McMaster University Department of Economics

ECON 1B03 Midterm Test #1

VERSION 1

| Instructor: Professor H F | Holmes |
|---------------------------|--------|
| Duration: 2 hours | |
| Total Number of Pages: | 14 |

INSTRUCTIONS:

Answer all questions on the scan sheets. USE AN HB PENCIL ONLY. Make sure you carefully fill in the bubbles. YOU MUST FILL IN YOUR STUDENT NUMBER, VERSION NUMBER AND SECTION NUMBER ON THE SCAN SHEET OR YOUR GRADE WILL NOT BE RECORDED.

11:30-12:20

Wednesday Night

You may use the Casio FX calculator.

Hand in the scan sheet and this test copy.

TOTAL MARKS AVAILABLE: 50

SECTION: Circle One: 9:30-10:20

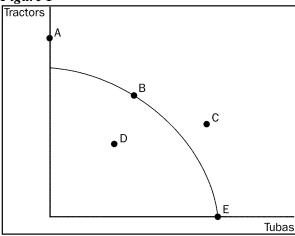
| NAME: | | | |
|--------------|------|------|------|
| STUDENT #: _ | | | |
| MUGSI ID: | | | |

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

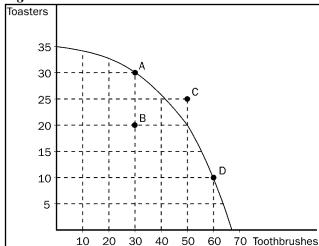
- 1. Any point on a country's production possibilities frontier represents a combination of two goods that an economy
 - a. will never be able to produce.
 - b. can produce using all available resources and technology.
 - c. can produce using some of its resources and technology.
 - d. may be able to produce sometime in the future with additional resources and technology.

Figure 1



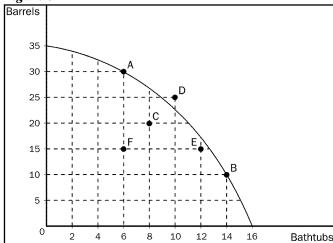
- 2. **Refer to Figure 1**. The economy CANNOT produce at which point or points?
 - a. A
 - b. C
 - c. A, C
 - d. A, C, D,

Figure 2



- 3. **Refer to Figure 2 on the previous page**. The opportunity cost of getting 1 additional toaster by moving from point D to point C is
 - a. 10 toothbrushes.
 - b. 7 toothbrushes.
 - c. 30 toothbrushes.
 - d. It is impossible for the economy to move from point D to point C.

Figure 3



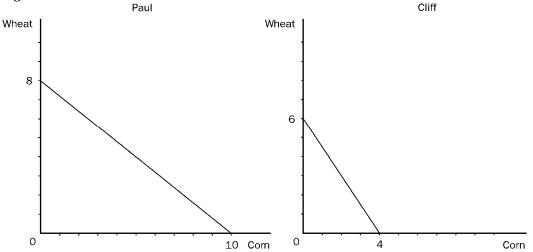
- 4. **Refer to Figure 3.** Which of the following combinations is impossible for this economy to produce?
 - a. 30 barrels and 6 bathtubs
 - b. 25 barrels and 12 bathtubs
 - c. 20 barrels and 8 bathtubs
 - d. 10 barrels and 14 bathtubs
- 5. Without trade
 - a. a country is better off because it will become self-sufficient.
 - b. a country's production possibilities frontier is also its consumption possibilities frontier.
 - c. a country can still benefit from international specialization.
 - d. more product variety is available in a country.
- 6. The difference between production possibilities frontiers that are bowed out and those that are linear is that
 - a. bowed out production possibilities frontiers illustrate tradeoffs where linear production possibilities frontiers do not.
 - b. bowed out production possibilities frontiers show increasing opportunity cost where linear ones show constant opportunity cost.
 - c. bowed out production possibilities frontiers are the result of perfectly shiftable resources where linear production possibilities frontiers are not.
 - d. linear production possibilities frontiers illustrate real world conditions more than bowed out production possibilities frontiers.

