INSTRUCTIONS (***Read Carefully***):

ON YOUR QUESTION BOOKLET:
Fill in your name, Student ID, Discussion Section Number (e.g. D5) and your signature.

ON YOUR SCANTRON:
Enter the Course Number (EC101 DD or EE) and date on the lines at the top-left. In the boxes below, enter your Student ID, your DISCUSSION SECTION number (D1 - D9, E0 - E9), your NAME and your EXAM VERSION into the Scantron computer sheet. Be sure that you “bubble” all entries. I will subtract up to 5 points as punishment for errors in these data!

DURING THE EXAM:
Students who wish to leave the room for any reason must leave the Question Booklet and Scantron sheet with the instructor or teaching fellow. Students in EC101DD MUST turn in both the Question Booklet and the Scantron sheet at the end of the exam and exit from the front of the room. Students in EC101EE should keep their Question Booklet and turn in only their Scantrons. All students must show their BU Student IDs as they leave the exam room.

MULTIPLE-CHOICE QUESTIONS:
Choose the BEST answer for each of the multiple-choice questions. (Only ONE answer is allowed, even when more than one of the answers is technically correct.) On the Question Booklet, CIRCLE the letter that you chose, and then BUBBLE it on the Scantron sheet.

Never cross out an answer on your Scantron. Use a pencil to bubble your answers, and keep a good eraser with you. If you bubble the wrong answer on the Scantron, erase your mark COMPLETELY, and then bubble the correct answer.

[Note: The area of a triangle is given by \( \frac{\text{base} \times \text{height}}{2} \).]

***YOU MAY NOT USE A CALCULATOR, CELL PHONE OR LAPTOP.

***However, INTERNATIONAL STUDENTS may use electronic translators or dictionaries.

You have 60 minutes to complete the exam. Good luck!

DO NOT OPEN THIS BOOKLET OR TURN IT OVER
[until told to do so]
1. In perfect competition, each firm charges the equilibrium market price because
   a. setting a price below the equilibrium would cause consumers to suspect lower quality.
   b. a competitive firm has no way of setting its own price.
   c. the firm wouldn’t want to sell more at a lower price and would have no sales at a higher price.
   d. a different price would change the equilibrium and create uncertainty.

2. Private negotiation is most likely to solve problems created by pollution when there are
   a. laws that prohibit the pollution.
   b. a small number of people who produce the pollution and who suffer from it.
   c. high taxes on each unit of pollution.
   d. many people who suffer from the pollution.

3. Charlie buys sneakers for $80, but after he wears them for a day, he decides that they are not comfortable. Unfortunately the store will not refund his money, so Charlie goes to a different store and buys better sneakers for $90. The opportunity cost of the new sneakers is
   a. $10.
   b. $170.
   c. $90.
   d. none of the above

4. When firms have an incentive to enter a competitive market, their entry will
   a. lower the costs of firms that remain in the market.
   b. raise the market price.
   c. lower profits for firms already in the market.
   d. increase demand for the product.

5. See Scenario TJL. Christoph has a CD of Beethoven’s 9th Symphony, and he is willing to sell it to Juan for $8 or more. Juan is willing to pay $13 for the CD.

6. See Scenario TJL. If Juan buys the CD from Christoph for $13, then
   a. Juan gets no consumer surplus.
   b. Christoph gets $8 in economic rent.
   c. Christoph gets no economic rent.
   d. Christoph gets $13 in economic rent.

7. See Figure NEX. Without any government regulation, how much plastic would be produced?
   a. 100
   b. 500
   c. 325
   d. 250

8. See Figure NEX. What quantity of plastics maximizes social surplus?
   a. 250
   b. 100
   c. 500
   d. 325

9. See Figure NEX. What level of excise tax would maximize social surplus?
   a. $.50
   b. $2.00
   c. $1.50
   d. 0 [Any tax will reduce surplus.]

10. Which of the following is not an example of rent-seeking?
   a. Shree prepares her discussion section carefully, because she hopes to get good course evaluations.
   b. Nick tells his students to tell the dean that he is an excellent teacher.
   c. Bruno gives an excellent bottle of Port wine to the graduate director, because he wants his fellowship to be renewed.
   d. Michael gives easy tests, because he hopes to get good course evaluations.
Figure SJC. The US Furniture Market. Suppose $D$ represents the market demand curve, and $S$ is the market supply curve of domestic producers. After imports are allowed, foreign producers shift the market supply from $S$ to $S'$. 

