

ECO1104D, University of Ottawa

Midterm: November 14, 2013

Answer Key

[2 points each]

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

41. Bargaining by private parties will fail to produce an efficient solution to externalities under the following circumstances.

- Transaction costs: When the costs parties incur in the process of agreeing to, and following through on, a deal are so high that it is impossible to reach a mutually beneficial agreement **[1 point]**
- Stubbornness: When each party holds out for a better deal even if a beneficial agreement is possible **[1 point]**
- Coordination problems: When the number of parties is very large, coordinating them (getting them together) may be costly, difficult, or impossible. In addition, each resident has an incentive to free-ride off his/her neighbours. **[2 points]**

42. **[6 points; ½ point for each correct answer]**

	Without Tax	With Tax	Change
Consumer surplus	A + B + C	A	-(B + C)
Producer surplus	D + E + F	F	-(D + E)
Tax revenue	None	B + D	(B + D)
Total surplus	A + B + C + D + E + F	A + B + D + F	-(C + E)

43. This means that, for any quantity supplied, the social cost exceeds the private cost by the amount of the negative externality. The demand curve, on the other hand, reflects both the social value and the private value of the good. **[2 points]**

The socially desirable quantity is the quantity where the social cost curve equals (or intersects) the demand curve. At this equilibrium, the social optimum quantity (Q_O) is less than the market quantity (Q_M), and the price consumers would pay at the social optimum (P_C) exceeds the market price (P_M). **[2 points]**

The inefficiency is represented by area A in the diagram below. It equals the amount by which the social cost exceeds the social/private value of supplying the market quantity (Q_M).

For all quantities between Q_O and Q_M , the social cost of additional output exceeds its social/private value. [2 points]

A tax equal to the value of the negative externality would correct the inefficiency. [1 point]

[3 points for graph]