Table 1

| | Labor Hours N | Needed to Make 1 | | |
|---------|--|------------------|--------------|----------|
| | Pound of: Pounds produced in 40 hours: | | in 40 hours: | |
| | Meat | Potatoes | Meat | Potatoes |
| Farmer | 8 | 2 | 5 | 20 |
| Rancher | 4 | 5 | 10 | 8 |

- 7. **Refer to Table 1**. The opportunity cost of 1 pound of meat for the farmer is
 - a. 1/4 hour of labour.
 - b. 4 hours of labour.
 - c. 4 pounds of potatoes.
 - d. 1/4 pound of potatoes.
- 8. **Refer to Table 1**. The opportunity cost of 1 pound of potatoes for the farmer is
 - a. 8 hours of labour.
 - b. 2 hours of labour.
 - c. 4 pounds of meat.
 - d. 1/4 pound of meat.
- 9. **Refer to Table 1**. The Rancher has an absolute advantage in
 - a. both goods, and the Farmer has a comparative advantage in meat.
 - b. meat, and the Farmer has a comparative advantage in potatoes.
 - c. meat, and the Farmer has a comparative advantage in neither good.
 - d. both goods, and the Farmer has a comparative advantage in potatoes.

Figure 4



- 10. **Refer to Figure 4**. Assume that both Paul and Cliff divide their time equally between the production of corn and wheat, and they do not trade. If they were the only producers of corn and wheat, then total production of wheat and corn would be
 - a. 8 bushels of wheat and 7 bushels of corn.
 - b. 7 bushels of wheat and 6 bushels of corn.
 - c. 6 bushels of wheat and 8 bushels of corn.
 - d. 7 bushels of wheat and 7 bushels of corn.

- 11. **Refer to Figure 4**. Assume that Cliff and Paul were both producing wheat and corn, and each were dividing their time equally between the two. Then they decide to specialize in the product they have a comparative advantage in. As a result, total production of corn would
 - a. increase by 1 bushel.
 - b. increase by 3 bushels.
 - c. increase by 5 bushels.
 - d. decrease by 2 bushels.

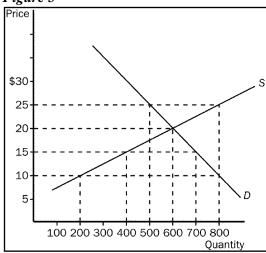
Table 2

| Labor Hours needed to make one unit of: | | | Amount pro | Amount produced in 160 hours: | | |
|---|--------|---------|------------|-------------------------------|--|--|
| | Quilts | Dresses | Quilts | Dresses | | |
| Helen | 40 | 10 | 4 | 16 | | |
| Carolyn | 80 | 16 | 2 | 10 | | |

- 12. **Refer to Table 2**. Helen has a comparative advantage in
 - a. quilts and Carolyn has an absolute advantage in neither good.
 - b. dresses and Carolyn has an absolute advantage in quilts.
 - c. quilts and Carolyn has an absolute advantage in dresses.
 - d. dresses and Carolyn has an absolute advantage in both goods.
- 13. Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, where Sandy can make 6 tables or 18 chairs. Given this, we know that
 - a. Mike has an absolute advantage in chairs.
 - b. Mike has a comparative advantage in tables.
 - c. Sandy has an absolute advantage in chairs.
 - d. Sandy has a comparative advantage in chairs.
- 14. You lose your job and as a result, you buy fewer mystery books. This shows that you consider mystery books to be a/an
 - a. normal good.
 - b. inferior good.
 - c. luxury good.
 - d. complementary good.
- 15. Suppose that a decrease in the price of X results in less of good Y sold. This would mean that X and Y are
 - a. complementary goods.
 - b. normal goods.
 - c. inferior goods.
 - d. substitute goods.
- 16. When we move up or down a given demand curve,
 - a. only price is held constant.
 - b. income and the price of the good are held constant.
 - c. all nonprice determinants of demand are assumed to be constant.
 - d. all determinants of quantity demanded are held constant.

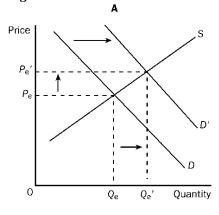
- 17. Which of the following cause and effect events is in order for a seller?
 - a. Technology improves, profit falls, the supply curve shifts left.
 - b. An input price falls, profit increases, the supply curve shifts right.
 - c. An input price rises, profit falls, the supply curve shifts right.
 - d. An input price rises, profit rises, the supply curve shifts left.

