

NAME: _____

STUDENT ID: _____

Midterm Exam #2

ECON 101, Section 2

summer 2004

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Instructions – Please read carefully!

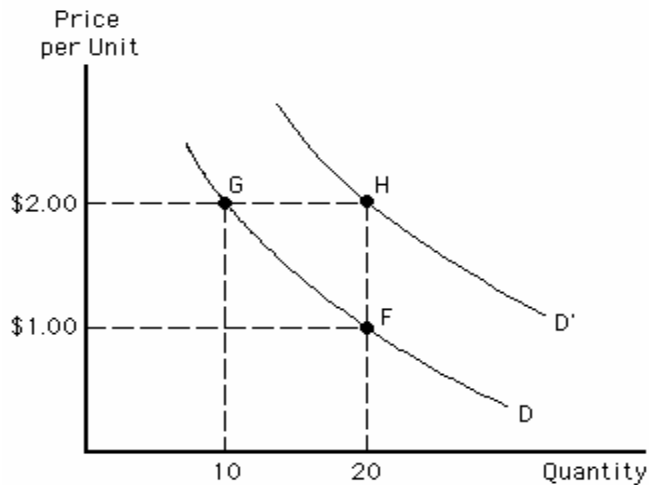
1. Print your name and student ID number at the top of this cover sheet.
2. Check that your exam contains 46 multiple choice questions and 1 short answer question
3. You will have one hour to complete the exam. You are responsible for keeping track of the time - pace yourself wisely.

Multiple choice questions 1-46 (2 points each)

1. A market is considered imperfectly competitive whenever(d)
 - a. the government intervenes to set a price floor
 - b. the government intervenes to set a price ceiling
 - c. supply and demand explain how prices are determined
 - d. a single buyer or seller has the power to affect the price of the product
 - e. supply and demand fail to establish an equilibrium
2. In a market system, prices are determined by(c)
 - a. corporate executives
 - b. government bureaucrats
 - c. supply and demand
 - d. total market demand
 - e. production costs
3. According to the law of demand, (c)
 - a. there is a positive relationship between quantity demanded and price
 - b. as the price rises, demand will shift to the left
 - c. there is a negative relationship between quantity demanded and price
 - d. as the price rises, demand will shift to the right
 - e. as the price rises, consumers switch their purchases to substitute goods
4. Each point along the market demand curve shows(d)
 - a. the quantity of the good that firms would be willing and able to supply at a specific price
 - b. the relationship between the price of the good and total quantity demanded at a series of prices
 - c. the opportunity cost of supplying a given quantity of goods to the market

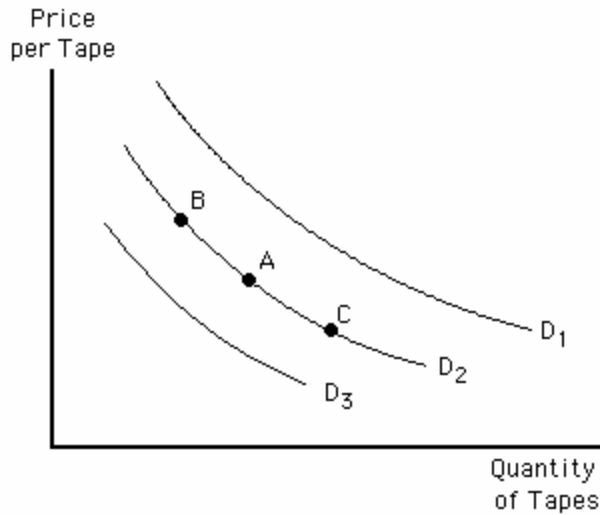
- d. the quantity of the good that consumers would be willing and able to purchase at a specific price
 - e. how population changes affect the quantity demanded at a specific price
5. A decrease in the price of a particular good, with all other variables constant, causes (d)
- a. a shift to a different demand schedule with higher quantities demanded
 - b. a shift to a different demand schedule with lower quantities demanded
 - c. a movement along a given demand curve to a lower quantity demanded
 - d. a movement along a given demand curve to a higher quantity demanded
 - e. no movement along a given demand curve unless supply also changes

