

TEST 2
MARCH 24, 2010
CHAPTERS 25 AND 5-9

Name _____

There are 15 multiple choice questions which are worth 2 points each for a total of 30 points. The 8 short answer questions are 10 points each. You choose 7 of the last 8 to answer for a total of 70 more points. The numbers in parenthesis are the point values for the question. Partial credit will be given. Clearly label your answer to each part of the question and make a note if your work continues to another sheet.

1. Suppose that you find the owner of the dog who has been using your lawn in an unwanted way and that the owner compensates you for the use of your yard. This is an example of which type of solution to an externality?
 - (a) tax
 - (b) subsidy
 - (c) Coasian bargaining
 - (d) quantity restriction

2. Your neighbor Gabriella plays loud music that irritates you and the rest of her neighbors. She agrees to turn down the music by 5 decibels for every \$25 she receives from her neighbors, and even though you and your neighbors collectively value reductions of 5 decibels at more than \$25 per person, no one pays. This is an example of what type of problem?
 - (a) the holdout problem
 - (b) the assignment problem
 - (c) the free-rider problem
 - (d) the externality-internalization problem

3. A road (that could be congested) is an example of what type of good?
 - (a) a pure private good
 - (b) a pure public good
 - (c) an impure public good
 - (d) an altruistic good

4. If government provision of a public good results in an equal reduction in the privately provided amount of that good, which of the following is true?
 - (a) Private provision is partially crowded out.
 - (b) Private provision is not crowded out.
 - (c) The warm-glow effect caused an increase in the net amount of the public good.
 - (d) Private provision is fully crowded out.

5. If an input is sold in a perfectly competitive market, its price is equal to which of the following?
 - (a) its average cost
 - (b) its opportunity cost
 - (c) its cost-benefit ratio
 - (d) its cash flow premium

6. If the present discounted value of \$85 next year is \$80 this year, then what is the implied annual rate of interest?
- (a) 3.03% (b) 5% (c) 5.88% (d) 6.25%
7. Which of the following is the approach taken to determine how individuals value an option they are not now choosing by asking them?
- (a) contingent valuation (c) cost-benefit analysis
(b) revealed preference (d) social discounting
8. The property of the independence of irrelevant alternatives refers to which of the following?
- (a) If voters for one choice feel more strongly than do voters who select another choice, then the aggregation mechanism must be such that the choices are weighted accordingly.
(b) If one choice is preferred by all voters, then the aggregation mechanism must be such that this choice is made by society.
(c) If choice A is preferred to choice B and choice B is preferred to choice C, then A must be preferred to C.
(d) Choices must satisfy the condition that if one choice is preferred to another, then the introduction of a third choice will not change that ranking.
9. According to the median voter model which of the following must be known by a politician in order to maximize votes cast for her?
- (a) the preferences of all voters (c) total willingness to pay
(b) the preferences of the median voter (d) all of the above
10. Which of the following is true of median voter outcomes?
- (a) They are always socially efficient. (c) They reflect the intensity of voters' preferences.
(b) They are never socially efficient. (d) None of the above are correct.
11. Tax _____ is efforts to reduce the evasion of taxes; tax _____ is the result of efforts to reduce one's tax burden within the limits of the law.
- (a) compliance; avoidance (c) avoidance; evasion
(b) compliance; evasion (d) avoidance; hedging
12. Assume that both people have the same income. Under current U.S. tax code, someone who chooses to save some of his income to consume more later is taxed _____ than someone who chooses to spend all his income now, which is _____.
- (a) less; efficient (c) more; efficient
(b) less; inefficient (d) more; inefficient

13. The traditional economic answer to addiction is which of the following?
- (a) It is irrational.
 - (b) It is rational.
 - (c) It involves an understanding that smoking today increases addiction tomorrow.
 - (d) Both b and c are correct.
14. Suppose that you estimate the value of life by comparing the earnings and probabilities of death from working on a fishing boat in Alaska to the earnings and probabilities of death from working in a fish processing plant in Alaska. You find that a year of life is valued at \$6 million. If risk-loving people take the jobs on the boats and risk-averse people take jobs at the processing plants, then what will be true of your estimate?
- (a) It will overstate by an unknown amount the value of a life for the average person.
 - (b) It will be approximately equal to the value of a life for the average person.
 - (c) It will understate by an unknown amount the value of a life for the average person.
 - (d) It will understate by at least two times the value of a life for the average person.
15. Suppose that a market is currently in equilibrium and that there is no government intervention in the market. If the private marginal cost of producing the item is \$4 and the social marginal cost of production is equal to \$6, then what is the private marginal benefit of the item?
- (a) 2
 - (b) 4
 - (c) 6
 - (d) None of the above