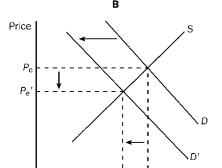
Figure 5



- 18. **Refer to Figure 5**. If the price is \$25, there would be a
 - a. surplus of 300 and price would fall.
 - b. surplus of 200 and price would fall.
 - c. shortage of 200 and price would rise.
 - d. shortage of 300 and price would rise.
- 19. Suppose roses are currently selling for \$40.00 per dozen. The equilibrium price of roses is \$30.00 per dozen. We would expect a
 - a. shortage to exist and the market price of roses to increase.
 - b. shortage to exist and the market price of roses to decrease.
 - c. surplus to exist and the market price of roses to increase.
 - d. surplus to exist and the market price of roses to decrease.

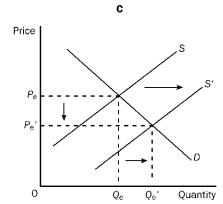
Figure 6

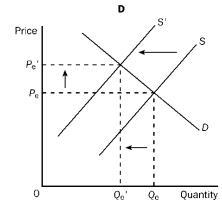




Qe'

Quantity





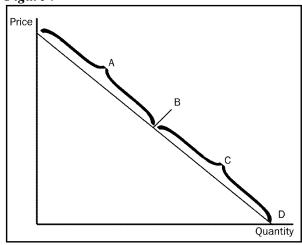
20. **Refer to Figure 6**. Which of the four graphs represents the market for peanut butter after a major hurricane hits the peanut-growing south?

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- a. A
- b. B
- c. C
- d. D
- 21. **Refer to Figure 6**. Which of the four graphs represents the market for pizza delivery in a college town in September?
 - a. A
 - b. B
 - c. C
 - d. D

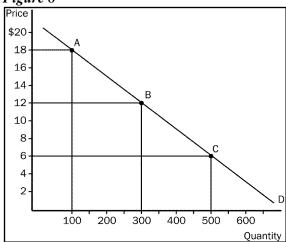
| 22. | Suppose that the number of buyers in a market increases and a technological advancement occurs. What would we expect to happen in the market? |
|---------|--|
| | a. The equilibrium price would increase, but the impact on the amount sold in the market |
| | would be ambiguous.b. The equilibrium price would decrease, but the impact on the amount sold in the market |
| | would be ambiguous.c. Equilibrium quantity would increase, but the impact on equilibrium price would be |
| | ambiguous. |
| | d. Both equilibrium price and equilibrium quantity would increase. |
| 23. | Suppose that demand decreases AND supply decreases. What would you expect to occur in the market for |
| | the good? a. Equilibrium price would increase, but the impact on equilibrium quantity would be |
| | ambiguous. |
| | b. Equilibrium price would decrease, but the impact on equilibrium quantity would be ambiguous. |
| | c. Equilibrium quantity would decrease, but the impact on equilibrium price would be |
| | ambiguous.d. Both equilibrium price and equilibrium quantity would increase. |
| | |
| 24. | Pens are normal goods. What will happen to the equilibrium price of pens if the price of pencils falls, consumers experience an increase in income, writing in ink becomes fashionable, people expect the price |
| | of pens to fall in the near future, the population increases, fewer firms manufacture pens, and the wages of |
| | pen-makers decrease? |
| | a. Price will rise.b. Price will fall. |
| | c. Price will stay exactly the same. |
| | d. The price change will be ambiguous. |
| 25. | If a person only occasionally enjoys a cup of coffee, his demand for coffee would be |
| | a. horizontal. |
| | b. inelastic. |
| | c. unit elastic.d. elastic. |
| | u. erasue. |
| 26. | |
| | to \$0.40, the quantity demanded increases to 600. Given this information and using the midpoint method, you know that the demand for bubble gum is |
| | a. inelastic. |
| | b. elastic. |
| | c. unit elastic. |
| | d. perfectly inelastic. |
| 27. | If the price elasticity of demand for a good is 4.0, then a 10 percent increase in price would result in a |
| | a. 4.0 percent decrease in the quantity demanded. |
| | b. 10 percent decrease in the quantity demanded.c. 40 percent decrease in the quantity demanded. |
| | d. 400 percent decrease in the quantity demanded.d. 400 percent decrease in the quantity demanded. |
| | I managed to the control of the cont |

Figure 7



- 28. **Refer to Figure 7**. The section of the demand curve labeled A represents the
 - a. elastic section of the demand curve.
 - b. inelastic section of the demand curve.
 - c. unit elastic section of the demand curve.
 - d. perfectly elastic section of the demand curve.