Figure-1



6. Which of the following could explain a movement from point F to point G in Figure-1? Assume that the good represented is an inferior good. (d)
- a. all of the following are correct
 - b. an increase in buyers' incomes
 - c. a decrease in the expected future price of the good
 - d. an increase in the price of the good
 - e. an increase in the price of a complement
7. If automobiles are a normal good and the price of automobiles rises, then holding all else constant, the
- a. demand for automobiles will rise (b)
 - b. quantity demanded of automobiles will fall
 - c. demand for automobiles will fall
 - d. quantity demanded of automobiles will rise
 - e. supply of automobiles will fall

Figure-2



8. Suppose that initially the market for cassette tapes is at point A on demand curve D₁ in Figure -2. If the price of cassette tapes decreased, (c)

- a. the demand curve will shift to D₃
- b. the market will move to point B on demand curve D₁
- c. the market will move to point C on demand curve D₁
- d. there will be no change from point A
- e. the demand curve will shift to D₂

9. The demand curve for a product will shift rightward when the price of a substitute decreases. (b)

- a. True
- b. False

10. If the price of jelly (a complement with peanut butter) decreases, both the demand and supply curves of peanut butter will shift rightward. (b)

- a. True
- b. False

11. All of the following except one would increase the amount of a particular model of a Ford automobile that buyers would like to buy. Which is the exception? (e)

- a. an increase in buyers' incomes
- b. increased prices of other Ford models
- c. an expected future increase in the price
- d. an increase in the U.S. population
- e. a decrease in the price of steel

12. If the price of orange juice rises, the demand for grapefruit juice will (e)

- a. increase because the two goods are substitutes
- b. increase because it is a complement
- c. decrease because the two goods are substitutes

- d. decrease because the two goods are complements
- e. not change unless the price of grapefruit juice also changes

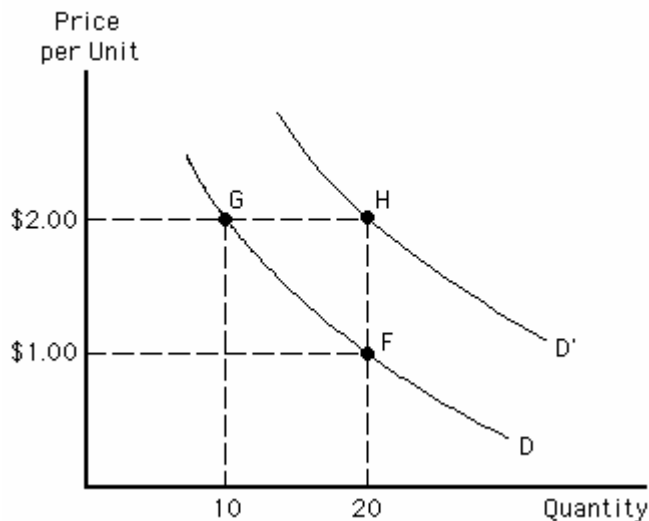
13. Which of the following would increase the amount of an inferior good that buyers would like to purchase? (d)

- a. an increase in buyers' incomes
- b. an increase in the price of a complement
- c. a decrease in the price of a substitute
- d. a decrease in buyers' incomes
- e. a decrease in its expected future price

14. Which of the following is assumed constant along the demand curve for gasoline?(c)

- a. the price of gasoline and the prices of related goods
- b. the price of gasoline, buyers' incomes, and tastes
- c. all variables affecting demand other than the price of gasoline
- d. all variables affecting demand other than the supply of gasoline
- e. buyers' incomes and tastes, but not the prices of related goods

Figure-3



15. In Figure -3, a movement from point G to point H would represent (a)

- a. a change in demand
- b. the impact of a decrease in the price of a substitute good
- c. higher prices for the inputs used to produce this product
- d. a change in demand plus a change in quantity demanded
- e. a change in quantity demanded

