## Macroeconomics, Spring 2011, Exam 1, several versions

## Read these Instructions carefully! You must follow them exactly!

I) Answer on your Scantron card, using a \#2 pencil.

Warning: SOME QUESTIONS MUST BE ANSWERED SEVERAL TIMES! Such questions will begin with a phrase such as this:
(Repeat answer on Scantron lines 37, 38 and 39)
---Remember to do it!
II) On your Scantron card you must print three things:

1) Print your full name clearly;
2) Print the day and time of your section (for example TTh 7 AM);
3) Near your name, print your test number from the upper right corner of this test.
(This number tells me which version of the test you have. Without it your test cannot be graded properly and you get no credit for your answers.)
III) You must turn in this printed exam along with your Scantron card, otherwise your score on this exam is " $F$ ".

## Questions:

1. If money did not exist in a modern economy,
a. production would be much lower and the average person would be extremely poor.
b. specialization and the division of labor could be carried to a much higher level, resulting in a much more smoothly functioning economy.
c. the world would not go around.
d. barter would be extremely rare.
e. none of the other answers.
2. (Repeat your answer on Scantron line 33.) Chosose the best answer. During the Great Depression,
a. which occurred during the 1920's, the US unemployment rate reached $25 \%$
b. which occurred during the 1930's, the US unemployment rate reached $25 \%$
c. which occurred during the 1920 's, the US unemployment rate reached $20 \%$
d. which occurred during the 1930 's, the US unemployment rate reached $20 \%$
e. the US unemployment rate reached $25 \%$, but it was not during the 1920's or 1930's
3. (Repeat your answer on Scantron line 34.) Suppose good weather in Brazil results in an unusually good coffee crop AND ALSO a widely disctributed study shows that coffee increases the risk of cancer. Select the best answer about the market for coffee:
1) The supply of coffee will decline, and also the demand for coffee.
2) The price of coffee definitely will decline.
3) The quantity supplied of coffee definiely will decline.
4) The market quantity of coffee definitely will decline.
a. Only statement 2 is correct.
b. Only statements 1,2 and 4 are correct.
c. Only statements 1,3 and 4 are correct.
d. All the statements are correct.
e. None of the statements is correct.

4. Refer to the graph above. The arrow that would best illustrate the impact of an increase in the price of a substitute good is:
a. A
b. B
c. C
d. D
5. If the unemployment rate is 6 percent, that means that 6 percent of
a. the population is not working
b. potential workers do not have jobs
c. the workforce is not working at that time
d. the individuals who are looking for work cannot find jobs
e. people who want to work cannot find jobs
$\qquad$ 6. (Repeat your answer on Scantron lines $\mathbf{3 5}$ and 36.) Since 1960, the US unemployment rate as reported in Chapter 5 has been
a. on average about $2.5 \%$
b. more than $5 \%$ in most years
c. more than $8 \%$ in most years
d. more than $10 \%$ in three years
e. No other answer is correct
6. (Repeat your answer on Scantron line 37.) Since 1960, the two worst years of inflation as reported in your text have seen prices rise
a. less than $3 \%$ both years.
b. between 3 and $5 \%$ both years.
c. between 5 and $7 \%$ both years.
d. between 7 and $10 \%$ both years.
e. more than $10 \%$ in both years.
7. (Repeat your answer on Scantron line 38.) An example of "derived demand" is,
a. the demand curve you are able to derive from the functional relationship of variables which influence the demand for a product.
b. an increase in the demand for nails because of an increase in the demand for new houses.
c. an increase in the supply of dog food in response to an increase in the number of families who have dogs as pets.
d. none of the other answers.
e. the increased demand for oranges caused by a rise in the price of a substitute such as apples.
8. Which of the following is closest to the definition of a "model" as given in lecture. A model is
a. and abstract representation of reality.
b. a logical structure and collection of ideas for thinking about a problem or answering a question.
c. never good enough, since it must be accurate, timely and inexpensive and easy to use--an impossibility.
d. best if it is as realistic as possible.
e. no other answer is the best one.
9. Here are several statements which may or may not be true about "models", as discussed in lecture, not the text:
1) Models are used in the sciences (including the social sciences) but not in day-to-day life.
2) The best model for a given situation is always the most accurate one, since it is most likely to get the right answer.
3) The ideal model would be accurate, timely and easy (including inexpensive) to use.
4) Models are always necessary, no matter what real world problem is being solved.
a. Only statements 1,2 and 3 are true.
b. Only statements 2 and 3 are true.
c. Only statement 2 is true.
d. Only statements 2 and 4 are true.
e. Only statements 3 and 4 are true.
11. (Repeat your answer on Scantron line 39.) Unlike an increase in the "quantity demanded" of a good, an increase in demand for a good
a. can be caused by a reduction in the price of an input used to produce the good.
b. can be caused by a decline in the "own price" of that good.
c. can be caused by an increase or decrease in the incomes of customers.
d. can be caused by a change in the price of a substitute for the good.
e. both c. and d.

