## Microeconomics, Spring 2009, Exam 3

Student: $\qquad$
On your Scantron card, place:

1) your name,
2) the time and day your class meets,
3) the number of your test (it is found written in ink--the upper right-hand corner of this first page). Also, please note:
Some questions will include words such as: (Repeat your answer on Scantron lines 31 and 32.) If so, fill in the answer on those additional separate lines on the Scantron card. Warning: You must turn in both your Scantron card and your test when you are finished. Otherwise you receive an "F" for the exam.
1. (Repeat answer on Scantron line 27.) Suppose John has chosen a combination of two goods, $X$ and $Y$, such that MU/P of good X is .8 and the MU/P of good Y is .7. To increase utility with the same amount of money Paul should:
A. increase the number of $Y$ consumed.
B. increase the number of X consumed.
C. increase the number of $X$ and $Y$ consumed.
D. do nothing. He cannot increase total utility.
2. (Repeat answer on Scantron line 28.) If the market quantity goes up and the market price goes down, you can be pretty sure
A. that demand went up.
B. that demand went down.
C. that supply went up.
D. that supply went down.
E. that neither supply nor demand changed.
3. (Repeat answer on Scantron lines 29 and 30.) In capitalism, compared to mercantilism:
A. craft guilds rather than merchants own capital.
B. the "invisible hand" is more important than the government.
C. industrialists' views are represented by craft guild organizations.
D. the state plays a more active role in coordinating economic activity.
E. two of the other answers are correct.
4. (Repeat answer on Scantron line 31.) Consider each of the following statements about taxes. 1) If the buyer sends the tax proceeds to the government, the market price of the good (dollar per unit passing from buyer to seller) will be higher than if the seller sends tax to the government.
2) If you want a tax to be "efficient" (as discussed in lecture), pick a market in which both supply and demand are as inelastic as possible.
3) In lecture we have said that if you wish the sellers to bear the burden of a tax, it is important to be sure that the seller, not the buyer, collects the tax revenue and sends it to the government.

Then choose which of the following is most accurate:
A. Only 1 and 3 are true.
B. Only 2 is true.
C. Only 2 and 3 are true.
D. Only 1 and 2 are true.
E. Only 1 is true.
5. (Repeat answer on Scantron lines 32 and 33.) Consider each of the following statements about international economics.

1) Based on what was said in lecture, if a small country trades with a large country, the small country will capture a larger share of the Pareto gains from trade than the large country, because prices change more in the small country.
2) Even if a country is experiencing Pareto gains from international trade, this does not mean that everyone in that country is in fact benefiting from the international trade.
3) If some event occurs which causes no changes except that Joe gains $\$ 100$, Fred loses $\$ 50$ and Suzy loses $\$ 40$, then an economist would say the event has created a Pareto gain even though more people have lost than have gained.

Now select the best answer.
A. None of the statements 1,2 or 3 are true.
B. All of statements 1,2 and 3 are true.
C. Only 2 is true.
D. Only 3 is true.
E. Only 2 and 3 are true.
6. (Repeat your answer on Scantron line 34.) Consider each of the following statements about international economics.