16. Betsy graduates from college, where she earned \$3,000 a year working part-time, and takes a job as a third grade teacher, where she now earns \$30,000 per year. After receiving her first paycheck, she gave away her bicycle and purchased a new car. Therefore, (c)

- a. bicycles are a normal good for Betsy

- b. automobiles are an inferior good for Betsy
- c. automobiles are a normal good for Betsy
- d. Betsy's supply curve for automobiles is upward-sloping
- e. bicycles and automobiles are complementary goods for Betsy

17. If buyers expect the price of a good to rise in the future, the result is (d)

- a. a decrease in supply today
- b. an increase in supply today
- c. a decrease in quantity demanded today
- d. an increase in demand today
- e. an increase in quantity demanded today

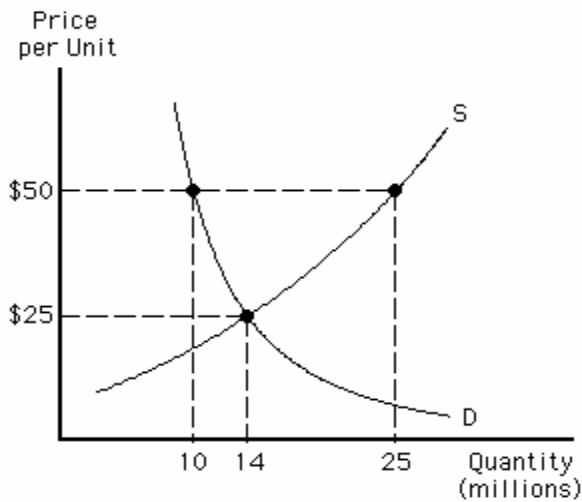
18. At a price of \$5.00 per doll, most stores cannot keep Beanie Baby dolls in stock because consumers buy them all as soon as shipments arrive. This implies that there(d)

- a. is an excess supply of Beanie Babies, and the price must fall for equilibrium to be reached
- b. will be a downward shift in the demand curve for Beanie Babies
- c. will be an upward shift in the supply curve for Beanie Babies
- d. is an excess demand for Beanie Babies, and the price must rise for equilibrium to be reached
- e. is an excess demand for Beanie Babies, and the price must fall for equilibrium to be reached

19. Procter & Gamble Co. is a major soap producer. All of the following, except one, would shift its supply curve of liquid soap inward. Which is the exception?(d)

- a. an increase in the price of bar soap
- b. an increase in the price of a key ingredient of liquid soap
- c. environmental regulations force Procter & Gamble to use a more costly technology to produce liquid soap
- d. a decrease in the price of liquid soap
- e. an increase in the wage rate for factory workers who produce liquid soap

Figure-4



20. Which of the following statements about the market represented by Figure-4 is correct? (c)

- a. at a price of \$50.00, there is an excess supply of 11 million units
- b. at a price of \$50.00, there is an excess demand of 11 million units
- c. at a price of \$50.00, there is an excess supply of 15 million units
- d. at a price of \$50.00, there is an excess demand of 15 million units
- e. at a price of \$50.00, there is an excess demand of 25 million units

21. Consider the market represented by Figure -4. If the price of the good is currently \$50.00, the price will (b)

- a. fall, causing the quantity demanded to fall
- b. fall, causing the quantity supplied to fall
- c. rise, causing the demand curve to shift to the right
- d. rise, causing the supply curve to shift to the left
- e. fall, causing the supply curve to shift to the right

22. An excess supply of rice in a competitive market would indicate that (e)

- a. the problem of scarcity has been solved in that market
- b. buyers want to purchase more rice at the current price than the sellers want to sell
- c. the market will not be able to approach equilibrium
- d. the entire supply curve must shift to the left in order to attain equilibrium
- e. the current price exceeds the equilibrium price

