Instructions:
I) 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 MW 1:25);
   3) Notice the number I have written in ink in the upper right corner of your test? Write that number on the Scantron card. (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.)
II) Answer on your Scantron card, using a #2 pencil.
III) Warning: SOME QUESTIONS MUST BE ANSWERED SEVERAL TIMES! Such questions will begin with a phrase such as this:
     Repeat this answer on lines 37, 38 and 39.
     Remember to do it!
IV) You must turn in this written exam along with your Scantron card or else receive an F for the course.

Questions:

1. (Repeat answer on Scantron line 30.) As stated in lecture, if we wish to be completely accurate, the law of demand states that:
   A) sellers supply less of a good when its price increases.
   B) buyers buy less of a good when its price increases only if their income increases at the same time. buyers never buy more of a good if its price increases.
   C) buyers buy less of a good when its price increases even if other demand determinants change at the same time.
   D) buyers buy less of a good when its price increases, provided all shift factors of demand are fixed.
   E) buyers never buy less of a good if its price decreases, and never buy more if its price increases.

2. If a consumer is willing to pay as much as $5 for a hot dog that actually costs $1.50, then the amount of consumer surplus resulting from the purchase of the hot dog would be:
   A) $1.50.
   B) $3.50.
   C) $5.00.
   D) $6.50.
3. (Repeat answer on Scantron line 31.) Choose the best answer. The Wealth of Nations
A) is the phrase used to stand for a crucial concept in economics, namely the economics of
the growth, progress and development of nations.
B) is the title of a Table maintained by the International Bank for Cooperation and
Development (usually called The World Bank). As mentioned in lecture, The Wealth of
Nations table summarizes the standard of living in every nation in the world.
C) was published in 1776 and was written by John Kenneth Galbraith, and was the first
book attempting to describe the fundamental principles of economics.
D) was published in 1776 and was written by the moral philosopher Adam Smith, and was
the first book attempting to describe the fundamental principles of economics.
E) is the title of an important textbook in economics—the most important competitor to the
text we are using in this course.

Use the following to answer question 4:

![Graph showing supply and demand curves]

4. (Repeat answer on Scantron line 32.) Refer to the graph above. Assume that the market is
initially in equilibrium at a price of $12 and a quantity of 80 units. If the government imposes a
$4 per unit tax on this product, equilibrium quantity will change to:
A) 60.
B) 80.
C) 100.
D) 120.

5. Cost-conscious consumers use cents-off coupons when purchasing items such as soap or
frozen dinners. As a result, they pay a lower price. This is an example of:
A) welfare loss.
B) breaking even.
C) quantity discrimination.
D) price discrimination.
6. (Repeat answer on Scantron lines 33 and 34.) If the supply curve is vertical the burden of a tax on suppliers is borne:
   A) entirely by the suppliers.
   B) entirely by the consumers.
   C) mostly by the suppliers, and partly by the consumers, if the demand curve is inelastic.
   D) partly by the suppliers, and mostly by the consumers, if the demand curve is elastic.

7. A monopoly firm selling lemonade to tourists on an island is currently maximizing profits by charging a price of $5 per glass. It follows that the marginal cost of lemonade:
   A) is equal to $5.
   B) is less than $5.
   C) is greater than $5.
   D) is greater than the average cost.

Use the following to answer question 8:

8. Refer to the graph above. If the monopolist seeks to maximize profit, it should set a price equal to:
   A) $17.
   B) $14.
   C) $13.
   D) $10.
9. (Repeat answer on line 35.) The market structure in which many different firms supply similar, but slightly differentiated products, is:
   A) monopoly.
   B) oligopoly.
   C) monopolistic competition.
   D) perfect competition.

10. The best example of monopolistic competition is:
   A) the tobacco industry.
   B) the restaurant industry.
   C) the steel industry.
   D) cable services.

11. (Repeat answer on Scantron line 36.) A market structure in which there a few firms that engage in strategic pricing is called:
   A) monopolistic competition.
   B) monopoly.
   C) oligopoly.
   D) perfect competition.