## Several Equilibrium Points


(Repeat your answer on Scantron line 40.) In the diagram above, a move from equilibrium at point 1 to equilibrium at point 2 would involve (if more than one answer is correct, select the answer containing more information):
a. an increase in demand
b. a decrease in demand
c. a decrease in equilibrium quantity
d. both A and C
e. both B and C
13. The term capital, as used by economists, refers to
a. money
b. the physical space in which production occurs
c. the time allocated to producing goods and services
d. financial securities such as stocks and bonds
e. resources that are not used up during the production process
14. (Repeat your answer on Scantron line 41.) Evaluate the following statements about the Principle of Lowest Opportunity Cost as discussed in lecture, and then choose the best answer from a through e below. If the principle is operating properly:

1) Every person will select among jobs and activities so that his/her personal opportunity cost is as low as possible.
2) Every activity which occurs in an economy (including, for example, the activity of working in a barber shop) will be performed by those individuals on the planet for whom the opportunity cost of performing that activity is the lowest.
3) The principle operates in international trade. For example, if the opportunity cost of computers is " $7 \mathrm{bi}-$ cycles" in Country 1 and 8 bicycles in Country 2 , then Country 1 will tend to export bicycles to Country 2, and Country 2 will tend to export computers to Country 1.
a. Only statement 1 is correct.
b. Only statement 2 is correct.
c. Only statements 1 and 2 are correct.
d. All three statements are correct.
e. None of the statements is correct, or else some combination not available as an answer.
15. If I can produce 1 computer or 4 bicycles in a week and you can produce 2 computers or 10 bicycles in a week, and the economy needs lots of both, then according to the prinicple of lowest opportunity cost:
1) I should produce computers.
2) I should produce bicycles.
3) You should produce computers
4) You should produce bicycles.
5) Since you can produce more of both in a week than I can, you should do the producing of computers and bicycles, and I should produce something else.
a. Only statements 2 and 3 are correct.
b. Only statements 1 and 4 are correct.
c. Only statement 5 is correct.
d. Only statement 1 is correct.
e. Only statement 2 is correct.
16. Suppose that the United States has an absolute advantage over Mexico in producing both agricultural and manufactured goods. In the U. S., the opportunity cost of 1 unit of agricultural output is 2 units of manufactured goods. In Mexico, the opportunity cost of 1 unit of agricultural output is 1.5 units of manufactured goods. Total production in the U. S. and Mexico will be maximized if
a. the U. S. specializes in both types of output
b. Mexico specializes in both types of output
c. the U. S. specializes in agricultural goods and Mexico specializes in manufactured goods
d. the U. S. specializes in manufactured goods and Mexico specializes in agricultural goods
e. each country achieves self-sufficiency
17. Jenni can change a car's oil in 10 minutes and clean a bathroom in 20 minutes. Rob can change a car's oil in 20 minutes and clean a bathroom in 10 minutes. Therefore,
a. Jenni should clean the bathroom and Rob should change the car's oil
b. Rob should clean the bathroom and Jenni should change the car's oil
c. there are no gains from specialization
d. Rob has an absolute advantage in both activities
e. Jenni has an absolute advantage in cleaning the bathroom
18. If an excise tax is imposed on restaurant meals,
a. fewer meals will be produced and sold
b. more meals will be produced and sold
c. the government's tax revenue will fall
d. the market price of meals will decrease
e. restaurants will sell more meals, but at a lower price per meal
19. When analyzing the housing market, the supply curve
a. will be upward sloping because the higher the price of a house the more that will exist
b. will be horizontal to illustrate that the supply of housing is a stock variable
c. will be downward sloping; that is what went wrong with the housing market
d. will be vertical to illustrate that the supply of housing is a stock variable
e. could be horizontal, vertical or upward sloping depending upon the housing market in question
20. (Repeat your answer on Scantron lines 42 and 43.) Based on information presented in the text, since 1922 the annual inflation rate in the US
a. none of the other answers are right.
b. has been positive some years and negative others, but has averaged roughly $1 \%$ per year.
c. has averaged about $8 \%$ per year.
d. has been above $10 \%$ per year for more than 30 of those $100+$ years.
e. B and D are correct.