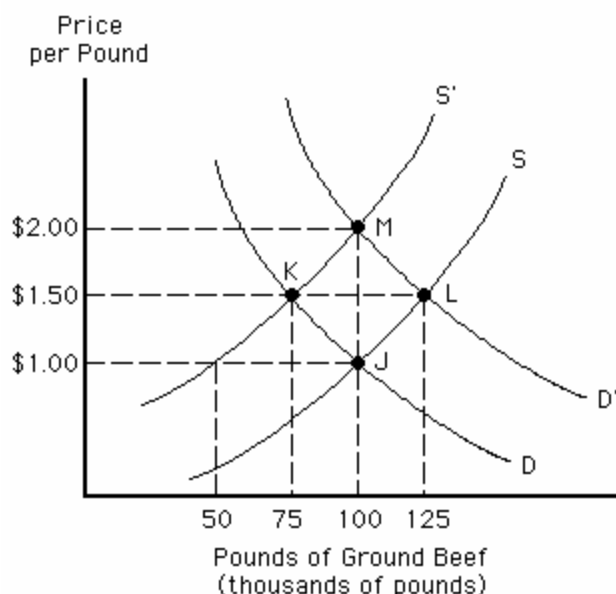
23. If both the demand and supply curves for computers shift to the right, the price of computers may rise, fall, or remain unchanged. (a)

- a. True
- b. False

24. If the demand for baseball cards rises and the supply curve does not shift, then the price (b)

- a. will rise and quantity will fall
- b. and quantity will rise
- c. will fall and quantity will rise
- d. and quantity will fall
- e. will rise, but quantity may rise or fall

Figure-5



25. Consider the market for ground beef represented by Figure -5, which is initially in equilibrium at point J. Assume that ground beef is an inferior good. Which of the following could explain a movement to a new equilibrium at point M? (d)

- a change in tastes away from hamburgers combined with an increased price for cattle feed
- an increase in buyers' incomes combined with a cost-saving technological improvement
- a decrease in the price of hot dogs combined with an increased price for labor
- a decrease in buyers' incomes combined with a decrease in the number of acres owned by cattle ranches
- a drop in the population combined with a increased price for an alternate form of packaged beef

26. Consider the market for ground beef represented by Figure -5, which is initially in equilibrium at point J. Which of the following is correct if equilibrium shifts to point K? (d)

- there is an excess supply of 50,000 pounds at the price of \$1.00
- the demand decreased due to a lower price substitute
- there is an excess demand of 25,000 pounds at the price of \$1.00
- the shift in supply will cause a temporary shortage, which will disappear when the price rises to \$1.50
- both demand and the quantity demanded have dropped

27. A government-imposed price ceiling below the market's equilibrium price will create an excess demand for the product. As a result of the excess demand, either the demand curve will tend to shift to the left or the supply curve will shift to the right-or both. (b)

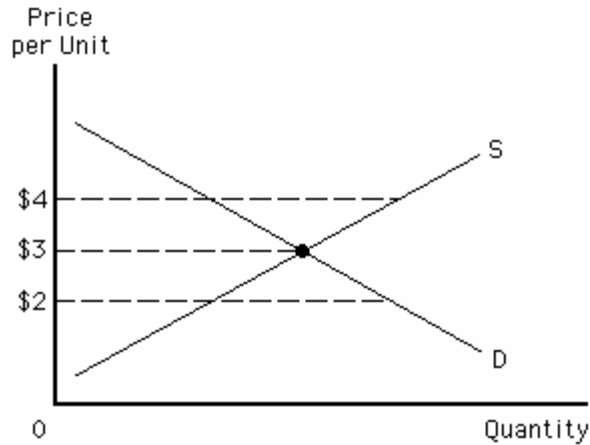
- True
- False

28. Price ceilings are primarily targeted to help _____, while price floors generally benefit _____.

- producers; no one (e)
- increase tax revenue for governments; producers

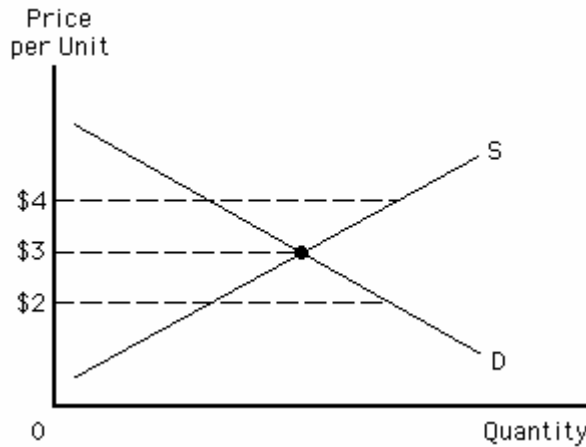
- c. increase tax revenue for governments; consumers
- d. producers; consumers
- e. consumers; producers

