most likely to increase the equilibrium price of corn?  
A) **increasing production of corn-based ethanol**  
B) decreasing household incomes and corn is a normal good  
C) a subsidy given by the government to growers of corn  
D) a bountiful harvest

**B)-D) all would decrease the equilibrium price of corn, A) by shifting the demand curve for corn to the left; C) and D) by shifting the supply curve to the right. So, the answer must be A). That said, if I ask this question again I will change A) to read something like "The government mandates that more fuel be produced from corn-based ethanol.**

21. Which of the following events would cause a movement upward and to the left **along** the demand curve for mangos?  
A) The price of peaches decreases, and peaches are a substitute for mangos.  
B) The number of buyers of mangos decreases.  
C) **The price of mangos rises.**  
D) Consumer income decreases, and mangos are a normal good.
22. Black markets may develop with price controls because:  
A) individuals cannot profit by illegal exchanges.  
B) **individuals can profit by illegal exchanges.**  
C) quantity demanded equals quantity supplied at the mandated price.  
D) price controls increase efficiency.
23. The domestic car industry supports a government increase in the "import" tax on imported (foreign) cars. What is the likely effect of such a tax increase?  
A) The supply curve for domestic cars shifts to the left.  
B) The demand curve for domestic cars shifts to the left.  
C) The supply curve for domestic cars shifts to the right.  
D) **The demand curve for domestic cars shifts to the right.**

Because the price of a substitute, a foreign car, has increased.

24. In an attempt to reduce shooting deaths, some cities have offered money to people who turn in illegal guns. This program is an example of the government using \_\_\_\_\_ to influence behavior.
- A) Law
  - B) the gains from trade
  - C) **Incentives**
  - D) marginal analysis
25. When the government removes a binding price floor:
- A) an excess supply would develop.
  - B) an excess demand would develop.
  - C) quantity demanded would decrease and quantity supplied would increase.
  - D) **quantity demanded would increase and quantity supplied would decrease.**
26. In a two commodity world, specialization in production can **always** lead to an increase in the production of at least one of the commodities, with no decrease in the production of the other commodity.
- A) True
  - B) **False**
- There is nothing to be gained from specialization if no one has a comparative advantage.**
27. Joe was given a free ski-pass to Vail Mountain. If Joe lived in Vail he would have gone skiing 25 times during the season. However, since Joe lives in Boulder (approximately 100 miles away) he only went skiing 10 times. This illustrates a situation where \_\_\_\_\_.
- A) The supply of skiing is downward sloping
  - B) Joe's demand for ski days as a function of distance is upward sloping
  - C) **Joe's demand for ski days as a function of distance is downward sloping**
  - D) None of the above

28. Which statement is false?
- A) A good's marginal value curve traces out WTP for each additional unit of that good.
  - B) **If an individual buys a house, his WTP for the house equals the price.**
  - C) The inverse demand curve (price on the vertical axis) is the marginal value curve for each unit of the commodity.
  - D) If an individual has a negative WTP for one more unit of a commodity, consumption of the unit will make the individual worse off.

**If you buy a house, most often your WTP for it will exceed its price; otherwise, nothing is gained by buying it.**

29. Imagine that the government has a fixed budget and can do only two things: provide units of health care or kill terrorists. For the level of health-care it is currently providing, the budget is exhausted, so no funds are left to hunt down and kill terrorists. Given all this, the government is efficiently allocating its budget between health care and killing terrorists.
- A) **True**
  - B) **False**

**This question is ambiguous at best, so we gave everyone full credit.**

30. Is the following statement correct or incorrect? "George consumes less of good A than does Fred, so Fred likes good A more than George does."
- A) True
  - B) **False**

**Maybe Fred consumes more simply because he is wealthier.**

31. Which of the following options best defines and captures what an economist means by *constraints*.
- A) **Constraints limit us; they limit what we can and cannot do**
  - B) Constraints affect one's love life
  - C) Constraints are things that are out of our control
  - D) Not having enough money is everyone's constraint

**They do affect one's love life, but limit most other things as well. Constraints are out of our control, but not everything out of our control limits us. Income and wealth are constraints but there are many other constraints as well.**

32. A new government study conclusively proves that smoking cigarettes significantly increases sex drive. Which of the following is the most likely result.
- A) The demand curve for cigarettes shifts left
  - B) The demand curve for cigarettes is unchanged
  - C) **The supply curve for cigarettes is unchanged**
  - D) None of the above

**There is no reason to think that the study results will affect the cost of producing cigarettes, so there is no reason to think it will affect supply. It is likely to shift the demand curve, but more likely to the right than to the left.**

33. All else equal, if the price of chocolate bars in Boulder increased\_\_\_\_\_
- A) **The amount of chocolate bars supplied in Boulder would most likely increase.**
  - B) The amount of chocolate bars supplied in Boulder would most likely decrease.
  - C) It must have been due to an increase in the price of inputs.
  - D) None of the above.