Quantity of cassettes per week
21.
(Repeat your answer on Scantron lines 44.) Refer to the graph above. Evaluate statements 1 through 4 and then select the answer from A) through E):

1) Moving from point $E$ to point $F$ is accompanied by an increase in demand.
2) Moving from point $E$ to point $F$ is accompanied by a decrease in demand.
3) Moving from point $E$ to point $C$ is accompanied by no change in demand.
4) Moving from point E to point C is accompanied by an increase in demand.
a. Only statements 1 and 4 are true.
b. Only statement 1 is true.
c. Only statement 4 is true.
d. Only statements 2 and 3 are true.
e. None of these statements are true because all of these moves actually are changes in quantity demanded, not changes in demand..
22. (Repeat your answer on Scantron line 45.) Evaluate the following numbered statements, then choose the best answer from a. through d.
1) For the U.S. from 1950 through the present, annual unemployment rates of $5 \%$ or higher have occurred fairly often but annual inflation rates of $5 \%$ or higher have occurred less often.
2) Compared to the recent historical record (since 1960), it is unusual for the U.S. unemployment rate to be below 4 percent.
a. The above statements 1) and 2) are both true.
b. Neither statement 1) nor 2 ) is true.
c. Only statement 1 ) is true.
d. Only statement 2 ) is true.
23. (Repeat your answer on Scantron line 46.) Decide which of the following events will cause the demand for dingbats to increase, then choose among a. through e. below::
1) A rise in the price of a complement.
2) A fall in the price of a substitute.
3) A decline in the price of dingbats caused by an increase in supply.
4) An increase in the supply of dingbats, which leads to an increase in quantity being purchased in the market.
a. Only statement 3 is correct.
b. Only statements 1 and 2 are correct.
c. Only statements 1,2 and 3 are correct.
d. All of satements 1,2,3 and 4 are correct.
e. None of statements 1 through 4 are correct.
24. Which of the following would most likely result in an increase in the demand for orange juice?
a. A decrease in the price of grapefruit juice.
b. An increase in the price of grapefruit juice.
c. A decrease in the supply of oranges.
d. A decrease in the cost of transporting oranges.
25. Price ceilings are primarily targeted to help $\qquad$ , while price floors generally benefit $\qquad$ .
a. producers; no one
b. increase tax revenue for governments; producers
c. increase tax revenue for governments; consumers
d. producers; consumers
e. consumers; producers
26. If the government thinks the price that a consumer has to pay for a good is too high, then which of the following would solve this problem?
a. a price ceiling or an excise tax
b. a price floor or an excise tax
c. a price ceiling or a subsidy
d. a price floor or a subsidy
e. none of the above will lower the price a consumer has to pay for a good
27. (Repeat your answer on Scantron line 47.) The so-called "Second Welfare Theorem" as discussed in lecture tells us that
a. under certain conditions, and if it is done properly, it is possible to redistribute income in a desirable way without upsetting the efficiency which is possible under the First Welfare Theorem.
b. economic efficiency can also be achieved if there are power structures in the economy (so all associations are not voluntary), which would violate the assumptions of the First Welfare Theorem.
c. the difficulties created by so-called public goods and by positive and negative externalities must be dealt with or the First Welfare Theorem becomes false.
d. the highest level of economic welfare is impossible unless all associations are voluntary.
e. the level of welfare achievable under the "First Welfare Theorem", which applies only to capitalism, can also be achieved under socialism.
28. Suppose that college tuition is higher this year than last year and that more students are enrolled in college this year than last year. Based on this information, we can best conclude that:
a. the law of demand is invalid.
b. despite the increase in price, quantity demanded rose due to some other factor changing.
c. this situtation has nothing to do with the law of demand.
d. the demand for a college education is positiviely sloped.
29. (Repeat your answer on Scantron line 48.) Suppose an economist observes a market with normally shaped supply and demand curves. Now she notices the market price has risen at the same time that the market quantity has risen. She can be sure that:
a. demand has definitely increased and supply has increased also.
b. demand may not have changed but supply has definitely increased.
c. demand has definitely increased and supply has defintely decreased.
d. both demand and supply may not have changed.
e. demand has definitely increased but supply may not have changed.
30. (Repeat your answer on Scantron line 49.) In lecture you were given a model to account for the difference in prices of the different goods. Which of the following most accurately describes it?
a. Prices are determined by the forces of supply and demand. If the price is too high there is excess supply, and competition among the sellers drives the price down, if the price is too low there is excess demand and competition among the buyers drives the price up, so the price settles in between.
b. If there are taxes, then prices must equal the sum of all the taxes at the various stages of the production of the good.
c. The Law of One Price tells us that thanks to the buyers wanting the lowest price and the sellers wanting the highest price, each good will have just one price in its market.
d. The price of a good must be sufficient to attract all resources needed for its production plus additional amounts to cover the costs of taxes or possible monopolistic behavior at various stages of production.
e. No other answer is good enough.
31. (Repeat your answer on Scantron line 50.) In lecture we discussed the production possibility frontier model (also called production possibility curve model). Consider the following statements having to do with that model and then select the best answer.
1) If the ppf is convex, this may be because of increasing returns to scale in one or both industries.
2) If the ppf is concave, this may be because of gains from specialization and the division of labor.
3) If Oysters are on the horizontal axis, and Coconuts are on the vertical axis, and then somebody figures out a more efficient way to grow coconuts, then every point on the ppf will shift upward except the point where it intersects the horizontal axis.
a. Only statements 1 and 3 are correct.
b. Only statements 2 and 3 are correct.
c. All three statements are correct.
d. Only statement 3 is correct.
e. Only statement 1 is correct.
32. Based on lecture, consider the following statements about what normally might happen when there is an increase in expected future prices, i.e., beliefs about the future have changed. Then select the best answer.
1) If the expected future price of a good rises, demand will rise.
2) If the expected future price of a good rises, then production will rise.
3) If the expected future price of a good rises, then supply will fall.
4) If the expected future price of a good rises, then inventories will rise.
5) Today's price is expected to rise also.
6) Today's market quantity may rise, fall, or remain unchanged.
a. Only statements 1,2 and 4 are correct.
b. Only staements 1,3 and 4 are correct.
c. Only statements 1 through 4 are correct.
d. Only statements 1 through 5 are correct.
e. All six of the statements are correct.