11. **See Figure SJC.** The positions of the supply curves $S$ and $S'$ imply that some of the foreign firms ______ than any of the domestic firms.
   a. are larger  
   b. charge higher prices  
   c. have lower costs  
   d. are less competitive

12. **See Figure SJC.** After the foreign producers enter, the producer surplus of domestic producers
   a. increases by $150. 
   b. increases by $50. 
   c. decreases by $150. 
   d. decreases by $50.

13. **See Figure SJC.** Suppose the US government imposes a price floor of $20 in order to protect domestic producers from foreign imports. Then the producer surplus of domestic firms would be
   a. $0. 
   b. $200. 
   c. $50. 
   d. $800. 

14. Which of the following is the best example of a positive externality?
   a. a box of chocolates of higher than average quality  
   b. a restaurant that serves excellent food  
   c. cigarettes with a low cost of production  
   d. a student that asks good questions in class

Figure NRL. Suppose a profit-maximizing firm with the cost curves graphed below is operating in a perfectly competitive market. At first the market price is $P_1$, and the firm is producing $Q_1$.

15. **See Figure NRL.** If the market price rises from $P_1$ to $P_2$, the firm will find that
   a. expanding output to $Q_3$ would leave the firm with losses.  
   b. if it produces at output level $Q_2$ it will earn a positive profit.  
   c. it could increase profits by lowering output from $Q_2$ to $Q_1$.  
   d. marginal cost exceeds marginal revenue at a production level of $Q_1$.

16. **See Figure NRL.** Then, if the market price falls from $P_2$ to $P_0$, the firm should
   a. produce $Q_2$ units of output. 
   b. shut down immediately. 
   c. produce $Q_1$ units of output. 
   d. produce $Q_0$ units of output.

17. **See Figure NRL.** But if the market price rises from $P_2$ to $P_3$, the firm would
   a. maximize profits by increasing output to $Q_3$. 
   b. lose money at output $Q_4$. 
   c. minimize costs at output $Q_3$. 
   d. maximize profits by continuing to produce at $Q_2$.

18. The social surplus generated in the market for eggs
   a. is always smaller than producer surplus. 
   b. is the difference between consumer surplus and producer surplus. 
   c. is the value that buyers place on the eggs minus the cost to the sellers of providing the eggs. 
   d. has no meaning, because different consumers have different WTP for eggs.
Table RGK. The data below represent the quantity of resources that France and Germany would need to manufacture one train or one plane.

<table>
<thead>
<tr>
<th>Required Resources</th>
<th>Train</th>
<th>Plane</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

19. See Figure RGK. The opportunity cost of a plane in France is ____ train(s); the opportunity cost in Germany is ____ train(s).
   a. 2; 4
   b. 1/2; 4
   c. 4; 1/2
   d. 4; 2

20. See Table RGK. Which country has a comparative advantage in producing trains? planes?
   a. Germany; France
   b. Germany; Germany
   c. France; Germany
   d. France; France

21. Judy works 20 hours per week at Star Market and earns $6.00 per hour. Her boss decides to raise her wage to $12.00 per hour. Then, Judy says to herself, “Great, now I don’t have to work so many hours.” This implies that
   a. she does not want to ‘buy’ more leisure as she becomes richer.
   b. the income effect on her demand for leisure is stronger than the substitution effect.
   c. her demand curve for leisure is not downward sloping.
   d. leisure is an inferior good.

22. Economists think that in most circumstances, the best way for society to manage a good with a negative externality is to
   a. pass laws restricting consumption of the good.
   b. let the market work without government intervention.
   c. tax the good.
   d. pass laws restricting production of the good.

23. Suppose an excise tax is placed on goods in a perfectly competitive market. If firms have no fixed costs and increasing marginal costs, then
   a. the consumer’s WTP is greater than the firm’s MC for every good sold.
   b. consumers who buy the good have a higher WTP than those who do not.
   c. firms that produce the good have a lower MC than those that do not.
   d. ALL of the above

24. The willingness to pay curve (WTP) is the same as the demand curve, because
   a. WTP measures the utility of a product.
   b. consumers will continue to buy as long as the WTP is greater than the price.
   c. WTP for each unit decreases as more units are purchased.
   d. WTP is the quantity demanded.

