Please read the exam carefully. The exam is worth 150 points with 35 multiple choice questions (3 points each) and 1 question that requires a graph (30 points). Please use the back of your PARSCORE form to do question 36. You will start with 15 points.

All multiple choice questions are of equal value. All points will be awarded according to the correct answer. There is no deduction for incorrect answers. Mark your answers so that they can be properly read. Markings that are not read properly by the grading machine may not be given credit, even if they are correct answers.

Please be sure to:

-- Mark the bubbles for your name
   NOTE: Please put a space between your last name and your first name. You do not need to put your middle initial
-- Mark the bubbles for your ID number
-- Mark the bubble for the test version that you are using

You do not need to complete other information (phone number, etc.)

There will not be any tolerance for cheating and other inappropriate behavior. You may not have anything on your desk except this exam, a writing utensil, and a foreign language dictionary if you need it. If there is anything else on your desk, your exam will be removed and you will receive a zero for this exam. You must have a different colored exam than anybody working next to you. If you have the same colored exam as your neighbor, both exams will be removed and both persons will receive a zero for the exam.

Part I – Multiple Choice (35 Questions, 105 Points)

1. If demand is perfectly inelastic and supply is neither perfectly elastic nor perfectly inelastic, what is the effect of an increase in consumer income?

   a) Equilibrium quantity increases; equilibrium price increases
   b) Equilibrium quantity increases, equilibrium price does not change
   c) Equilibrium quantity increases, equilibrium price decreases
   d) Equilibrium quantity does not change; equilibrium price increases
   e) Equilibrium quantity does not change; equilibrium price does not change

2. If supply in the market for pizzas is perfectly inelastic and demand in the market for pizzas is neither perfectly elastic nor perfectly inelastic, what is the effect of an increase in the price of chicken sandwiches (substitute for pizza)?

   a) Equilibrium quantity increases; equilibrium price increases
   b) Equilibrium quantity increases, equilibrium price does not change
   c) Equilibrium quantity increases, equilibrium price decreases
   d) Equilibrium quantity does not change; equilibrium price increases
   e) Equilibrium quantity does not change; equilibrium price does not change
3. Which of the following would best describe the rationale for government involvement to prevent overfishing in areas that are not privately owned?

a) Investment in human capital
b) Production is based on average product instead of marginal product
c) The externality from fishing
d) The consideration that fish are public goods
e) The lack of profitability in fishing on a large scale

4. Which of the following best describes the effect of a tax paid by consumers in the market for cigarettes?

a) Price paid by consumers increases; price received by producers increases
b) Price paid by consumers increases; price received by producers stays the same
c) Price paid by consumers increases; price received by producers decreases
d) Price paid by consumers decreases; price received by producers increases
e) Price paid by consumers decreases; price received by producers decreases

5. Which of the following best describes the effect of a price floor in the market for cigarettes?

a) Price paid by consumers increases; price received by producers increases
b) Price paid by consumers increases; price received by producers stays the same
c) Price paid by consumers increases; price received by producers decreases
d) Price paid by consumers decreases; price received by producers increases
e) Price paid by consumers decreases; price received by producers decreases

6. Of the two policies considered in questions 4 and 5 (tax and price floor), which would result in a reduction in the quantity of cigarettes consumed (compared with a situation without any government involvement)?

a) Both the tax and the price floor would result in a lower quantity consumed
b) The tax would result in a lower quantity consumed, the price floor would not
c) The price floor would result in a lower quantity consumed, the tax would not
d) Neither the tax nor the price floor would result in a lower quantity of cigarettes consumed
e) It is uncertain which policies would result in a reduction in the quantity of cigarettes consumed

7. Which of the following best describes the effects of a subsidy to producers in the market for pizza?

a) Consumer surplus increases, producer surplus increases, government gains money
b) Consumer surplus increases, producer surplus increases, government loses money
c) Consumer surplus increases, producer surplus decreases, government gains money
d) Consumer surplus decreases, producer surplus increases, government loses money
e) Consumer surplus decreases, producer surplus decreases, government loses money

8. Is society better off or worse off with a subsidy to producers in the market for pizza?

a) Society is better off
b) Society is equally well off
c) Society is worse off
d) It is uncertain whether society is better off or worse off
e) It is never appropriate for the government to intervene in the market
9. Which of the following best describes how a monopolist decides how much to produce?

a) The quantity at which marginal cost equals average cost  
b) The quantity at which average cost is at its lowest level  
c) The quantity at which the price of output equals the marginal cost  
d) The quantity at which marginal revenue equals the price of output  
e) The quantity at which marginal revenue equals marginal cost

10. Which of the following best describes how economists measure welfare?

a) The amount of money given to poor people relative to their income  
b) The ratio of the income of the highest 20 percent to the income of the lowest 20 percent  
c) The point at which the indifference curve is tangent to the budget constraint  
d) Consumer surplus plus producer surplus plus the net change in the government budget  
e) General happiness in the society

11. Which of the following best describes a public good?

a) Rival and excludable  
b) Rival and not excludable  
c) Not rival and excludable  
d) Not rival and not excludable  
e) A good seen in public

For Questions 12 to 15, please consider the following information for a competitive firm.

