ECO1104 [redacted] MIDTERM #1

[redacted]

Instructor: Professor Jeffrey Peter

[redacted]

NAME_____

STUDENT NUMBER_____

INSTRUCTIONS:

There are two (2) sections to this midterm. Section A is multiple choice worth 30 marks. Fill-in your answers on the sheet provided. Section B is short answer and is worth 20 marks. Answer in the space provided.

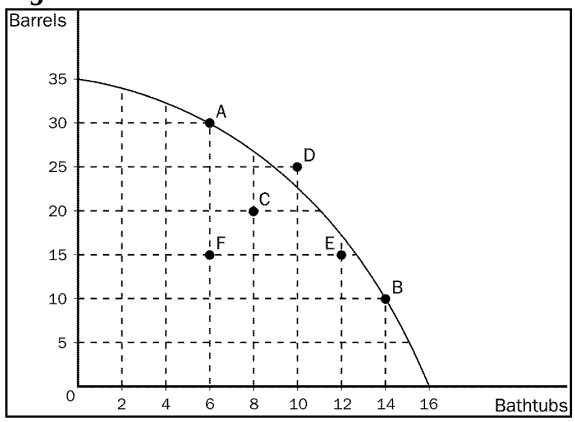
GOOD LUCK!

SECTION A: Multiple Choice

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

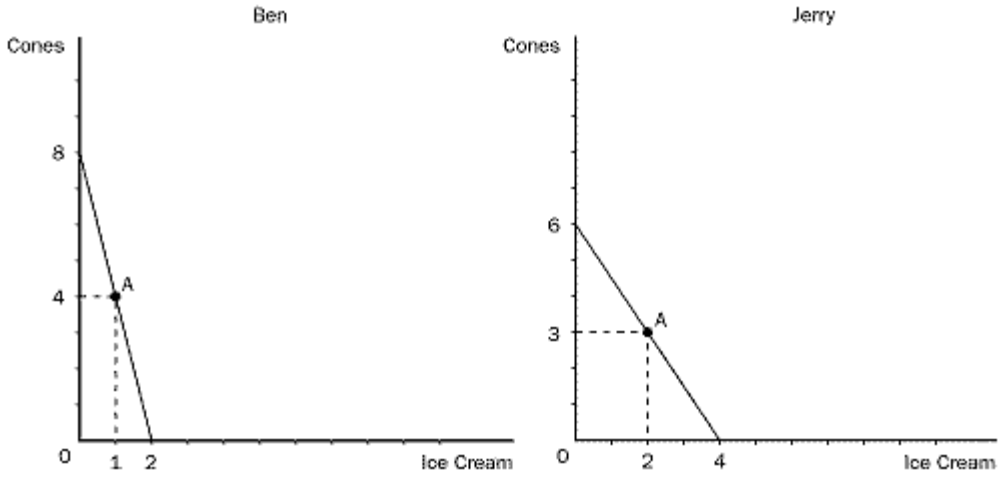
1. A good is considered scarce in a society when
   a. more output of the good is possible.
   b. everyone in that society cannot have all they want of the good.
   c. the government restricts production of the good.
   d. only the richest people in the economy can buy all they want of the good.
2. The adage, "There is no such thing as a free lunch," means
   a. even people on welfare have to pay for food.
   b. the cost of living is always increasing.
   c. to get something we like, we usually have to give up another thing we like.
   d. all costs are included in the price of a product.
3. Which of the following is true?
   a. Efficiency refers to the size of the economic pie; equity refers to how the pie is divided.
   b. Fortunately, government policies are designed to promote both equity and efficiency.
   c. As long as the economic pie continually gets larger, no one will have to go hungry.
   d. Efficiency and equity can both be achieved if the economic pie is cut into equal pieces.
4. Causes of market failure include
   a. externalities and market power.
   b. market power and incorrect forecasts of consumer demand.
   c. externalities and foreign competition.
   d. incorrect forecasts of consumer demand and foreign competition.
5. Which of the following is the most correct statement about the relationship between inflation and unemployment?
   a. In the short run, reducing inflation is associated with falling unemployment.
   b. In the short run, reducing inflation is associated with rising unemployment.
   c. In the long run, reducing inflation is associated with falling unemployment.
   d. In the long run, reducing inflation is associated with rising unemployment.
6. 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.