1) The exchange rate will tend to equal the trade currency ratios of internationally traded goods.
2) The foreign exchange markets exist because international exporters and importers wish to specialize in either exporting or importing, but not both.
3) If the exchange rate is not equal to the trade-currency ratios for the internationally traded goods, this kind of disequilibrium is eliminated very quickly, within a few weeks at most.
A. Only statements 1 and 2 are true.
B. Statements 1, 2 and 3 all are true.
C. Only statements 1 and 3 are true.
D. Only statements 2 and 3 are true.
E. Only statement 1 is true.
7. (Repeat your answer on Scantron lines 35 and 36.) By the definition given in lecture, a model is
A. an abstract representation of reality.
B. logical structure and collection of ideas for thinking about a problem or answering a question
C. not the best model for a situation unless it is the most accurate model available.
D. best if it is as realistic as possible.
E. no other answer is the best one.
8. If the income elasticity of demand for a good is less than zero, the good is:
A. A luxury good.
B. A normal good.
C. A Giffin good.
D. A good of low quality.
E. An inferior good.
9. (Repeat your answer on Scantron line 37.) Suppose the data shows that if the price of a product rises $10 \%$ then supply rises $10 \%$ and demand falls $20 \%$. Choose the most complete answer.
A. Then the own price elasticity of supply is 1 .
B. Then the own price elasticity of demand is 2 (technically -2 ).
C. Then the own price elasticity of demand is $-1 / 2$.
D. Then own price elasticity of supply is 1 and own price elasticity of demand is 2 (technically -2 ).
E. Then own price elasticity of supply is 1 and own price elasticity of demand is $-1 / 2$
10. (Repeat your answer on Scantron line 38.) You are studying a "well-run firm" which produces electric motors. You know the price of rotors is $\$ 2$ per rotor, and the marginal product of rotors is 1 motor per rotor. You also know the firm uses electricians, and the salary of electricians is $\$ 20$ per hour. What is the marginal product of electricians in this firm?
A. 5
B. 10
C. 15
D. 20
E. none of the above.
11. Evaluate the following statement: Any change in consumption may be analyzed as the combination of an income effect and/or a substitution effect. However, if dingbats are large in the consumer's budget and the price of dingbats goes up, this creates a substitution effect but not an income effect.
A. The first sentence is true but the second is false.
B. The first sentence is false but the second is true.
C. Both sentences are true.
D. Both sentences are false.
12. (Repeat your answer on Scantron line 39.) Decide which of the following statements are definitely true or false and then choose the best answer from among A) through E) below. The Fundamental Theorem of Welfare Economics tells us that:
1) Only a fundamentally fair economic system will be politically and economically stable.
2) If certain somewhat technical conditions are valid, economic systems will be maximally efficient if all markets are competitive and the problems of externalities and public goods have been properly dealt with. 3) As a practical matter, no economic system can hope to be efficient unless government takes an active role in managing the complexities of the modern economy.
3) Welfare is maximized, in the Pareto sense, by appropriate welfare programs which are best undertaken by the federal and local governments rather than by the state governments.
Choose the best answer:
A. All statements 1, 2, 3 and 4 are true.
B. Only statements 2 and 3 are true.
C. Only statements 1 and 2 are true.
D. Only statements 3 and 4 are ture.
E. Only statement 2 is true.
13. Since both supply curves and demand curves tend to be less elastic in the short run than in the long run: 1) The burden of a tax tends to fall more heavily on the buyers in the short run but shift more onto the sellers in the long run.
2) The burden of a tax tends to fall more heavily on the sellers in the short run but shift more onto the buyers in the long run.
3) The tax is definitely more efficient in the long run than the short run.
4) The tax is definitely more efficient in the short run than the long run.
5) A given tax will definitely raise more tax revenue in the short run than the long run.
6) A given tax will definitely raise more tax revenue in the long run than the short run.

Choose the best answer:
A. Statement 1 is definitely true.
B. Statement 2 is definitely true.
C. Statements 4 and 5 are true, and neither 1 nor 2 are true.
D. Statements 3 and 6 are true, and neither 1 nor 2 are true.
E. Statements 1, 3 and 6 are true.
14.


Reference: Diagram SR vx LR ATC

Refer to the graph above. If the firm originally set itself up to produce 300 and now desires to expand its output to 600 units, it will
A. use the short run curve represented by SATC2 at first, but eventually (in the long run) start using SATC3 as the short run curve.
B. use the short run curve represented by SATC 2 both at first and after the long run completion of the expansion.
C. use the short run curve represented by SATC3 both at first and after the long run completion of the expansion.
D. use the short run curve represented by SATC1 at first, but eventually (in the long run) start using SATC2 as the short run curve.
E. use some other short run curve, not shown, rather than use SATC1, SATC2, SATC3 or SATC4.
15. (Repeat your answer on Scantron line 40.) A firm has average variable costs of $\$ 60$ per unit, average fixed costs of $\$ 40$ per unit and can sell its output at $\$ 50$ per unit.
A. the firm should keep operating in the short run.
B. the firm should shut down in the short run.
C. the firm needs to increase output.
D. two of the other answers are correct.
E. no other answer is correct.
16. (Repeat answer on Scantron line 41.) Evaluate the following statements and then choose from A) through E)

1) The Wealth of Nations was written by Milton Freidman.
2) The Wealth of Nations was written by John Maynard Keynes.
3) The Wealth of Nations was published just after the Great Depression.
4) Adam Smith is a famous economist who wrote in the mid 1800's.
A. None of statements $1,2,3$ or 4 are true.
B. Statements 2 and 3 are true.
C. Statement 4 is the only statement which is true.
D. Only statement 1 is true.
E. Only statement 3 is true.

