NAME _____

THE UNIVERSITY OF WESTERN ONTARIO
LONDON CANADA

E. Rivers **ECONOMICS 1021B-001** **February 12, 2012**

MIDTERM #1

INSTRUCTIONS:

1. You will have **2 hours** to complete the exam.

2. Check that your examination contains 15 pages.

3. Use a **BLACK PENCIL** to complete your Scantron Form.

    i. Print your **NAME** and complete your **SIGNATURE**

    ii. Enter your **STUDENT NUMBER**

    iii. Enter your **SECTION NUMBER** – 001

    iv. Ensure that the **VERSION CODE** on your question packet matches the version code on your Scantron Form.

    In order to get credit for a question, you must record the correct answer on your Scantron Form. No credit will be given for answers recorded in your question packet.

4. You may have pencils, erasers, your student card, and a *non-graphing, non-programmable* calculator at your desk. All other items must be left in your bag at the front of the examination room.

5. Please ensure that all electronic devices (cell phones, laptops, etc.) are turned off before storing them in your bag at the front of the examination room.

6. There are no washroom breaks allowed during the test.

7. **WHEN YOU HAVE FINISHED, PLEASE HAND IN ALL EXAM MATERIALS (YOUR SCANTRON FORM, YOUR QUESTION PACKET, AND ALL SCRAP PAPER YOU HAVE BEEN PROVIDED).**

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) If Harold must decrease production of some other good to increase production of good *X*, then Harold
A) is producing outside his production possibilities frontier.
B) is producing on his production possibilities frontier.
C) has too few capital goods.
D) must prefer good X to any other good.
E) is producing inside his production possibilities frontier.

2) Which one of the following concepts is *not* illustrated by a production possibilities frontier?
A) monetary exchange
B) scarcity
C) attainable and unattainable points
D) opportunity cost
E) the tradeoff between producing one good versus another

Use the table below to answer the following questions.

Table 1
Production Possibilities

Possibility	Kilograms of Butter	Guns
A	8	0
B	6	1
C	0	3

3) Refer to Table 1. In moving from combination *B* to combination *C*, the opportunity cost of producing *one* additional unit of guns is
A) 3 kilograms of butter.
B) 2 kilograms of butter.
C) 6 kilograms of butter.
D) 1/2 kilogram of butter.
E) 1/6 kilogram of butter.

4) Refer to Table 1. According to this production possibilities frontier,
A) a combination of 0 butter and 4 guns is attainable.
B) resources are equally useful in all activities.
C) the opportunity cost of producing guns increases as more guns are produced.
D) the opportunity cost of producing guns decreases as more guns are produced.
E) a combination of 6 kilograms of butter and 1 gun leaves some resources unused.

5) Complete the following sentence. Marginal cost
A) is the opportunity cost of producing one more unit of a good or service.
B) is always greater than marginal benefit.
C) is unrelated to the production possibilities frontier.
D) remains constant.
E) always equals marginal benefit.

6) Which of the following is true regarding marginal benefit?
I. The marginal benefit curve shows the benefit firms receive by producing another unit of a good.
II. Marginal benefit increases as more and more of a good is consumed.
III. Marginal benefit is the maximum amount a person is willing to pay to obtain one more unit of a good.
A) I and III.
B) III only.
C) I, II, and III.
D) I and II.
E) I only.

7) In general, if country *A* is accumulating capital at a faster rate than country *B*, then country *A*
A) is using a larger proportion of resources to produce consumption goods.
B) will have more unemployment than country *B*.
C) will have a higher rate of inflation than country *B*.
D) will soon have a comparative advantage in the production of most goods.
E) will have a production possibilities frontier that is shifting out faster than country *B*'s.

Use the information below to answer the following questions.

Fact 1

In an eight-hour day, Andy can produce either 24 loaves of bread or 8 kilograms of butter. In an eight-hour day, Rolfe can produce either 8 loaves of bread or 8 kilograms of butter.

8) Refer to Fact 1. The opportunity cost of producing 1 kilogram of butter is
A) 3 loaves of bread for Andy and 1 loaf of bread for Rolfe.
B) 3 loaves of bread for Andy and 1/3 loaf of bread for Rolfe.
C) 1 hour for Andy and 1 hour for Rolfe.
D) 20 minutes (1/3 hour) for Andy and 1 hour for Rolfe.
E) 8 loaves of bread for Rolfe and 24 loaves of bread for Andy.

9) Refer to Fact 1. Which one of the following statements is true?
A) Andy has a comparative advantage in butter production.
B) Andy has an absolute advantage in butter production.
C) Rolfe has an absolute advantage in butter production.
D) Andy has a comparative advantage in bread production.
E) Rolfe has a comparative advantage in bread production.