Figure 2-1



7. **Refer to Figure 2-1.** An efficient combination of bathtubs and barrels would be
   a. 30 barrels and 6 bathtubs.
   b. 20 barrels and 8 bathtubs.
   c. 25 barrels and 12 bathtubs.
   d. 15 barrels and 12 bathtubs.
8. **Refer to Figure 2-1.**. 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
9. With trade a
   a. country is worse off because it becomes dependent on other countries.
   b. country will produce a greater variety of goods and services to trade.
   c. country's consumption possibilities frontier can be outside its production possibilities frontier.
   d. country will experience a lower unemployment rate.

Figure 3-1



10. **Refer to Figure 3-1**. Ben has an absolute advantage in
    a. ice cream and Jerry has an absolute advantage in cones.
    b. cones and Jerry has an absolute advantage in ice cream.
    c. neither good and Jerry has an absolute advantage in both goods.
    d. both goods and Jerry has an absolute advantage in neither good.
11. **Refer to Figure 3-1**. Ben and Jerry were currently both producing at point A on their production possibilities frontier and then Ben decided he would be willing to trade 4 pounds of cones to get 2 pounds of ice cream from Jerry. If both decided to specialize in what they had a comparative advantage in and trade, the gains from trade would be
    a. 1 pound of cones for Ben and 1 pound of ice cream for Jerry.
    b. 1 pound of ice cream for Ben and 1 pound of cones for Jerry.
    c. 2 pounds of ice cream for Ben and 2 pounds of cones for Jerry.
    d. 2 pounds of ice cream for Ben and 1 pound of cones for Jerry.

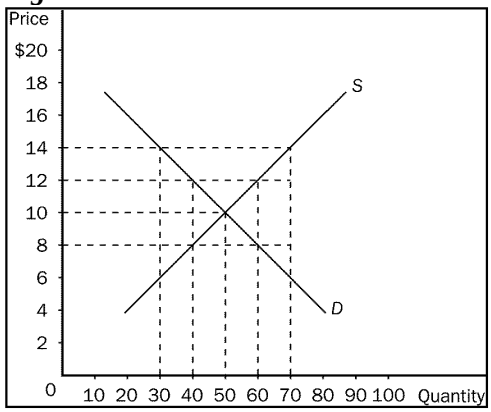
Table 3-2

	Labor Hours Needed to Make One Unit of:		Amount Produced in 24 Hours:	
	Baskets	Birdhouses	Baskets	Birdhouses
Montana	6	2	4	12
Missouri	3	4	8	6

12. **Refer to Table 3-2**. The opportunity cost of 1 basket for Montana is
    a. 1/3 birdhouse.
    b. 1 birdhouse.
    c. 3 birdhouses.
    d. 4 birdhouses.
13. **Refer to Table 3-2**. The opportunity cost of 1 basket for Missouri is
    a. 1/4 birdhouse.
    b. 3/4 birdhouse.
    c. 1 birdhouse.
    d. 4/3 birdhouses.

14. **Refer to Table 3-2**. Montana has an absolute advantage in
    a. birdhouses and Missouri has an absolute advantage in baskets.
    b. baskets and Missouri has an absolute advantage in birdhouses.
    c. neither good and Missouri has an absolute advantage in both goods.
    d. both goods and Missouri has an absolute advantage in neither good.
15. **Refer to Table 3-2**. If Montana and Missouri trade based on the principle of comparative advantage, Montana will export
    a. baskets and Missouri will export birdhouses.
    b. birdhouses and Missouri will export baskets.
    c. neither good and Missouri will export both goods.
    d. both goods and Missouri will export neither good.
16. In a competitive market, each seller has limited control over the price of his product because
    a. other sellers are offering similar products.
    b. in competitive markets, buyers have more influence over price than sellers.
    c. the products sold in competitive markets are generally in abundant supply.
    d. sellers in competitive markets prefer to meet and set a price that each will profit from.
17. The amount of the good buyers are willing and able to purchase is the
    a. demand.
    b. quantity supplied.
    c. quantity demanded.
    d. supply.
18. If Francis receives a decrease in his pay, we would expect
    a. Francis's demand for each good he purchases to remain unchanged.
    b. Francis's demand for normal goods to increase.
    c. Francis's demand for luxury goods to increase.
    d. Francis's demand for inferior goods to increase.