## 17. Current prices in two countries, Rahrah and Goofonia

(The money of Goofonia is called the goofus, and the money of Rahrah is called the rah. Prices in each country are expressed in its local currency.)

|  | Good 1 | Good 2 | Good 3 | Good 4 |
| :--- | :---: | :---: | :---: | :---: |
| Rahrah prices (in rahs) | 40 | 20 | 4 | 2 |
| Goofonia prices (in goofuses) | 40 | 20 | 4 | 6 |

Repeat your answer on Scantron line 42.) The numbers in the table represent current prices of four goods in two different nations, Rahrah and Goofonia. Each price is expressed in the local currency of that country, which is the "rah" in Rahrah and the "goofus" in Goofonia. These two countries have never traded with each other, but now they begin to trade. There are no barriers to trade, no transport costs and no tariffs. Here are several statements which may or may not be true. Decide about each statement and then select the best answer below.

1) All goods will begin to be traded, but only good 4 will be traded from Rahrah to Goofonia.
2) The first good to be traded from Goofonia to Rahrah definitely will be good 3, followed later by goods 1 and 2.
3) The final trade-currency conversion ratio in rahs/goofuses (after trade has built up to the equilibrium level) will definitely be somewhere between $1 / 3$ and 1 .
4) Goods 1, 2 and 3 will definitely be exported by Goofonia.
A. Only statement 1 is correct.
B. Only statements 1 and 4 are correct.
C. Statements 1,3 and 4 are correct.
D. Only statements 1 and 4 are correct.
E. Only statement 2 is correct.
18. (Repeat your answer on Scantron line 43.) A firm produces and sells a particular good. The firm discovers the own price elasticity of demand for its good is $\boldsymbol{-} \mathbf{2 5}$. Decide which of the following statements are correct and then choose the best answer from A) through E) below:
1) Revenue will rise as price falls.
2) This situation will not last very long, because the firm can make more profit by raising its price, which it will keep doing again and again until demand becomes elastic. (I sometimes call this "Andron's Law".)
3) Revenue will fall as price falls.
4) Revenue will fall as price rises.
5) Revenue will rise as price rises.
A. Statements 1, 4 and 5 are true.
B. Only Statements 2, 3 and 5 are true.
C. Only Statements 3 and 5 are true.
D. Only Statements 1 and 4 are true.
E. Only Statement 2 is true.
19. (Repeat your answer on Scantron line 44.) The government is considering imposing a tax on the market for Squidges and asks you whether the buyers or the sellers are going to pay a larger share of the burden of this new tax. Here is the only data you have: if the price of Squidges rises $10 \%$, the quantity supplied rises $10 \%$ and quantity demanded falls $20 \%$. Choose the most complete answer.
A. Then sellers will bear more of the burden than buyers.
B. Then buyers will bear more of the burden than sellers.
C. Then buyers and sellers will share the burden equally.
D. Since we have not been told who will be "paying" the tax, we cannot say who will bear the burden.
E. There will be no burden of this tax, since neither supply nor demand are "elastic".
20. (Repeat your answer on Scantron line 45.) Evaluate each of the following statements having to do with the international foreign exchange markets, then select the best answer from the lettered choices below. 1) Without the foreign exchange markets (by which citizens all over the world acquire the foreign money they need for purchases of the goods of foreign nations) international trade would not be possible.
2) The exchange rates in the international foreign exchange markets tend to equal the trade currency ratios of internationally traded goods, but can deviate from those ratios for extended periods of time.
A. Only statement 1 is true.
B. Only statement 2 is true.
C. Both statements 1 and 2 are true.
D. Neither statement 1 nor 2 is true.
21. 