10) A market where no single buyer or seller can influence the price is
A) a competitive market.
B) a buyer's market.
C) a seller's market.
D) an input market.
E) an output market.

Use the table below to answer the following question.

Table 2

Year	Coffee Price	Tea Price	Cola Price
2007	$1.25	$1.10	$0.80
2008	$1.50	$1.00	$1.00
2009	$1.25	$1.20	$1.00

11) Refer to Table 2. In 2007, the relative price of coffee in terms of tea is
A) 1.10. B) 1.25. C) 0.88. D) 1.00. E) 1.14.

12) Which one of the following events shifts the demand curve for grape jelly to the right?
A) a decrease in the price of strawberry preserves, a substitute for grape jelly
B) an increase in the price of peanut butter, a complement of grape jelly
C) an increase in income if grape jelly is a normal good
D) a decrease in the population
E) a decrease in the price of grape jelly

13) Suppose income increases. Choose the correct statement.
A) The equilibrium price of turnips falls if a turnip is an inferior good.
B) The equilibrium price of turnips rises if a turnip is an inferior good.
C) The equilibrium quantity of turnips decreases if a turnip is an inferior good.
D) The supply of turnips decreases whether or not a turnip is an inferior good.
E) Both A and C.

Use the figure below to answer the following question.

Figure 1

14) Point *A* in Figure 1 indicates that
A) if the price is $1, consumers will plan to buy 4,000 apples.
B) consumers will only pay $1 for any apple.
C) consumers will not be in equilibrium if the price of an apple is $1.
D) $1 is the least that consumers are willing to pay for the 4,000th apple.
E) if the price is more than $1, consumers will buy 9,000 apples.

15) An increase in supply is shown by
A) a rightward shift of the supply curve.
B) a movement up along the supply curve.
C) an initial movement up and then down along the same supply curve.
D) a leftward shift of the supply curve.
E) a movement down along the supply curve.

Use the figure below to answer the following question.

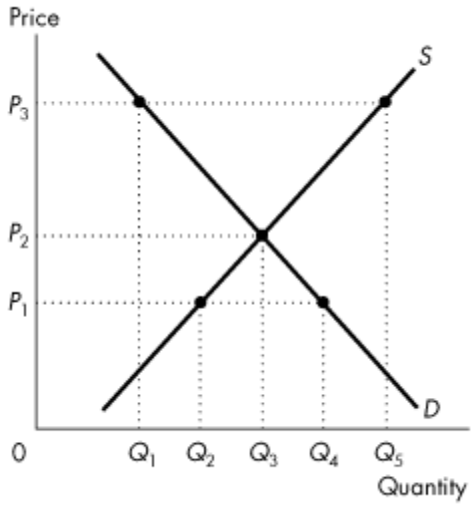

Figure 2

16) At price $P3$ in Figure 2,
A) equilibrium quantity is $Q5$.
B) there is a surplus in the amount of $Q5$ - $Q1$.
C) there is a shortage in the amount of $Q5$ - $Q1$.
D) there is a tendency for the price to rise.
E) this market is in equilibrium.

17) Which one of the following correctly describes how price adjustment eliminates a surplus?
A) As the price rises, the quantity demanded increases and the quantity supplied decreases.
B) As the price falls, the quantity demanded decreases and the quantity supplied increases.
C) As the price rises, the quantity demanded decreases and the quantity supplied increases.
D) As the price falls, the quantity demanded increases and the quantity supplied decreases.
E) As the price falls, the demand for substitutes decreases, which eliminates the surplus.

18) Suppose we observe a rise in the price of good *A* and a decrease in the quantity of good *A* bought and sold. Which one of the following is a likely explanation?
A) The supply of *A* increased.
B) The law of supply is violated.
C) The demand for *A* decreased.
D) The demand for *A* increased.
E) The supply of *A* decreased.

19) Crude oil is a very important factor of production used in the production of gasoline. If the price of crude oil rises, we would expect the
A) equilibrium quantity of gasoline to rise due to an increase in demand.
B) price of gasoline to fall due to an increase in demand.
C) price of gasoline to rise due to a decrease in supply.
D) equilibrium quantity of gasoline to fall due to an increase in supply.
E) price of gasoline to rise due to an increase in demand.

20) If a 10 percent rise in price leads to an 8 percent decrease in quantity demanded, the price elasticity of demand is
A) 80. B) 8. C) 0.125. D) 1.25. E) 0.8.