<table>
<thead>
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<th>Quantity Produced</th>
<th>Total Cost</th>
</tr>
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<tr>
<td>1</td>
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</tr>
<tr>
<td>2</td>
<td>$200</td>
</tr>
<tr>
<td>3</td>
<td>$300</td>
</tr>
<tr>
<td>4</td>
<td>$480</td>
</tr>
<tr>
<td>5</td>
<td>$700</td>
</tr>
<tr>
<td>6</td>
<td>$960</td>
</tr>
</tbody>
</table>

12. What is the Marginal Cost of the 5th unit produced?

a) $110  
b) $140  
c) $160  
d) $220  
e) $700

13. If the price of output were $180, how much would the firm produce?

a) 2 units  
b) 3 units  
c) 4 units  
d) 5 units  
e) 6 units
14. If all firms in this market were identical to this firm, how much would each firm produce in the long-run?
   a) 2 units
   b) 3 units
   c) 4 units
   d) 5 units
   e) 6 units

15. If all firms in this market were identical to this firm, what are the profits of the firms in the long-run?
   a) Zero
   b) $20
   c) $100
   d) $240
   e) $400

16. Which of the following best describes a compensating differential in the labor market?
   a) A subsidy by the government to promote employment
   b) A difference in wages between workers in jobs with different characteristics
   c) The difference in wages between males and females
   d) A payment made by one worker to another worker
   e) The cost of a tradable permit

17. The presence of unions in the labor market could help to explain the difference in wages between white males and white females if which of the following were true:
   a) Unions obey the laws of the market
   b) Males are more likely to be members of unions than females
   c) Unions have human capital
   d) Unions have a dominant strategy
   e) Employers like unions

18. Which of the following best describes the decision of how much output to produce and the decision how much labor to hire for a competitive firm:
   a) The firm first decides how much to produce, then decides how much labor to hire
   b) The firm first decides how much labor to hire, then decides how much to produce
   c) The firm lets the market decide both how much to produce and how much labor to hire
   d) The firm decides how much to produce and how much labor to hire at the same time
   e) The firm can only choose how much output to produce in the short-run
19. Which of the following would best describe the poverty rate?

a) The amount of income at the poverty line
b) The height of the curve at the poverty line
c) The ratio of the height of the curve at the poverty line to the income at the poverty line
d) The proportion of the area under the curve to the left of the poverty line
e) The income necessary to achieve the minimum acceptable standard of living

20. Which of the following best describes the change in the poverty rate in the United States between 2002 and 2003?

a) The poverty rate was eliminated between 2002 and 2003
b) The poverty rate increased
c) The poverty rate stayed the same
d) The poverty rate decreased
e) The poverty rate cannot be calculated for the United States

21. The income effect is best described as:

a) The change in quantity demanded resulting from a change in income holding prices fixed
b) The increase in income resulting from a policy change
c) The change in utility resulting from an increase in purchasing power
d) The difference between the income held by the top 20 percent compared to the bottom 20 percent
e) The slope of the budget constraint

22. An inferior good is best described as:

a) A good for which an increase in the price, all else equal, leads to a decrease in the quantity demanded
b) A good for which an increase in price, all else equal, leads to an increase in the quantity demanded
c) A good for which an increase in income, all else equal, leads to a decrease in quantity demanded
d) A good that is not preferred by the consumer, all else equal
e) A good for which the income effect is larger than the substitution effect
For Questions 23 and 24, please consider a consumer that purchases Good X and Good Y. Good X is an inferior good and Good Y is a normal good.

23. Which of the following best describes the change in the quantity demanded of Good X and Good Y when the price of Good X increases.

a) Quantity demanded of Good X increases; Quantity demanded of Good Y increases
b) Quantity demanded of Good X increases; Quantity demanded of Good Y decreases
c) Quantity demanded of Good X decreases; Quantity demanded of Good Y uncertain
d) Quantity demanded of Good X uncertain; Quantity demanded of Good Y uncertain
e) Quantity demanded of Good X uncertain; Quantity demanded of Good Y decreases

24. Which of the following best describes the change in the quantity demanded of Good X and Good Y when the price of Good Y increases.

a) Quantity demanded of Good X increases; Quantity demanded of Good Y increases
b) Quantity demanded of Good X increases; Quantity demanded of Good Y decreases
c) Quantity demanded of Good X decreases; Quantity demanded of Good Y uncertain
d) Quantity demanded of Good X uncertain; Quantity demanded of Good Y uncertain
e) Quantity demanded of Good X uncertain; Quantity demanded of Good Y decreases

For Questions 25 to 30, please consider the following information:

A consumer purchases two goods: food and clothing. The price of food is $5 per unit. The price of clothing is $10 per unit. Initial income is $60. Both food and clothing are normal goods. With income of $60 and prices of $5 (for food) and $10 (for clothing), the consumer spends half of income on food and half on clothing. The poverty line is $50.