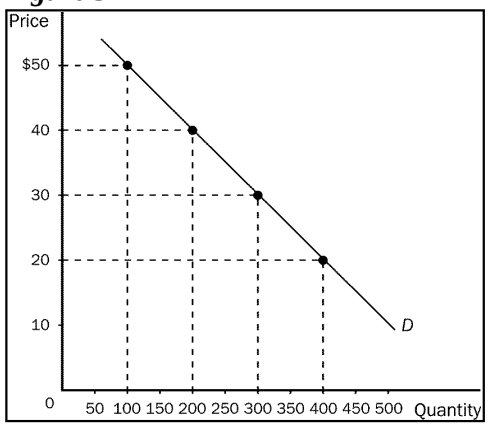
Figure 4-1



19. **Refer to Figure 4-1**. If price in this market is currently $14, there would be a
    a. shortage of 20 units and price would tend to rise.
    b. surplus of 20 units and price would tend to fall.
    c. shortage of 40 units and price would tend to rise.
    d. surplus of 40 units and price would tend to fall.
20. Demand is said to be inelastic if
    a. the quantity demanded changes only slightly when the price of the good changes.
    b. demand shifts only slightly when the price of the good changes.
    c. buyers respond substantially to changes in the price of the good.
    d. the price of the good responds only slightly to changes in demand.

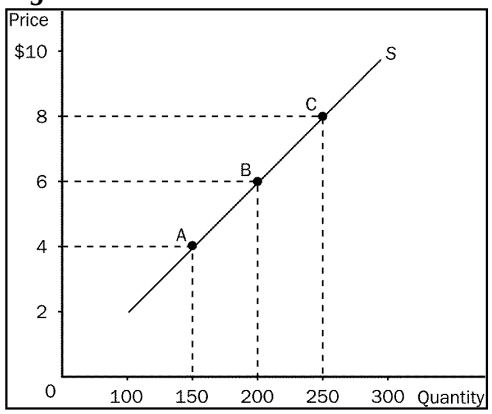
21. If a good is a luxury, demand for the good would tend to be
    a. inelastic.
    b. elastic.
    c. unit elastic.
    d. horizontal.
22. When the price of bubble gum is $0.50, the quantity demanded is 400 packs per day. When the price falls to $0.40, the quantity demanded increases to 600. Given 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.

Figure 5-1



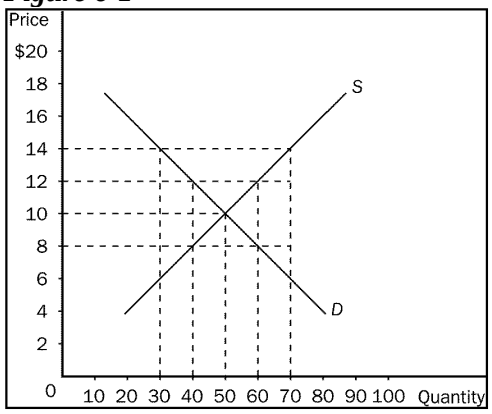
23. **Refer to Figure 5-1**. Total revenue at a price of $30 would be
    a. $9,000.
    b. $7,000.
    c. $5,000.
    d. $3,000.
24. **Refer to Figure 5-1**. When price falls from point $40 to $30 we know that demand must be
    a. elastic, since total revenue increases from $8000 to $9000.
    b. inelastic, since total revenue increases from $8000 to $9000.
    c. inelastic, since total revenue decreases from $9000 to $8000.
    d. unit elastic, since total revenue decreases from $9000 to $8000.
25. Income elasticity of demand measures how
    a. the quantity demanded changes as consumer income changes.
    b. consumer purchasing power is affected by a change in the price of a good.
    c. the price of a good is affected when there is a change in consumer income.
    d. many units of a good a consumer can buy given a certain income level.

Figure 5-2



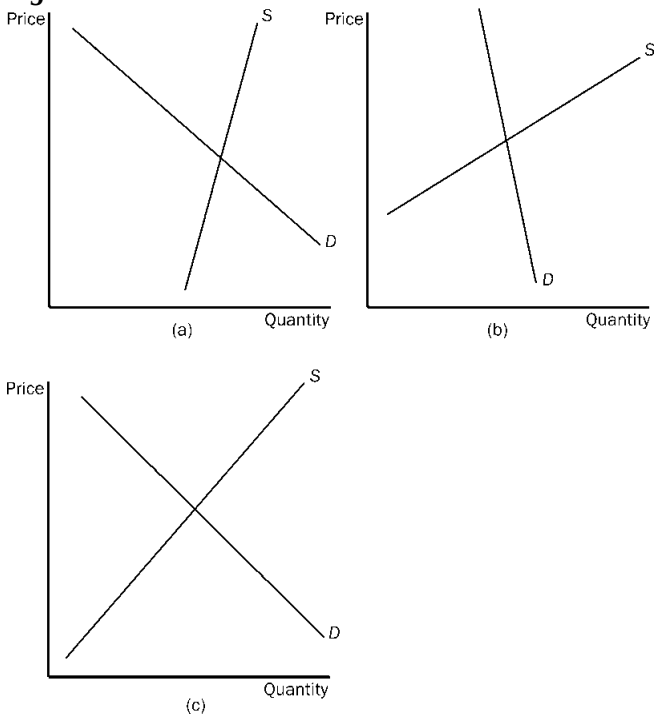
26. **Refer to Figure 5-2**. The elasticity of supply from point A to point C, using the midpoint method would be approximately
    a. 2.67.
    b. 1.33.
    c. 0.75.
    d. 0.375.