21) A fall in the price of a good from $10.50 to $9.50 results in an increase in the quantity demanded from 18,800 to 21,200 units. The price elasticity of demand is
A) 1.2. B) 2.4. C) 1.25. D) 0.8. E) 8.0.

22) If a rise in price results in a decrease in total revenue, then the price elasticity of demand is
A) equal to 1.
B) greater than 1.
C) negative.
D) zero.
E) greater than zero but less than 1.

Use the figure below to answer the following question.

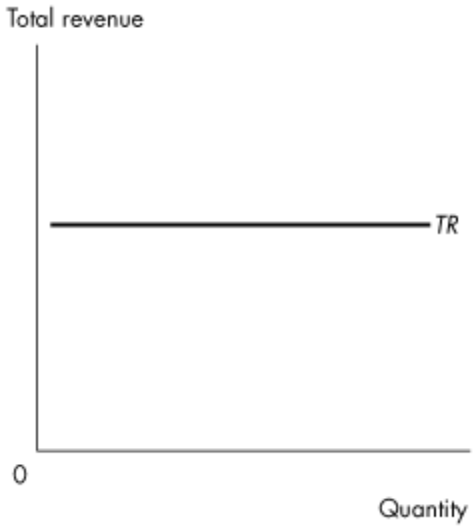

Figure 3

23) Given the relationship shown in Figure 3 between total revenue from the sale of a good and the quantity of the good sold, then
A) this is an inferior good.
B) demand for this good is perfectly elastic.
C) the price elasticity of demand is zero.
D) the price elasticity of demand is 1.
E) this is a normal good.

24) Business people speak about income elasticity of demand without using the actual term. Which one of the following statements reflects income elasticity of demand?
A) "I don't think a price cut will make any difference to my bottom line. What I may gain from selling more I would lose on the lower price."
B) "My customers are real bargain hunters. Since I set my prices just a few cents below my competitors, customers have flocked to the store and sales are booming."
C) "With the recent economic recovery, people have more income to spend and sales are booming, even at the previous prices."
D) "A price cut won't help me. It won't increase sales, and I'll just get less money for each unit."
E) both A and B

25) A vertical supply curve
A) implies an elasticity of supply equal to infinity.
B) indicates that suppliers are unwilling to produce the good.
C) implies an elasticity of supply equal to zero.
D) is impossible except in the long run.
E) indicates a shortage of the good.

Use the figure below to answer the following question.

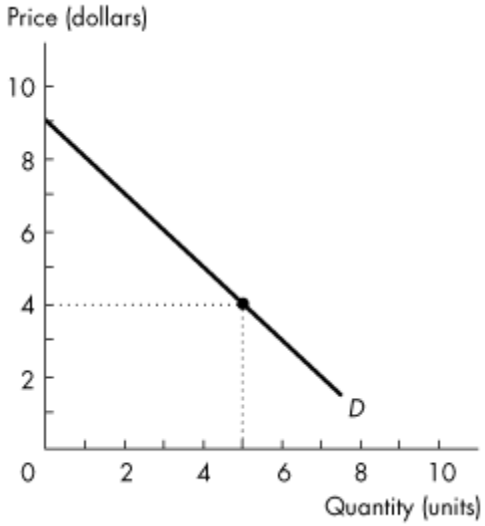

Figure 4

26) Consider the demand curve in Figure 4. If the price of the good is $4, what is the consumer surplus?
A) $25.00
B) $32.50
C) $20.00
D) $12.50
E) none of the above

Use the figure below to answer the following questions.

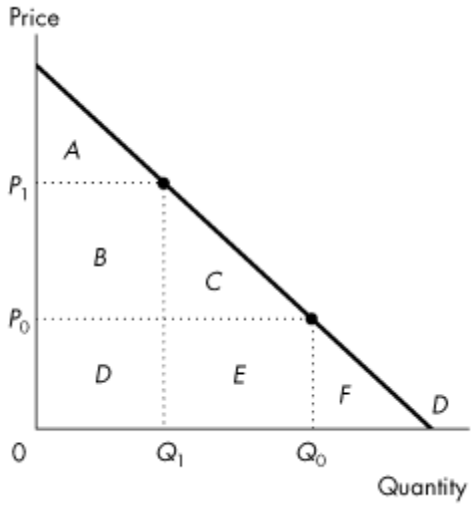

Figure 5

27) Refer to Figure 5. If the price is *P0*, then the value of the last unit consumed is
A) *P1*.
B) equal to area *A* + *B* + *C*.
C) 0.
D) *P0* .
E) *P1*- *P0* .