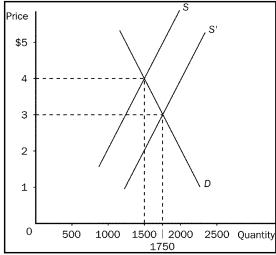
Figure 8



- 29. **Refer to Figure 8**. If the price decreased from \$18 to \$6, what would happen to total revenue?
 - a. Total revenue would increase by \$1200 and demand would be elastic.
 - b. Total revenue would increase by \$800 and demand would be elastic.
 - c. Total revenue would decrease by \$1200 and demand would be inelastic.
 - d. Total revenue would decrease by \$800 and demand would be inelastic.

- ____ 30. Last year, Joan bought 50 pounds of hamburger when the household income was \$40,000. This year, the household income was only \$30,000 and Joan bought 60 pounds of hamburger. All else constant Joan's income elasticity of demand for hamburger is
 - a. positive, so Joan considers hamburger to be an inferior good.
 - b. positive, so Joan considers hamburger to be a normal good and a necessity.
 - c. negative, so Joan considers hamburger to be an inferior good.
 - d. negative, so Joan considers hamburger to be a normal good.
 - 31. If the cross-price elasticity of two goods is negative, then those two goods are
 - a. substitutes.
 - b. complements.
 - c. normal goods.
 - d. inferior goods.
 - 32. Holding all else constant, if a pencil manufacturer increases production by 20 percent when the market price of pencils increases from \$0.50 to \$0.60, then the price elasticity of supply, using the midpoint method, must be
 - a. elastic, since elasticity is equal to 1.11.
 - b. inelastic, since elasticity is equal to 1.11.
 - c. inelastic, since elasticity is equal to .90.
 - d. elastic, since elasticity is equal to .90.

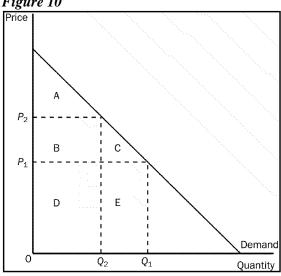
Figure 9



- 33. **Refer to Figure 9**. When a new, more productive strawberry was developed which caused supply to increase, strawberry farmers were
 - a. helped, since although price fell, total revenue increased, due to an inelastic demand curve.
 - b. hurt, since both price and total revenue fell due to an elastic demand curve.
 - c. hurt, since both price and total revenue fell due to an inelastic demand curve.
 - d. helped, since although price fell, total revenue increased, due to an elastic demand curve.

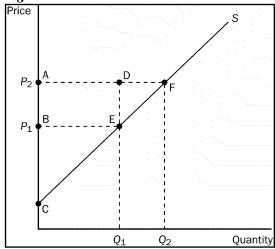
- 34. Consumer surplus is
 - a. a buyer's willingness to pay minus the price.
 - b. a buyer's willingness to pay plus the price.
 - c. the price of the product minus the buyer's willingness to pay.
 - d. when the buyer's willingness to pay and the price of the product are equal.
- If the cost of producing sofas decreases, consumer surplus will
 - a. increase, then decrease.
 - b. decrease.
 - c. remain constant.
 - d. increase.

Figure 10



- 36. **Refer to Figure 10**. When the price is P_1 , consumer surplus is
 - a. A
 - b. A + B
 - c. A + B + C
 - d. A + B + D
- 37. **Refer to Figure 10**. Area C represents
 - the decrease in consumer surplus that results from a downward-sloping demand curve.
 - consumer surplus to new consumers who enter the market when the price falls from P_2 to P_1 .
 - c. an increase in producer surplus when quantity sold increases from Q_2 to Q_1 .
 - d. a decrease in consumer surplus to each consumer in the market.