(Repeat your answer on Scantron line 46.) In Figure X, this monopolist will

1) produce output "f".
2) produce output "g".
3) produce output "h".
4) use short run average cost curve "a".
5) use short run average cost curve "c".
6) use short run average cost curve "e".
7) keep operating in the long run.
A. Only statements 1 and 4 correct.
B. Only statements 1, 4 and 7 are correct.
C. Only statements 2 and 5 are correct.
D. Only statements 2,5 and 7 are correct.
E. Only statement 7 is correct.
22. Decide if each of the following statements is definitely true or definitely false and then choose the best answer from A) through E) below:
1--As the level of an activity rises, marginal cost curves tend to rise at first then fall. The decline at higher outputs occurs as the firm takes advantage of increasing returns to scale.
2--If demand in a market increases for some reason, this does not mean that supply must increase also.
3--Money makes it possible to avoid barter, because money can act as a medium of exchange and a store of value.
4--Without the invention and use of money, society would produce about $50 \%$ less total output.
A. None of the statements $1,2,3$ or 4 are true.
B. Statements 1, 2, 3 and 4 are all true.
C. Statements 2 and 3 are the only ones which are true.
D. Statements 3 and 4 are the only ones which are true.
E. Statements 2, 3 and 4 are the only ones which are true.
23. 


(Repeat your answer on Scantron line 47.) A firm can produce its product using the four resources listed in Table X1 above. The marginal product of each resource, and the price at which it can be purchased, are listed for each resource. Choose the best answer.
A. This firm should increase its budget for resources 1 and 2.
B. This firm MIGHT be more profitable by completely eliminating the budgets for both resources 1 and 2 .
C. This firm should reduce its budget for resource 1 , since that is the resource with the lowest price.
D. This firm should increase its budget for resource 1 and reduce its budget for the more expensive resource 2 .
E. This data is consistent with the idea that this firm is a successful, cost minimizing firm.
24. (Repeat answer on Scantron line 48.) Suppose in Country A they can produce an extra tractor by producing 2 less cars, while in Country B they can produce an extra tractor by producing 4 less cars. Then which of the following statements is correct?

1) Country A should sell cars to Country B and Country B should sell tractors to Country A.
2) The opportunity cost of producing cars is lower in Country B than in Country A.
3) The opportunity cost of producing tractors is lower in Country A than in Country B.
4) Country B should sell cars to Country A, and Country A should sell tractors to Country B.
A. Statements 1, 2 and 3 are true, 4 is false.
B. Statements 2, 3 and 4 are true, 1 is false.
C. Statement 2 is true but 3 is false.
D. Statement 3 is true but 2 is false.
E. Statements 2 and 3 are both false.

## Labor-Leisure Choice Diagrams

Figure 1


Figure 4


Figure 2


Figure 5


Figure 8


Figure 3


Figure 6


Figure 9

(Repeat answer on Scantron line 49.) Refer to the nine Labor-Leisure Choice Diagrams above and chose the best answer.

1) As discussed in lecture, in the US from early 1900's to the present, the average wage rate has increased substantially and average the number of hours worked has decreased substantially. Figure 9 illustrates this.
2) Figures 1 and 4 each illustrates the impact of an increase in non-wage income on a person.
3) Figure 7 illustrates a "pure substitution effect" (which is the impact of a change in price without any change in income).
A. None of Statements 1, 2 or 3 are correct.
B. Only statements 1 and 2 are correct.
C. Only statements 2 and 3 are correct.
D. Only statements 1 and 3 are correct.
E. All the statements 1,2 and 3 are correct.
26. (Repeat answer on Scantron line 50.) Refer to the above diagrams. Which one of these diagrams might illustrate a child whose allowance has been reduced while at the same time giving the child a higher hourly wage rate for doing chores around the house.
A. Figures 3 and 5
B. Figures 1 and 4
C. Figure 9
D. Figure 7
E. Figure 3

## Microeconomics, Spring 2009, Exam 3 KEY

1. B
2. C
3. B
4. B
5. B
6. A
7. B
8. E
9. D
10. B
11. A
12. E
13. C
14. D
15. B
16. A
17. C
18. B
19. A
20. B
21. D
22. C
23. A
24. B
25. C
26. D

# Microeconomics, Spring 2009, Exam 3 Summary <br> Category <br> \# of Questions 

Good Qs...
GTA Micro...