28) Refer to Figure 5. If the price rises from P_0 to P_1, the *change* in consumer surplus is
A) *A*.
B) *B* plus *C*.
C) *A* plus *B* plus *C*.
D) *D* plus *E*.
E) *A* plus *B* plus *C* plus *D* plus *E*.

29) A market supply curve is
A) downward sloping.
B) is represented by a line with a constant slope.
C) is downward sloping initially, and then upward sloping.
D) the vertical sum of the individual supply curves.
E) the horizontal sum of the individual supply curves.

Use the table below to answer the following question.

Table 3

Quantity (units)	Marginal Cost (dollars)
1	2
2	3
3	4
4	5

30) Refer to Table 3. If the price is $6 a unit, the producer surplus on the *third* unit is
A) $3. B) $5. C) $2. D) $6. E) $4.

Use the figure below to answer the following questions.

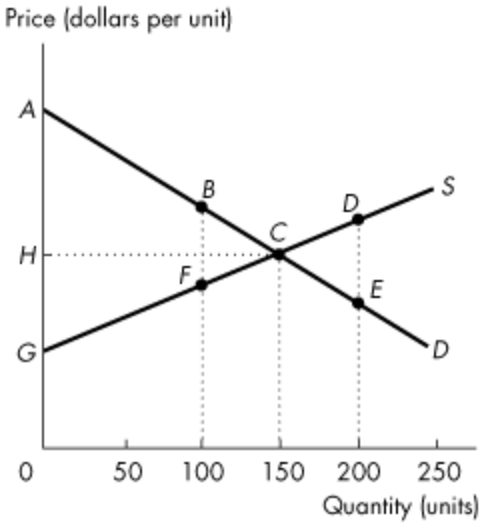

Figure 6

31) Refer to Figure 6. If the level of output is 150 units, the producer surplus is area
A) *ACH*. B) *BCF*. C) *HCG*. D) *ACG*. E) *DCE*.

32) Refer to Figure 6. If the level of output is 100 units, the deadweight loss is area
A) *ACH*. B) *HCG*. C) *ACG*. D) *BCF*. E) *DCE*.

33) If the government imposes a maximum rent for housing that is above the equilibrium price, then you predict that
A) the law will have no effect in the market for housing.
B) the supply curve for housing shifts leftward.
C) the demand curve for housing shifts rightward.
D) the law will generate a shortage of housing.
E) the law will create a surplus of housing.

Use the figure below to answer the following question.

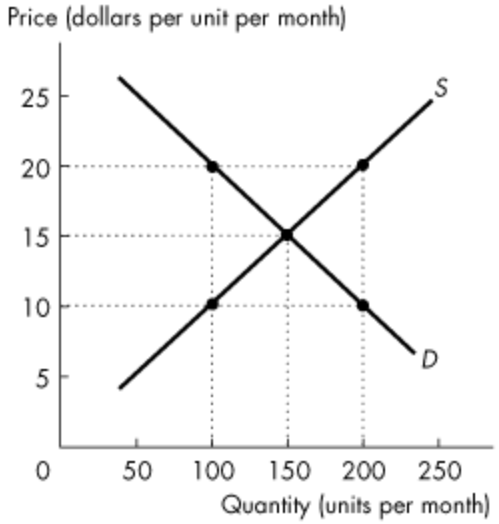

Figure 7

34) Refer to Figure 7. If a rigorously enforced price ceiling is set at $10, then
A) 100 units will be sold at a price of $15 each.
B) 100 units will be sold at a price of $10 each.
C) 200 units will be sold at a price of $10 each.
D) 150 units will be sold at a price of $15 each.
E) 100 units will be sold at a price of $20 each.

35) When rent is not permitted to allocate scarce housing, what other mechanisms are available?
A) first-come, first-served
B) a lottery
C) discrimination
D) both A and B are correct
E) A, B and C are correct

Use the table below to answer the following question.

Table 4

Wage Rate (dollars per hour)	Quantity Supplied (millions of hours)	Quantity Demanded (millions of hours)
7	60	30
6	50	40
5	40	50
4	30	60
3	20	70

36) Refer to Table 4. What is the level of unemployment in millions of hours if the minimum wage is set at $7 per hour?
A) 40 B) zero C) 20 D) 10 E) 30

Use the figure below to answer the following questions.