Figure-6



29. In Figure -6, if the government imposes a price ceiling of \$2, the result will be (d)
- a. equilibrium
 - b. excess supply
 - c. no different than before the price ceiling is imposed
 - d. excess demand
 - e. demand will shift leftward and supply will shift rightward
30. When the minimum wage is set above the equilibrium market wage, (c)
- a. there will be an excess demand for labor at the minimum wage
 - b. it will have no effect on the quantity of labor employed
 - c. the unemployment rate will rise
 - d. the quality of the labor force will rise
 - e. the unemployment rate will fall

Figure-7



31. In Figure-7, if the government imposes a price floor of \$2, the result will be (b)
- equilibrium
 - no different than before the minimum price is imposed
 - excess demand
 - demand will shift leftward
 - excess supply
32. In Figure -7, at a temporary price of \$4, (b)
- all of the following
 - a surplus occurs
 - the supply curve will shift backward
 - the demand curve will shift outward
 - equilibrium will eventually occur at approximately \$3.50
33. The price elasticity of demand measures the (c)
- responsiveness of a good's price to a change in quantity demanded
 - adaptability of suppliers when a change in demand alters the price of a good
 - responsiveness of quantity demanded to a change in a good's price
 - adaptability of buyers when there is a change in demand
 - responsiveness of quantity supplied to a change in quantity demanded
34. A price elasticity of demand of -2 for a specific cola means that if the price increases 1 percent, the quantity demanded of the cola will decrease by 2 percent. (a)
- True
 - False
35. If the price elasticity of demand for Cheer detergent is -3.0, then a (a)
- 12 percent drop in price leads to a 36 percent rise in the quantity demanded
 - 12 percent drop in price leads to a 4 percent rise in the quantity demanded
 - \$1,000 drop in price leads to a 3,000-unit rise in the quantity demanded
 - \$1,000 drop in price leads to a 333-unit rise in the quantity demanded
 - 12 percent rise in price leads to a 36 percent rise in the quantity demanded

36. In measuring the sensitivity of demand, the (d)

- a. price and income elasticities refer to movements along the demand curve; other elasticities refer to shifts of the entire demand curve
- b. price and cross-price elasticities analyze movements along the demand curve; other elasticities refer to shifts of the entire demand curve
- c. income and cross-price elasticities refer to movements along the demand curve; price elasticity refers to shifts of the entire demand curve
- d. price elasticity refers to movements along the demand curve; income and cross-price elasticities refer to shifts of the entire demand curve
- e. income elasticity refers to movements along the demand curve; other elasticities refer to shifts of the entire demand curve

37. Suppose that a local supermarket sells apples and oranges for 50 cents apiece, and at these prices is able to sell 100 apples and 200 oranges per week. One week, the supermarket lowered the price per apple to 40 cents and sold 120 apples. The next week, they lowered the price per orange to 40 cents (after raising the price per apple back to 50 cents) and sold 240 oranges. These results imply that the (e)

(note: please use starting value method here)

- a. price elasticity of apples is lower than the price elasticity of oranges
- b. price elasticity of apples is higher than the price elasticity of oranges
- c. demand for apples is more price sensitive than the demand for oranges
- d. demand for oranges is more price sensitive than the demand for apples
- e. price elasticities of demand for apples and oranges are the same over these price ranges

38. A \$1.00 increase in the price of a restaurant meal results in a drop in quantity demanded of 5 meals. Which of the following statements is correct? (a)

