| Economics 102 | Name |
| :--- | :--- |
| Spring 2013 | TA Name |
| $2 / 20 / 2013$ | Discussion Section \# |
| First Midterm | Student ID \# |

## Version 1

## DO NOT BEGIN WORKING UNTIL THE INSTRUCTOR TELLS YOU TO DO SO <br> READ THESE INSTRUCTIONS FIRST.

You have 50 minutes to complete the exam. The exam consists of 10 binary choice and 15 multiple choice questions. Binary choice questions are worth 2 points each and multiple choice questions are worth 5 points each. Please accurately and completely provide your name, ID number, discussion section number, version number, and TA name on the scantron sheet and the exam booklet. Writing all this information correctly is worth 5 points. Answer all questions on the scantron sheet with a \#2 pencil

## NO CELL PHONES, CALCULATORS, OR FORMULA SHEETS ARE ALLOWED. PICK THE BEST ANSWER FOR EACH OUESTION.

How to fill in the scantron sheet and other information:

1. Print your last name, first name, and middle initial in the spaces marked "Last Name," "First Name," and "MI." Fill in the corresponding bubbles below.
2. Print your student ID number in the space marked "Identification Number." Fill in the bubbles.
3. Write the number of the discussion section you've been attending under "Special Codes" spaces ABC, and fill in the bubbles. You can find the discussion numbers below on this page.
4. Write the version number of your exam booklet under "Special Codes" space $D$, and fill in the bubble. The version number is on the top of this page.

- If there is an error on the exam or you do not understand something, make a note on your exam booklet and the issue will be addressed AFTER the examination is complete. No questions regarding the exam can be addressed while the exam is being administered.
- When you are finished, please get up quietly and bring your scantron sheet and this exam booklet to the place indicated by the instructors.

| Section | Location | Day | Time | TA |
| :---: | :---: | :---: | :---: | :---: |
| 350 | Ingraham 122 | Fri | 11:00-11:50 AM | Andrea Guglielmo |
| 351 | Ingraham 116 | Fri | 11:00-11:50 AM | Ryan Veiga |
| 352 | SS 6310 | Th | 2:25-3:15 PM | Josephine Xu |
| 353 | SS 6314 | Th | 3:30-4:20 PM | Josephine Xu |
| 354 | Bascom 55 | Fri | 8:50-9:40 AM | Josephine Xu |
| 355 | Sterling 2333 | Fri | 9:55-10:45 AM | Josephine Xu |
| 356 | Sterling 2409 | Fri | 9:55-10:45 AM | Andrea Guglielmo |
| 358 | Ingraham 225 | Fri | 12:05-12:55 PM | Andrea Guglielmo |
| 359 | Bascom 54 | Fri | 12:05-12:55 PM | Ryan Veiga |
| 361 | SS 6240 | Fri | 1:20-2:10 PM | Andrea Guglielmo |

Work Sheet

## Signed:

1. If you are commissioned to compare different countries’ standard of living in 2012, what type of data is more appropriate?
a. Time-series data
b. Cross-sectional data
2. Determine if the following sentence is positive or normative: "countries can never benefit from trade."
a. Positive
b. Normative
3. Consider the market for coffee. Imagine that a recent study shows that drinking coffee will reduce the risk of having stroke, and at the same time the Brazilian government institutes a law to increase the wages of all workers in the coffee industry. What will happen to the equilibrium price and quantity of coffee?
a. Both price and quantity will increase.
b. Price will increase while quantity will decrease.
c. Price will remain the same while quantity will decrease.
d. Price will increase while the change in quantity cannot be determined.

For the next two questions, consider the following PPF with a "bowed-out" shape.

4. The shape of this PPF indicates $\qquad$ opportunity costs.
a. increasing
b. decreasing
5. This shape is likely due to
a. Diminishing returns to resources in the production of meat and beans.
b. Differing preferences for meat and beans within the economy.
c. Specialization of resources within the economy.
d. Economies of scale in the production of each good.
 price increase, suppliers will produce 2 fewer jars of applesauce at every price. What is the total surplus in the market for applesauce at the new equilibrium?
a. \$4
b. \$8
c. $\$ 12$
d. $\$ 9$

Use the following information to answer the following two questions.
A market has only two groups of firms. One group employs innovative technologies while the other still uses a conventional means of production. The group with conventional technology has the supply curve: $Q_{S_{1}}=P-180$. The group with innovative technology has the supply curve: $Q_{S_{2}}=P-150$. There is only one group of consumers and they have the demand curve:
$P=750-2 Q$.
7. If initially only the firm with the innovative technology is producing, what will be the market equilibrium quantity?
a. $\mathrm{Q}=200$
b. $\mathrm{Q}=350$
8. Now suppose both groups are producing. If you are asked to graph the market supply curve, which of the following will be the kink point (Q,P) for this market supply curve?
a. $(-30,150)$
b. $(0,120)$
c. $(30,180)$
d. $(0,150)$