Figure 6-1



27. **Refer to Figure 6-1**. A binding price floor would exist at
    a. a price of $10.00.
    b. a price of $8.00.
    c. any price above $10.00.
    d. any price below $10.00.
28. Other than OPEC, the shortage of gasoline in the U.S. in the 1970s could also be blamed on
    a. a sharp increase in the demand for gasoline needed for the Vietnam war.
    b. government regulations in the form of a price ceiling.
    c. an indifference among U.S. consumers toward conservation.
    d. the lack of alternative sources of crude oil.
29. A tax placed on kite buyers will shift
    a. supply upward, causing equilibrium price to rise and equilibrium quantity to fall.
    b. demand upward, causing both equilibrium price and quantity to rise.
    c. supply downward, causing equilibrium price to fall and equilibrium quantity to rise.
    d. demand downward, causing both equilibrium price and quantity to fall.

Figure 6-2



30. **Refer to Figure 6-2**. In which market will the majority of a tax be paid by the buyer?
    a. market (a)
    b. market (b)
    c. market (c)
    d. All of the above are correct.

SECTION B: Short Answer

There are two (2) questions in this section. Answer both of the following questions in the space provided at the end of the exam booklet. Each question is worth 10 marks. Be sure to answer all parts of the questions and label your answers clearly.

Q1:

(a) State and briefly describe two (2) variables that can shift the supply curve. [3 marks]

(b) State the formula for calculating the cross-price elasticity of demand. How do we know if two goods are substitutes or compliments? [2 marks]

(c) Suppose there is an increase in the income of consumers and there is a decrease in the price of rubber. What effect do these changes have on equilibrium price and quantity in the market for shoes? Assume shoes are a normal good. Be sure to explicitly state the steps to analyze these changes and graph the changes in the market for shoes. [3 marks]

(d) Suppose the demand schedule (Q^D) and supply schedule (Q^S) can be represented by the following equations:

$Q^D = 1000 - 100P$
$Q^S = 660 + 400P$

Solve for the equilibrium price and quantity in this market. [2 marks]

Q2: Solve the following problem. (Note that Q_D^1 and Q_S^1 are the initial quantity demanded and quantity supplied.)

Market for Lemons

Price	Quantity Demanded (Q_D^1)	Quantity Supplied (Q_S^1)	Q_S^2	Q_D^2
$1.00	1800	0	0	1500
$1.50	1650	150	0	1350
$2.00	1500	300	0	1200
$2.50	1350	450	150	1050
$3.00	1200	600	300	900
$3.50	1050	750	450	750
$4.00	900	900	600	600
$4.50	750	1050	750	450
$5.00	600	1200	900	300
$5.50	450	1350	1050	150
$6.00	300	1500	1200	0
$6.50	150	1650	1350	0
$7.00	0	1800	1500	0

(a) What is the initial equilibrium price (P_1^*) and quantity (Q_1^*)? [1 mark]

(b) Suppose that the provincial government imposes a $1.00 per unit tax on the sellers of lemons.

(i) Does the tax shift the demand schedule, the supply schedule or both? [1 mark]

(ii) What is the equilibrium price and quantity with the tax? [1 mark]

(iii) How much of the $1.00 tax is borne by the sellers? [1 mark]
How much is borne by the buyers? [1 mark]

(c) Clearly label a graph that illustrates the old and new equilibrium. Be sure to indicate the direction of the shift and the prices after the tax. [2 mark]

(d) The provincial government now decides that instead of the tax (they remove the tax on lemons); there will be a price ceiling of $3.00 in the market for lemons.

(i) What will the price (P) of lemons be in the market? [1 mark]

(ii) What will be the quantity supplied (Q_S)? [0.5 mark]

(iii) What will be the quantity demanded (Q_D)? [0.5 mark]

(iv) Will there be a surplus, shortage or just enough lemons? [1 mark]

NAME: _____ STUDENT NUMBER: _____

Use the following pages to answer the questions from section B. Clearly label your answers. If you need more space for your answers, additional sheets will be provided. You may use the backs of the pages for rough work and calculations.

NAME: _____ STUDENT NUMBER: _____

NAME: _____ STUDENT NUMBER: _____