**The expression, “all else equal” is important.**

34. If they spend all night writing computer programs, Laurence can write 10 programs while Carrie Anne can write 5. If they spend all night making sunglasses, Laurence can make 6 while Carrie Anne can make 4. We know that:
- A) Laurence's opportunity cost of writing programs and of making sunglasses is less than that of Carrie Anne.
  - B) Carrie Anne's opportunity cost of writing programs is less than that of Laurence.
  - C) **Laurence's opportunity cost of writing programs is less than that of Carrie Anne.**
  - D) Carrie Anne's opportunity cost of writing programs and of making sunglasses is less than that of Laurence.

**Laurence gives up .6 sunglasses when he produces another program. Carrie Anne gives up  $4/5=.8$**

35. Which one is NOT characteristic of market equilibrium?
- A) **It is always efficient** as well as equitable.
  - B) Given the price, neither consumers nor producers want to change their behavior.
  - C) The quantity demanded is equal to the quantity supplied.
  - D) There is no motivation for price to change.

36. Binding quotas on the amount of a good that can be produced necessarily cause inefficiency.
- A) True
  - B) **False**

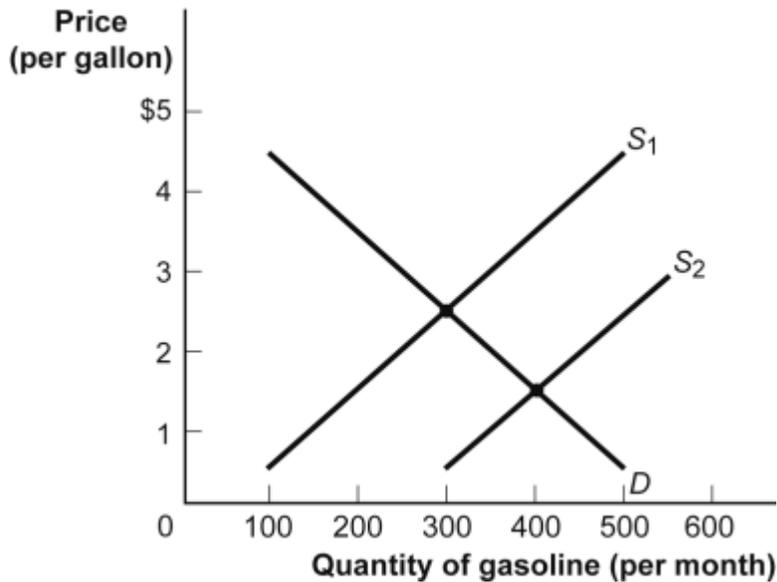
**As our wood-burning stove example demonstrates. In chapter 5 the binding quota example caused inefficiency. But a binding quota can also be used to correct a market failure.**

37. Consider two competing motorcycle manufacturers, Harley-Davidson and Honda. If Harley-Davidson raises the price that it charges for its motorcycles, we can expect:
- A) a shift to the left in the supply curve of Hondas and higher prices for Hondas.
  - B) a shift to the left in the demand curve for Hondas and lower prices for Hondas.
  - C) a shift to the right in the supply curve of Hondas and lower prices for Hondas.
  - D) **a shift to the right in the demand curve for Hondas and higher prices for Hondas.**

**Since HD are a substitute for Honda, if the price of HD increase the demand curve for Hondas will shift to the right and the equilibrium price of Hondas will increase.**

Use the following to answer question 38:

**Figure: Demand and Supply of Gasoline**



38. (Figure: Demand and Supply of Gasoline) A factor that may have changed supply from  $S_1$  to  $S_2$  is:
- A) lower labor productivity.
  - B) **better technology in the production of gasoline.**
  - C) increased prices of substitutes for gasoline.
  - D) increased demand.
39. In many parts of the United States when Wal-Mart opens a new store, some smaller retailers go out of business. One of the reasons for this development could be that:
- A) consumers in those areas receive no consumer surplus from Wal-Mart.
  - B) **consumers in those areas receive a larger consumer surplus from shopping at Wal-Mart than from the smaller stores.**
  - C) smaller stores increase prices to compete.
  - D) Wal-Mart practices unfair pricing methods that reduce consumer surplus over time.
40. Which of the following is the best definition of an economic system?
- A) The family
  - B) Supply and demand
  - C) The **process** a society uses to determine what will be produced and how it will be distributed
  - D) The market which determines what will be produced and how it will be distributed
41. Which of these statements are correct?
- A) A variable can be endogenous in one model and exogenous in a different model.
  - B) The variables whose levels you want to explain in your model are called endogenous.
  - C) The variables you want to include in your model, but not explain, are called exogenous.
- A) Only A
  - B) Only B
  - C) Only C
  - D) **A, B, and C are all correct**