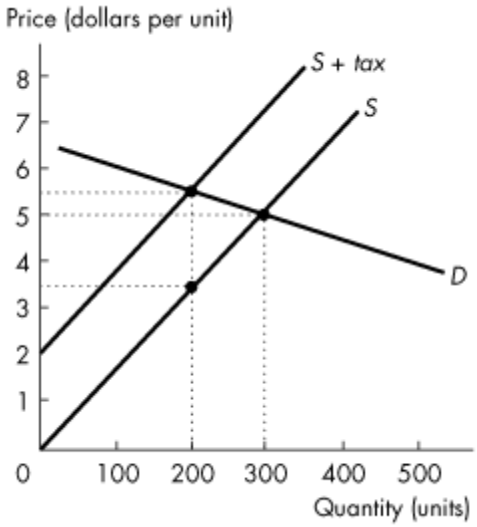

Figure 8

37) Refer to Figure 8. The amount of the tax per unit is
A) $1.00. B) $2.00. C) $0.50. D) zero. E) $1.50.

38) Refer to Figure 8. The buyers' share of the tax is
A) $1.50. B) $2.00. C) zero. D) $1.00. E) $0.50.

39) Refer to Figure 8. Government revenue from the tax is
A) $300. B) $400. C) $600. D) $100. E) zero.

40) Refer to Figure 8. The deadweight loss from the sales tax is
A) $50. B) $150. C) $1,000. D) $100. E) $200.

41) A subsidy is a
A) tax imposed by the government on imported goods.
B) payment made by the government to a producer.
C) payment made by a consumer to a producer.
D) payment made by foreign governments to domestic farmers.
E) tax imposed by the government on a producer.

42) A production quota
A) is efficient because it results in underproduction.
B) is inefficient because it results in underproduction.
C) is inefficient because it results in overproduction.
D) is efficient for quantities below the equilibrium quantity and is inefficient for quantities above the equilibrium quantity.
E) is efficient because it results in overproduction.

43) If enforcement is aimed at sellers of an illegal good, the
A) price and quantity bought decrease.
B) price change is uncertain and quantity bought decreases.
C) price falls and quantity bought increases.
D) price and quantity bought increase.
E) price rises and quantity bought decreases.

44) If enforcement is aimed at buyers of an illegal good, the
A) price change is uncertain and quantity bought decreases.
B) price and quantity bought increase.
C) price falls and quantity bought increases.
D) price and quantity bought decrease.
E) price rises and quantity bought decreases.

45) Diminishing marginal utility means that
A) the utility from eating two hamburgers will be more than twice the utility from eating the first one.
B) Ralph will enjoy his second hamburger less than the first one.
C) hamburgers seem smaller as you eat more of them.
D) the utility from one hamburger is greater than the utility from two hamburgers.
E) the price of two hamburgers is less than twice the price of one.

Use the table below to answer the following question.

Table 5

Quantity	Total Utility	Marginal Utility
0	0	
		30
1	30	
		12
2	*A*	
		5
3	*B*	
		C
4	50	

46) Refer to Table 5. The value of *B* is
A) 42. B) 30. C) 0. D) 47. E) 18.

47) Total utility equals
A) the marginal utility of the last unit divided by price.
B) the sum of the marginal utilities of each unit consumed.
C) the marginal utility of the last unit consumed multiplied by the total number of units consumed.
D) the area below the demand curve but above the market price.
E) the slope of the marginal utility curve.

48) Sarah can consume either pizzas or hamburgers. The price of a hamburger is $1 and the price of a pizza is $5. Let MU_h be the marginal utility of hamburgers and MU_p be the marginal utility of pizzas. In consumer equilibrium, what must the ratio MU_h/MU_p equal?
A) 1/6. B) 5/1. C) 1/5. D) 1/1. E) 4.

Use the table below to answer the following question.

Table 6

Hours Spent	Total Utility from Sailing	Total Utility from Skiing
1	100	70
2	140	110
3	170	140
4	190	150

49) Refer to Table 6. Consider Sam's utility from sailing and skiing. The price of sailing is $10 per hour and the price of skiing is $20 per hour; Sam's income to spend on these activities is $80. In consumer equilibrium, Sam will sail for
A) 4 hours.
B) 8 hours.
C) 2 hours and ski for 4 hours.
D) 3 hours and ski for 2 hours.
E) 4 hours and ski for 2 hours.

Use the table below to answer the following question.

Table 7

Bags of Popcorn	Marginal Utility	Bottles of Pop	Marginal Utility
1	120	1	120
2	100	2	70
3	80	3	60
4	70	4	40

50) Refer to Table 7. What is the total utility if 3 bags of popcorn and 2 bottles of pop are consumed?
A) 310 B) 660 C) 100. D) 150 E) 490

Answer Key
Testname: 1021B001MT1FEB12

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