2. When the government wants to correct a negative externality they may choose to restrict price (by imposing a tax) or restrict quantity (by setting a quota or using cap and trade).

(a) When are quantity restrictions (or cap and trade) not the same as price restrictions? (4)

(b) Describe one situation in which the government would be better off imposing quantity restrictions than setting a tax, and explain why quantity restrictions are better in that case. (6)

3. A grandfather clause in a regulation typically exempts existing facilities or operations from the new regulation. For example, the Clean Air Act of 1970 exempted existing plants from the regulation, affecting only new plants.

(a) Can you think of any good reasons why regulators would include a grandfather clause in something like the Clean Air Act of 1970? (5)

(b) What was a negative result of the grandfather clause used in the 1970 Clean Air Act? (5)

4. Suppose that Scott and Bob live on the same street. In the winter, both of them like the snow on their street to be plowed. Bob's demand is given by $Q = 40 - P$ and Scott's demand is given by $Q = 30 - 2P$. Suppose that the marginal cost of plowing the snow is constant at \$35.

(a) What is the social marginal benefit curve? (Remember to sum vertically and there should be two segments because this is a privately provided public good)
(6)

(b) What is the socially efficient amount of plowing that should be done? (2)

(c) What is the socially efficient amount of plowing that should be done if the marginal cost of plowing were \$5? (2)

5. A new recreational area in a small town will take 20 full-time workers 120 hours each to complete. In addition, the cost of materials is expected to be \$75,000. Upkeep for the rec area will be \$5,000 each year. Assume the discount rate is 7%. (Assume both the yearly costs and benefits start immediately in year 0)

(a) If the labor market is perfectly competitive and the market wage is \$20, what are the total opportunity costs of taking on this project? (5)

(b) If instead the town had unemployment, would the opportunity cost of the project change? Explain. (2)

(c) If the benefits are expected to be \$10,000 per year should the town build the rec area? (3)

6. Suppose that there are 1,000 voters in your city. A total of 400 are willing to pay up to \$25 each for the construction of a park while the other 600 are willing to pay only \$10. The construction of the park will cost \$12,000, and someone proposes a vote of whether to tax each citizen \$12 in order to finance the park.

(a) What will be the result according to the median voter model? (3)

(b) Is this result socially efficient? Explain. (4)

(c) How would your answer to both (a) and (b) change if instead of being willing to pay up to \$25 each, the 400 residents were willing to pay up to \$50 each? (3)

7. Suppose that three candidates are running for the same office. The only issues the population cares about are policing and criminal rehabilitation programs, and there are three types of voters. The first group wants relatively little policing and lots of rehab; the second group wants medium amounts of both; the third group wants lots of policing and little rehab. The candidate with the highest number of votes wins, and the politicians care only about winning rather than about their personal ideologies. Analyze how useful the median voter model will be in this case, specifically focusing on the number of issues in the race and the number of candidates that are running. What problems, if any, would these two things cause in terms of the median voter theory? (5)

How might the externality of smoking be different in a state in which unions negotiate common wages for all employees in similar positions in a company versus a state in which there are no labor unions and wages are negotiated by each employee? Assume that all other aspects of these two states are identical.(5)

8. Suppose that a nation is considering adopting a national sales tax of 25% on all goods in place of the progressive income tax currently in place.

(a) If the politicians want to use a sales tax but also want the tax to be progressive, what could they do? Evaluate this option in terms of what you know about optimal commodity taxation. (5)

(b) Would all groups be affected by the transition to a consumption tax in the same way? Explain. (Note this question asks for the differences in TRANSITION not just the differences in the tax so discuss transitional inequalities!) (5)