25. See Figure BMC. If the price of lamps is $5, the factory will obtain about $_____ of producer surplus. [Choose the closest value.]
   a. 25.00
   b. 13.50
   c. 0.00
   d. 20.00

26. See Figure BMC. How many lamps will the factory produce when the price of lamps is $10?
   a. 7
   b. 8
   c. 10
   d. more information needed

27. See Figure BMC. The variable cost of producing 5 lamps is about $_____. [Choose the closest value.]
   a. 20.00
   b. 11.50
   c. 5.00
   d. more than 100.00

28. Which of the following is a variable cost of producing physical copies of the Cowen/Tabarrok textbook?
   a. the cost of graphic design
   b. the cost of typesetting
   c. the cost of paper
   d. the cost of writing the book
29. A perfectly competitive market without externalities is efficient, in part because
   a. goods are produced if and only if the value to the consumer exceeds the cost of production.
   b. those willing to pay the most obtain the goods.
   c. those with the lowest costs sell the goods.
   d. **ALL** of the above

30. WTP may not be an accurate measure of the consumer welfare derived from a product, because
   a. WTP may underestimate the welfare obtained by the poor.
   b. WTP may be influenced by temptation.
   c. people may not know the properties of goods they buy.
   d. **ALL** of the above

31. The marginal cost of producing a unit is
   a. the same for every unit the firm produces.
   b. the average of the opportunity costs of all units produced.
   c. is the explicit cost of producing the unit as calculated by verified invoices and payments.
   d. is the opportunity cost of producing that unit.

32. Suppose Phil likes apples more than oranges, and Mesay like oranges more than apples. A Pareto improvement is possible when
   a. Mesay has oranges, and Phil has apples.
   b. Mesay and Phil both have peaches.
   c. Mesay and Phil both have apples.
   d. Mesay has apples, and Phil has oranges.

33. In order to demonstrate their generosity, dairy farmers decide to sell as much milk as consumers want to buy at half the equilibrium price. Then
   a. producer surplus will increase.
   b. social surplus will fall.
   c. social surplus will increase.
   d. consumer surplus will fall.

34. Nonprice rationing tends to reduce social surplus because
   a. the consumers with the highest WTP may not obtain the goods.
   b. buyers may have to wait a long time in lines (queues).
   c. the quality of goods may decrease.
   d. **ALL** of the above

35. US politicians don’t like high gasoline taxes, because
   a. gasoline taxes are unpopular.
   b. gasoline taxes are low in Europe.
   c. gasoline taxes reduce economic efficiency.
   d. **ALL** of the above

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**Figure NPR.** The government has imposed a price ceiling $P_c$ in the market for housing. Consumers with the highest WTP get all of the supplied housing.

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36. **See Figure NPR.** The quantity of housing supplied is ____ and the quantity demanded is ____.
   a. $Q*$; $Q2$
   b. $Q1$; $Q2$
   c. $Q*$; $Q*$
   d. $Q1$; $Q*$

37. **See Figure NPR.** Consumer surplus will be area
   a. AGFC.
   b. ADFH.
   c. ADFC.
   d. AGE.

38. **See Figure NPR.** The area DGF represents
   a. the loss of producer surplus.
   b. the gain in consumer surplus.
   c. surplus to renters with low WTP.
   d. unexploited gains of trade.

39. **See Figure NPR.** Suppose now that among consumers who want to buy housing at price $P_c$, those with the lowest WTP get all of the supplied housing. Then, the deadweight loss caused by rent control will be
   a. AGFC.
   b. DGF.
   c. AKFC.
   d. DKF.

40. Which of the following outcomes is **unlikely** in an unregulated free-market economy?
   a. many poor people
   b. shortages of many goods
   c. a market in human kidneys
   d. prostitution
EC101 DD/EE F14 Midterm 2
Answer Section

MULTIPLE CHOICE

1. ANS: C  REF: 1
2. ANS: B  REF: 2
3. ANS: C  REF: 3
4. ANS: C  REF: 4
5. ANS: D  REF: 5
6. ANS: A  REF: 6
7. ANS: C  REF: 7
8. ANS: A  REF: 8
9. ANS: B  REF: 9
10. ANS: A  REF: 10
11. ANS: C  REF: 11
12. ANS: C  REF: 12
13. ANS: C  REF: 13
14. ANS: D  REF: 14
15. ANS: A  REF: 15
16. ANS: B  REF: 16
17. ANS: A  REF: 17
18. ANS: C  REF: 18
19. ANS: B  REF: 19
20. ANS: A  REF: 20
21. ANS: B  REF: 21
22. ANS: C  REF: 22
23. ANS: D  REF: 23
24. ANS: B  REF: 24
25. ANS: B  REF: 25
26. ANS: A  REF: 26
27. ANS: B  REF: 27
28. ANS: C  REF: 28
29. ANS: D  REF: 29
30. ANS: D  REF: 30
31. ANS: D  REF: 31
32. ANS: D  REF: 32
33. ANS: B  REF: 33
34. ANS: D  REF: 34
35. ANS: A  REF: 35
36. ANS: B  REF: 36
37. ANS: B  REF: 37
38. ANS: D  REF: 38
39. ANS: A  REF: 39
40. ANS: B  REF: 40