Use the following information to answer the next three questions:
Keynesland is a small open economy that produces fish. Its domestic demand is given by $Q=200-2 P$ and its domestic supply is given by $Q=2 P-40$. The world price of fish is $\$ 40$ per unit of fish.
9. Suppose the government implements an import quota of 16 units. What will be the domestic price?
a. $\$ 44$
b. $\$ 48$
c. $\$ 56$
d. $\$ 50$
10. Suppose that, instead of the quota described in the previous problem, the government implements an import tariff that will increase the price of each unit of fish by $\$ 10$. Relative to this tariff of $\$ 10$, if the government were to increase the tariff by an additional \$1, this would $\qquad$ government tariff revenue and $\qquad$ consumer surplus.
a. decrease; decrease
b. decrease; increase
c. increase; decrease
d. increase; increase
11. If the government implements an import tariff that increases the price of each unit of fish by $\$ 10$, then what is the deadweight loss?
a. $\$ 100$
b. $\$ 160$
c. \$200
d. $\$ 240$

Use the following information to answer the next two questions.
Ahmed and Bernard produce oranges and lemons. When their production is combined, it yields the following joint PPF:

12. Suppose Ahmed could produce up to 4 oranges if he spent all his time producing oranges. Given this information and the above PPF, Ahmed must therefore have the comparative advantage in producing:
a. oranges
b. lemons
13. Suppose Ahmed can produce up to 4 oranges or 5 lemons in the given time period. What must be Bernard's opportunity cost of producing one lemon?
a. 4/5 Oranges
b. 4/3 Oranges
c. 1 Orange
d. 3/2 Oranges

Use the following information for the next two questions.
Jimmy has a Mexican Restaurant and his two staple dishes are Tacos and Fajitas. We know that Jimmy has constant opportunity cost. He can produce at most 20 Fajitas or 50 Tacos. Jimmy has the opportunity to trade with a Taco Ring, a bigger company. The Opportunity Cost for Taco Ring is constant, and it can exchange 1 Taco for $1 / 5$ of Fajita.
14. Who has the comparative advantage in producing tacos?
a. Jimmy
b. Taco Ring
15. Which of the following terms of trade would generate gains for both companies?
a. 1 fajita for 2.5 tacos
b. 1 taco for 0.5 fajitas
c. 1 fajita for 6 tacos
d. 1 taco for 0.3 fajitas

Use the following information for the next three questions.
Kenzaburo and Yasunari are writers. The table below shows the amount of time it takes them to produce articles and short stories.

|  | short story (S) | article (A) |
| :--- | :--- | :--- |
| Kenzaburo | 2 hours | 3 hours |
| Yasunari | 4 hours | 3 hours |

16. Who has the comparative advantage in producing articles?
a. Yasunari
b. Kenzaburo
17. Who has the absolute advantage in producing short stories?
a. Kenzaburo
b. Yasunari
18. What is the equation for Yasunari's PPF over a 12 hour time period? Assume articles are on the horizontal axis.
a. $\quad S=3-(2 / 3) A$
b. $S=2-(3 / 2) A$
c. $S=4-(4 / 3) A$
d. $S=3-(3 / 4) \mathrm{A}$

Use the following information for the next four questions.
trothestrallupquyisy
19. Suppose (for this question only) that, because of a new technology, domestic supply suddenly increases by 2 barrels of oil at every price. The new supply curve is given by:

20. Use the original supply and demand curves to answer this question. Suppose the country opens its oil market to trade. What will be the increase in total surplus due to this change in policy?
a. $\$ 675$
b. $\$ 400$
c. $\$ 325$
d. $\$ 200$
21. Use the original supply and demand curves to answer this question. Suppose the country opens its oil market to trade, but simultaneously the government imposes a tariff that increases the price of oil by $\$ 10$. How many barrels of oil will be imported?
a. 15
b. 30
c. 40
d. 50
22. Given the original demand and supply curves in this oil market, what tariff is equivalent to a 15 barrel import quota? (i.e. will lead to the same market price and quantities traded?) A tariff that raises the price of a barrel of oil by
a. $\$ 15$.
b. $\$ 25$.
c. $\$ 12$.
d. $\$ 20$.
23. Which of the following statements correctly describes free-market equilibrium?
a. When there is a surplus in the market, the price will increase to restore the market equilibrium
b. When there is a shortage in the market, the quantity demanded will increase to restore the market equilibrium.
c. Total surplus is maximized when the market is a free market.
d. The price and quantity can still change even if the market is at equilibrium.
24. A survey that calls people on land-line phones to study the purchasing habits of US adults would likely incur a problem of $\qquad$ in the data.
a. Measurement error
b. Sampling Bias
25. To study fluctuations in GDP, economists would most likely rely on $\qquad$ data.
a. Time-series
b. Cross-sectional

## Answers:

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