12. (Repeat answer on line 37.) Cartels are organizations that seek to:
   A) ensure ease of entry by new firms.
   B) encourage price wars.
   C) limit output by assigning production quotas to members.
   D) encourage takeover of specific industries by a single seller to establish monopolies.

13. (Repeat answer on Scantron line 38.) The burden of a tax is:
   A) most heavily borne by those with the more inelastic demand or supply.
   B) most heavily borne by those with the more elastic demand or supply.
   C) usually equally split between buyers and sellers.
   D) usually passed entirely on to consumers in the form of a higher price.

14. (Repeat answer on Scantron lines 39 and 40.) If elasticity of demand is 0.2, elasticity of supply is 0.6, and a 10% excise tax is levied on the good:
   A) consumers pay 25% of the tax.
   B) sellers pay 25% of the tax.
   C) consumers pay 20% of the tax.
   D) sellers pay 60% of the tax.
15. Rent-seeking activity is designed to:
   A) produce additional revenue for government.
   B) minimize welfare loss.
   C) maximize welfare loss.
   D) transfer surplus from one group to another.

16. (Repeat answer on Scantron line 41.) The purpose of the Sherman Antitrust Act of 1890 was to:
   A) establish the Federal Trade Commission to deal with unfair methods of competition.
   B) prevent monopolization and/or conspiracy in restraint of trade.
   C) specify the conditions under which mergers would be considered anti-competitive.
   D) deal with false and deceptive advertising.

17. The Clayton Act declared illegal the practice of:
   A) buying stock in a competitor's company when the purpose of buying the stock is to reduce competition.
   B) buying stock in a company with the purpose of taking over the company.
   C) buying stock in a competitor's company for any purpose.
   D) selling stock in a company that is on the verge of bankruptcy.

Use the following to answer question 18:

![Graph of marginal cost (MC) curves]

18. (Repeat answer on Scantron line 42.) The marginal cost (MC) curve is labeled:
   A) I.
   B) II.
   C) III.
   D) IV.
19. Refer to the graph above. The cost curves shown here are:
   A) correct.
   B) wrong because the average total cost and the average variable cost curves are confused.
   C) wrong because the average fixed cost curve is drawn incorrectly.
   D) wrong because the marginal cost curve fails to intersect the average variable cost and average total cost curve at their respective minimum points.

20. (Repeat answer on Scantron line 43.) Consider each of the following statements about the "minimum wage laws" as discussed in lecture.
   1) The minimum wage law results in higher income for those teenagers who are able to find work, but lower incomes for many teenagers who become unemployed because of the law.
   2) The minimum wage law makes it easier for smart, reliable, well connected teenagers to steal jobs from poorly educated teenagers and minority teenagers.
   3) The minimum wage law is an example of a price floor.

Then choose which of the following is most accurate:
   A) Only statements 1 and 3 are true.
   B) Only statements 2 and 3 are true.
   C) All the statements are true.
   D) Only statements 1 and 2 are true.
   E) None of the statements are true
21. (Repeat your answer on Scantron lines 44 and 45.) 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 and claims.
2) The foreign exchange markets exist because international exporters and importers wish to specialize in either exporting or importing, but not both.
3) Suppose that the trade-currency ratios for internationally traded goods, for internationally traded "claims" (capital flows), and also the exchange rate, all start out equal to 2 Pesos per Lira. Next, suppose the trade-currency ratio for goods rises to 2.2 while the trade-currency ratio for claims falls to 1.8. Based on what we have learned in lecture, the exchange rate initially will probably rise toward 2.2 rather than decline toward 1.8.
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.

22. (Repeat answer on line 46.) Marginal product of a resource of production is:
A) the output per unit of the resource.
B) the number of workers it takes to produce one more unit of output.
C) the additional output produced when one more unit of the resource is employed.
D) the total production of a group of workers.
23. (Repeat your answer on Scantron line 47.) 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.
24. (Repeat your answer on Scantron line 48.) 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.
25. **(Repeat answer on Scantron line 49.)** Evaluate the following statements about "price discrimination", then select the best answer.