- a. the slope of the demand curve is $-1/5$; there is insufficient information to determine the price elasticity of demand
- b. the price elasticity of demand is $-1/5$; there is insufficient information to determine the slope of the demand curve
- c. both the slope of the demand curve and the price elasticity of demand are equal to $-1/5$
- d. there is insufficient information to determine either the slope of the demand curve or the price elasticity of demand
- e. the slope of the demand curve is $-1/5$; the price elasticity of demand is 5

39. If the price of a certain brand of sneakers falls from \$27.50 to \$22.50, and the quantity demanded by consumers increases from 15 to 25 pairs per week, then **using the midpoint formula**, the price elasticity of demand is (e)

- a. -0.25
- b. -1.00
- c. -2.75
- d. -1.50
- e. -2.50

40. If the demand curve is a straight line with a negative slope, then demand is more elastic at higher prices. (a)

- a. True
- b. False

41. Which of the following statements about straight-line demand curves is true? (b)

- a. the price elasticity of demand becomes larger in absolute value as price falls
- b. the price elasticity of demand becomes smaller in absolute value as price falls
- c. the price elasticity of demand is constant along the curve
- d. the price elasticity of demand and the slope of the demand curve are the same
- e. demand is price elastic everywhere along the curve

42. A local store noticed that when it increased the price of milk from \$2.50 per gallon to \$3.50 per gallon, it sold the same amount of milk per week (165 gallons). Since everything else remained the same, we would say the (c)

- a. demand for milk is perfectly elastic
- b. demand for milk is elastic
- c. demand for milk is perfectly inelastic
- d. demand for milk is unitary elastic
- e. law of supply does not apply in this situation

43. If the cross-price elasticity of demand between two goods is negative, then (a)

- a. the two goods are complements
- b. the two goods are substitutes
- c. as price of one good rises, the quantity demanded of the other good also rises
- d. one of the goods must be inferior
- e. the two goods are rarely used together by consumers

44. If a 5 percent increase in income leads to a 15 percent increase in the quantity demanded of a service, then the income elasticity of demand for that service equals 0.33. (b)

- a. True
- b. False

45. If the income elasticity of demand for a good is greater than 0 but less than 1.0, then the good is (b)

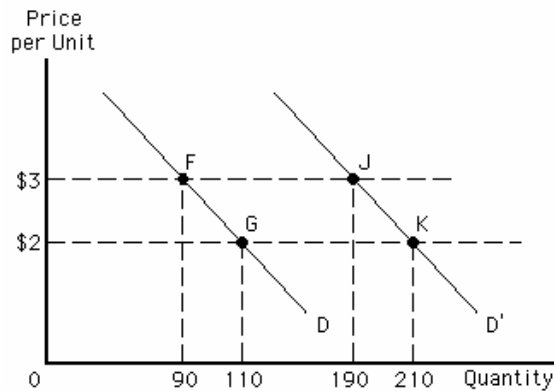
- a. an economic luxury
- b. an economic necessity
- c. one with relatively little demand
- d. provided by a monopoly producer
- e. provided by competitive producers

46. The cross-price elasticity of demand between Texaco gasoline and Mobil gasoline sold at the same intersection would be (a)

- a. positive
- b. negative
- c. 0
- d. 1.0
- e. infinity

Short answer questions

Figure-8



Note: using the mid-point method

1..Consider demand curve D in Figure -8. Between points F and G, the price elasticity of demand is? Show the steps in your calculating (4 points)

$$\text{the percentage change of quantity} = 2 \frac{(110-90)}{(110+90)}=0.2$$

$$\text{the percentage change of price} = 2 \cdot \frac{(2-3)}{(2+3)}= -0.4$$

$$\text{So, } E^D = 0.2/-0.4= - 0.5$$

2..In Figure -8, the income level at demand curve D is \$1,000 and the income level at demand curve D' is \$2,000. At price= \$2, computing the income elasticity(show the steps) (4 points)

$$\text{the percentage change of quantity} = 2 \cdot \frac{(210-110)}{(210+110)}= 5/8=0.625$$

$$\text{the percentage change of income} = 2 \cdot \frac{(2000-1000)}{(2000+1000)}=2/3=0.667$$

$$\text{So, } E^I = 0.625/0.667=0.9375$$