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## MULTIPLE CHOICE

1. ANS: A
2. ANS: B
3. ANS: A
4. ANS: D
5. ANS: C

NAT: financial theories, analysis, reporting, and markets
LOC: The study of economics, and definitions of economics
$\begin{array}{lll}\text { 6. ANS: B } & \text { PTS: } & 1 \\ \text { 7. ANS: E } & \text { PTS: } & 1\end{array}$
8. ANS: B PTS: 1
9. ANS: B PTS: 1
10. ANS: E PTS: 1
11. ANS: E PTS: 1
12. ANS: D PTS: 1
13. ANS: E PTS: 1 NAT: Financial theories, analysis, reporting, and markets

LOC: Scarcity, tradeoffs, and opportunity cost
14. ANS: D PTS: 1
15. ANS: B PTS: 1
16. ANS: D PTS: 1

LOC: Gains from trade, specialization and trade
17. ANS: B PTS: 1 NAT: Financial theories, analysis, reporting, and markets

LOC: Gains from trade, specialization and trade
18. ANS: A PTS: 1

NAT: Analysis | Financial theories, analysis, reporting, and markets
LOC: Understanding and applying economic models
19. ANS: D

PTS: 1
NAT: Analysis | Financial theories, analysis, reporting, and markets
LOC: Understanding economic models
20. ANS: A PTS: 1
21. ANS: D PTS: 1
22. ANS: A PTS: 1
23. ANS: E PTS: 1
24. ANS: B PTS: 1
25. ANS: E PTS: 1

NAT: Analysis | Financial theories, analysis, reporting, and markets
LOC: Supply and demand
26. ANS: C PTS: 1

NAT: Analysis | Financial theories, analysis, reporting, and markets
LOC: Understanding economic models
27. ANS: A

PTS: 1
28. ANS: B PTS: 1
29. ANS: E PTS: 1
30. ANS: D PTS: 1
31. ANS: A

PTS: 1
32. ANS: E

PTS: 1