42. Peanut butter and jelly are complements. If there is a decrease in the price of jelly, producer surplus in the peanut butter market:
- A) will decrease or stay the same.
  - B) may change, but it is impossible to tell if it will increase or decrease.
  - C) **will increase or stay the same.**
  - D) will not change.
- If the price of jelly goes down the demand curve for peanut butter will shift to the right, increasing the price of PB so likely increase producer surplus in the production of PB.**

Use the following to answer question 43:

**Table: Production Possibilities Schedule II**

<b>Production alternatives</b>	<b>V</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Capital goods per period	0	1	2	3	4
Consumer goods per period	20	18	14	8	0

43. (Table: Production Possibilities Schedule II) If the economy is producing at alternative X, the opportunity cost of producing at Y instead of X is \_\_\_\_\_ units of consumer goods per period.
- A) **6**
  - B) 14
  - C) 0
  - D) 8
44. Both Fred and George can buy as many Cuban cigars as they want at \$5 a cigar. George buys 8/day, Fred, 3/day. George's consumer's surplus from cigar consumption
- A) is smaller than Fred's consumer's surplus from cigar consumption.
  - B) **might be smaller than Fred's consumer's surplus from cigar consumption.**
  - C) equals Fred's because they both pay \$5/cigar.
  - D) is larger than Fred's consumer's surplus from cigar consumption.
- For example, Fred's wtp for the first three cigars might be \$12, \$11, and \$5 (for a total of CS of \$13) and George's might be \$7, \$7, \$6, \$5.50, \$5.25, \$5.20, \$5.15 and \$5 (for a total of \$6.10)**
45. A shift to the left of a supply curve (price on the vertical axis) could be caused by
- A) An increase in the number of buyers
  - B) **An increase in the cost of an input**
  - C) A technological improvement
  - D) An increase in the number of sellers

46. If you decide to go to Cancun with your friends during spring break, you realize you cannot go to Paris with your sister in the summer. This statement best represents the economic concept of:
- A) “how much?” is a decision at the margin.
  - B) there are gains from trade.
  - C) **the real cost of something is what you must give up to get it.**
  - D) people usually exploit opportunities to make themselves better off.
47. I have a debit card with \$20 left in the account, and, for some reason, the \$20 will disappear from the account by tomorrow morning if it is not spent today. My first choice is to hit the bars tonight and spend the \$20 on drinks. My second choice is to stay home, veg and buy nothing. Is the opportunity cost of my going out tonight necessarily \$20 or more?
- A) **No**
  - B) Yes
- The \$20 is not part of the cost—it is gone either way—so the opportunity cost is not necessarily \$20 or more. It could be, but not necessarily.**
48. Justin and Aiden sell lemonade on the corner. It costs them 10 cents to make each cup. On a certain day, they sell 40 cups, all at the same price. Their producer surplus that day is \$20. They sold each cup for \_\_\_\_\_.
- A) 40 cents
  - B) 50 cents
  - C) **60 cents**
  - D) 30 cents
49. A minimum price set above the equilibrium price is a:
- A) **price floor.**
  - B) demand price.
  - C) price ceiling.
  - D) supply price.

Use the following to answer question 50:

**Table: The Lemonade Market**

<b>Price of Lemonade (per cup)</b>	<b>Number of Cups Demanded (Qd)</b>	<b>Number of Cups Supplied (Qs)</b>
\$ .50	250	25
\$ .75	200	50
\$1.00	150	75
\$1.25	100	100
\$1.50	50	125
\$1.75	20	150

50. (Table: The Lemonade Market) If the price of a cup of lemonade is \$1.00, what will exist in the market?
- A) a shortage of 75 cups
  - B) a surplus of 75 cups
  - C) a shortage of 150 cups
  - D) equilibrium

## Answer Key

1. C
2. A
3. C
4. B
5. D
6. A
7. D
8. C
9. C
10. A
11. D
12. D
13. A
14. A
15. C
16. A
17. B
18. B
19. A
20. A
21. C
22. B
23. D
24. C
25. D
26. B
27. C
28. B
29. A
30. B
31. A
32. C
33. A
34. C
35. A
36. B
37. D
38. B
39. B
40. C
41. D
42. C
43. A
44. B

- 45. B
- 46. C
- 47. A
- 48. C
- 49. A
- 50. A