25. Which of the following diagrams represents the budget constraint of this consumer?
26. Which of the following best describes how the consumer decides how much to purchase of each good?

a) The consumer purchases goods with the lowest prices  
b) The consumer purchases the goods that give the highest utility  
c) The consumer purchases good that have the highest quality  
d) The consumer purchases goods that have the lowest taxes  
e) The consumer maximizes utility subject to his or her budget constraint

27. Which of the following best describes what would happen to the quantity demanded of each good if income went up by $20?

a) Quantity demanded of clothing increases; quantity demanded of food increases  
b) Quantity demanded of clothing increases; quantity demanded of food decreases  
c) Quantity demanded of clothing uncertain; quantity demanded of food increases  
d) Quantity demanded of clothing stays the same; quantity demanded of food uncertain  
e) Quantity demanded of clothing decreases; quantity demanded of food decreases

28. Which of the following best describes what would happen to the quantity demanded of each good if the consumer received food stamps (coupons that can only be used to purchase food) worth $20?

a) Quantity demanded of clothing increases; quantity demanded of food increases  
b) Quantity demanded of clothing increases; quantity demanded of food decreases  
c) Quantity demanded of clothing uncertain; quantity demanded of food increases  
d) Quantity demanded of clothing stays the same; quantity demanded of food uncertain  
e) Quantity demanded of clothing decreases; quantity demanded of food decreases

29. Is the quantity demanded of clothing higher with an increase in income of $20 or an increase in food stamps of $20?

a) Quantity demanded of clothing higher with increase in income  
b) Quantity demanded of clothing the same with both  
c) Quantity demanded of clothing higher with food stamps  
d) Change in quantity demanded of clothing uncertain  
e) Quantity demanded of clothing becomes more inelastic with increase in income

30. Is the consumer better off with an increase in income of $20 or an increase in food stamps of $20?

a) Consumer is better off with increase in income of $20  
b) Consumer is equally well off with both  
c) Consumer is better off with increase in food stamps of $20  
d) It cannot be determined from this information how well off the consumer is in either situation  
e) It is uncertain which change makes the consumer better off

31. The price of oil is expected to increase this summer as the supply of oil (at each level of the price) is expected to increase. Which of the following is the best explanation for the increase in price?

a) The cost of production is increasing  
b) Technological improvements are occurring in the oil industry  
c) Discrimination in the labor market  
d) The demand for oil is shifting to the right  
e) There are discoveries of new sources of oil
32. CNN.com is reporting that both housing prices and the quantity of houses sold rose during the first quarter of 2005? Which of the following best explains this?

a) Large increase in demand (at each price); small increase in supply (at each price)
b) Large increase in demand (at each price); small decrease in supply (at each price)
c) Large decrease in demand (at each price); small increase in supply (at each price)
d) Small decrease in demand (at each price); small decrease in supply (at each price)
e) No change in demand (at each price); large increase in supply (at each price)

33. President Bush is in favor of lowering income taxes. Which of the following best describes the effect a reduction of income taxes on consumer demand?

a) Increase demand for normal goods; increase demand for inferior goods
b) Increase demand for normal goods; reduce demand for inferior goods
c) Reduce demand for normal goods; increase demand for inferior goods
d) Reduce demand for normal goods; reduce demand for inferior goods
e) Increase demand for inferior goods if the labor supply curve is “backward-bending”

34. The United States is implementing a Free Trade Agreement with Central America (CAFTA). This could make both countries better off in which of the following situations?

a) Both countries produce the goods in which they have absolute advantage
b) Both countries produce the goods they are currently producing
c) Both countries produce the goods in which they have comparative advantage
d) Both countries produce goods in which they have the most human capital
e) Both countries use compensating differentials to determine optimal production

35. The U.S. Bureau of Labor Statistics reports that females earn lower wages than males. Which of the following best describes what can be said about discrimination against females based on this information alone?

a) There exists discrimination against females in the labor market, but not discrimination against females outside the labor market
b) There exists discrimination against females in the labor market and outside the labor market
c) There could be discrimination against females in the labor market
d) There is not discrimination against females in the labor market, but there is discrimination against females outside the labor market
e) There is not discrimination against females in the labor market and there is not discrimination against females outside the labor market
36. Consider a consumer that purchases gasoline (for a car) and food only. For this consumer, both oil and food are normal goods.

a) (10 points) In the initial situation, the income of the consumer (say, per day) is $20, the price of gasoline is $2.50 per gallon, and the price of food is $5. Please draw THIS budget constraint and a “normal-looking” indifference curve that shows how the consumer decides what to consume. Label the key points on your axes and graph.

b) (10 points) Please show what would happen to the consumer’s choice if the price of gasoline increased to $5 per gallon. Please indicate whether the consumption of gasoline and food must increase, must decrease, or has uncertain change following the change. Explain your answer.

c) (10 points) Based on your answers to parts a) and b), please draw a demand curve for this consumer and show what happens to the demand curve and the quantity demanded of this consumer when the price of gasoline increases from $2.50 per gallon to $5 per gallon.