Figure 11



- 38. **Refer to Figure 11**. When the price rises from P_1 to P_2 , which area represents the increase in producer surplus to existing producers?
 - a. BCE
 - b. ACF
 - c. ABED
 - d. DEF
 - e. AFEB
- 39. The Surgeon General announces that eating chocolate increases tooth decay. As a result, the equilibrium market price of chocolate
 - a. increases, and producer surplus increases.
 - b. increases, and producer surplus decreases.
 - c. decreases, and producer surplus decreases.
 - d. decreases, and producer surplus increases.
- 40. At Nick's Bakery, the cost to make his homemade chocolate cake is \$3 per cake. He sells three and receives a total of \$21 worth of producer surplus. Nick must be selling his cakes for
 - a. \$2 each.
 - b. \$7 each.
 - c. \$8 each.
 - d. \$10 each.
- 41. Economists view positive statements as
 - a. affirmative, justifying existing economic policy.
 - b. optimistic, putting the best possible interpretation on things.
 - c. descriptive, making a claim about how the world is.
 - d. prescriptive, making a claim about how the world ought to be.

| 42. | Which of the following is an example of a no | ormati | ve statement? |
|---------|--|---------|--|
| | a. If the price of a product decreases, quant | ity der | manded increases. |
| | b. Reducing tax rates on the wealthy would | | |
| | c. If the national saving rate were to increas | se, so | would the rate of economic growth. |
| | d. All of the above are correct. | | |
| 43. | Market demand and supply are given as Qd | = 1000 | 0 - 5P and $Qs = 4P - 80$ respectively. Equilibrium |
| | price and quantity traded are | | |
| | a. \$100; 500 | c. | \$120; 400 |
| | b. \$400; 120 | d. | \$100; 320 |
| 44. | Market demand and supply are given as Qd | = 1000 | 0 - 5P and $Qs = 4P - 80$ respectively. At equilibrium |
| | producer surplus is | | |
| | a. \$16,000 | | \$24,000 |
| | b. \$20,000 | d. | \$48,000 |
| 45. | Market demand and supply are given as Qd | = 1000 | 0 - 5P and $Qs = 4P - 80$ respectively. If $P = 100$, |
| | a. the market is in equilibrium. | | there is a shortage of 180 units. |
| | b. there is a surplus of 180 units. | d. | none of the above. |
| 46. | Market demand and supply are given as Qd | = 1000 | 0 - 5P and $Qs = 4P - 80$ respectively. At $P = 100$, |
| | a. demand is elastic. | c. | demand is unit elastic. |
| | b. demand is inelastic. | d. | demand is perfectly inelastic. |
| 47. | Market demand and supply are given as Qd | = 1000 | 0 - 5P and $Qs = 4P - 80$ respectively. If $P = 100$, |
| | consumer surplus is | | |
| | a. \$21,760 | c. | \$20,000 |
| | b. \$16,000 | d. | \$36,000 |
| 48. | | = 1000 | 0 - 5P and $Qs = 4P - 80$ respectively. Compared to |
| | equilibrium, at a price level of \$100, | | |
| | a. total surplus is higher by \$1440 | c. | the same since we are in equilibrium when $P = !00$ |
| | b. total surplus is lower by \$1440 | d. | not enough information to determine. |
| 49. | Trade is based on | | |
| - 1 | a. absolute advantage. | | |
| | b. comparative advantage. | | |
| | c. production costs. | | |
| | d. relative dollar prices. | | |
| | | | |

- 50. Suppose that a worker in Radioland can produce either 4 radios or 1 television per year, and a worker in Teeveeland can produce either 2 radios or 4 televisions per year. Each nation has 100 workers. Also suppose that each country completely specializes in producing the good for which it has a comparative advantage. If Radioland trades 100 radios to Teeveeland in exchange for 100 televisions each year, then each country's maximum consumption of new radios and televisions per year will be
 - a. 300 televisions and 100 radios in Radioland and 300 radios and 100 televisions in Teeveeland.
 - b. 300 televisions and 100 radios in Teeveeland and 300 radios and 100 televisions in Radioland.
 - c. 100 televisions and 200 radios in Radioland and 100 radios and 200 televisions in Teeveeland.
 - d. 400 televisions and 100 radios in Teeveeland and 400 radios and 100 televisions in Radioland.
 - 51. What NFL team does Aaron Rodgers play for?

a. Cowboys

c. Steelers

b. Colts

d. Packers