1. If two or more different prices are being charged for a product which costs the same to produce and sell, this is evidence of price discrimination.
2. Price discrimination, if the business chooses to do so, always increases the profitability of the business.
3. Price discrimination can only be practised by monopolists, never by firms in competitive industries.
4. Perfect price discrimination is just as efficient as competition (there is no efficiency cost), but the customers capture NO consumer surplus, sellers capture the entire surplus.

A) None of these statements are true.
B) Only one of these statements is true.
C) Exactly two of these statements is true.
D) Exactly three of these statements are true.
E) All these statements are true.

26. In lecture we analyzed "price discrimination". (Only a monopolist can price discriminate.) In our analysis we realized that in order to price discriminate, the monopolist must be able to segment the market. We considered segmenting the market into **TWO** parts. We analyzed two cases, the first in which the new segment would be charged a price **ABOVE** the original monopoly price, the second case in which the new segment would be charged a price **BELOW** the original monopoly price. For each of these cases we first analyzed the case of "perfect market segmentation", and then considered modifications for the case of "imperfect market segmentation". (In imperfectly segmented markets, some customers are placed in the wrong group. The result is some customers "get away with" paying a lower price, or some customers are charged too much so they won't buy the product.)

**This question is about imperfect market segmentation only.** Evaluate the following statements, then select the best answer.

1) If second price is **ABOVE** the monopoly price, the monopolist will not adopt the imperfect two segment strategy unless his/her profits are increase compared to the single price alternative.
2) If the second price is **BELOW** the monopoly price, and also market segmentation is imperfect, "welfare costs" will definitely decrease compared to the "welfare costs" caused by the single price monopoly.
3) If the second price is **ABOVE** the monopoly price, and some buyers are now in the high price group but they should be in the low price group, "welfare costs" will definitely increase compared to the "welfare costs" caused by the single price monopoly.

A) Only statements 1 and 2 are correct.
B) Only statements 2 and 3 are correct.
C) Only statements 1 and 3 are correct.
D) All three statements are correct.
E) Only one of the statements is correct.
27. In lecture we analyzed "price discrimination". (Only a monopolist can price discriminate.) In our analysis we realized that in order to price discriminate, the monopolist must be able to segment the market. In our analysis, we considered segmenting the market into TWO parts. We analyzed two cases, the first in which the new segment would be charged a price ABOVE the original monopoly price, the second case in which the new segment would be charged a price BELOW the original monopoly price. For each of these cases we first analyzed the case of "perfect market segmentation", and then considered modifications for the case of "imperfect market segmentation". This question is about perfect market segmentation only. Evaluate the following statements, then select the best answer.

1) If the second price is ABOVE the original monopoly price, then profits of the monopolist rise.
2) If the second price is ABOVE the original monopoly price, then welfare cost declines.
3) If the second price is BELOW the original monopoly price, then profits of the monopolist rise.
4) If the second price is BELOW the original monopoly price, then welfare cost declines.

A) All four statements are correct.
B) Only statements 1 and 2 are correct.
C) Only statements 3 and 4 are correct.
D) Only statements 1, 3 and 4 are correct.
E) Only statements 1, 2 and 3 are correct.

28. In lecture we analyzed "price discrimination". Only a monopolist can price discriminate. In our analysis we began by thinking about "perfect price discrimination". (Of course it is impossible, but what if it actually were possible.) Then evaluate the following statements, and select the best answer.

1) Perfect price discrimination would completely eliminate the so-called "welfare cost" (also called "efficiency cost") of the monopoly.
2) Perfect price discrimination would take all consumer surplus previously captured by the buyers of the product and shift it into the revenue of the monopolist. In other words, all surplus would become producer surplus.

A) Both statements are false.
B) Both statements are true.
C) Only statement 1 is true.
D) Only statement 2 is true.
29. (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 5 and 8
B) Figures 1 and 4
C) Figure 6
D) Figure 7
E) Figure 3
Answer Key

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