McMaster University   Department of Economics
ECON 1B03
Winter 2012

Test 2   ANSWERS

Saturday March 10, 2012
90 minutes
Instructor: H Holmes

MULTIPLE CHOICE

Answer all questions on the scan sheet using HB pencil.
Calculators are permitted.
Hand in the scan and this sheet separately.

TOTAL MC MARKS AVAILABLE: 40

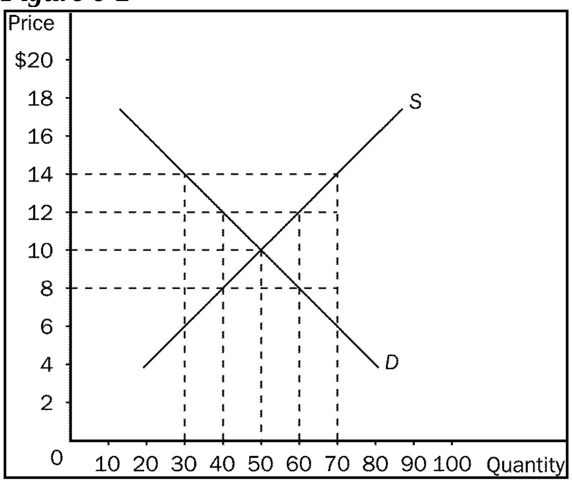
NAME:____

STUDENT #:____

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. A price ceiling
a. is a legal maximum on the price at which a good can be sold.
b. is a legal minimum on the price at which a good can be sold.
c. occurs when the price in the market is temporarily above equilibrium.
d. will usually result in a market surplus.

Figure 6-2



____ 2. **Refer to Figure 6-2**. If the government imposes a binding price ceiling of $8.00 in this market, the result would be a
a. surplus of 20.
b. surplus of 40.
c. shortage of 20.
d. shortage of 30.

____ 3. **Refer to Figure 6-2**. A binding price floor would exist at
a. a price of $10.00.
b. a price of $8.00.
c. any price above $10.00.
d. any price below $10.00.

____ 4. Assume that the demand and supply curves for cars are elastic. If the government imposed a $500 tax on the buyer of each car, we can assume that the
a. equilibrium price of a car would decrease by less than $500.
b. price of a car would decrease by exactly $500.
c. price of a car would decrease by more than $500.
d. price of a car would not change if both curves were elastic.

Figure 6-8

____ 5. **Refer to Figure 6-8**. The price buyers will pay after the tax is imposed is
a. $8.00.
b. $7.00.
c. $6.00.
d. $5.00.

____ 6. **Refer to Figure 6-8**. The price sellers receive after the tax is imposed is
a. $8.00.
b. $6.00.
c. $5.00.
d. $4.00.

____ 7. **Refer to Figure 6-8**. The amount of the tax imposed in this market is
a. $1.00 per unit.
b. $1.50 per unit.
c. $2.50 per unit.
d. $3.00 per unit.

____ 8. The tax incidence is equivalent
a. if the tax is levied on only the seller.
b. if the tax is levied only on the buyer.
c. if the tax is levied on both the buyer and the seller.
d. regardless of whether the tax is levied on buyers or sellers.

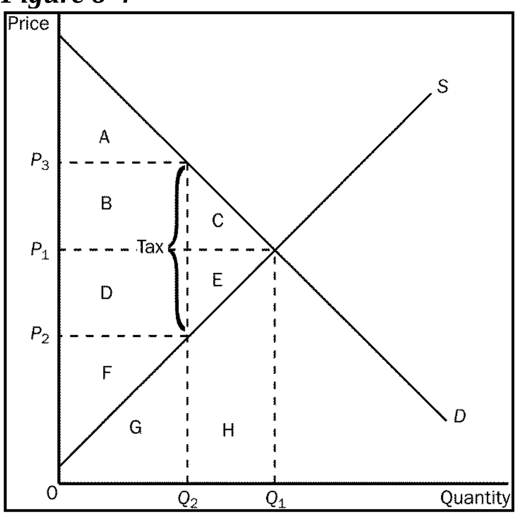
____ 9. In general, a tax burden falls more heavily on the side of the market that is
a. perfectly elastic.
b. more elastic.
c. unit elastic.
d. less elastic.

____ 10. When a tax is imposed on a good we know that the losses to buyers and sellers
a. are equal to the revenue raised by the government.
b. are less than the revenue raised by the government.
c. exceed the revenue raised by the government.
d. cannot be compared to the tax revenue raised by the government since the amount of the tax will vary from good to good.

____ 11. A tax has a deadweight loss because
a. it induces the government to spend more.
b. it induces buyers to consume less and sellers to produce less.
c. it causes a disequilibrium in the market.
d. the loss to buyers is greater than the loss to sellers.

____ 12. When evaluating the size of the deadweight loss due to a tax we know that the
a. greater the elasticities of supply and demand, the greater the deadweight loss.
b. smaller the elasticities of supply and demand, the greater the deadweight loss.
c. smaller the decrease in both quantity demanded and quantity supplied, the greater the deadweight loss.
d. primary factor that determines the size of the deadweight loss in the percentage the tax is of price.

Figure 8-4



____ 13. **Refer to Figure 8-4**. If the tax was levied on the consumer, it caused a reduction in consumer surplus represented by area
a. A
b. B + C
c. C + E
d. D + E

____ 14. **Refer to Figure 8-4**. If the tax was levied on the producer, it caused a reduction in consumer surplus represented by area
a. A
b. B + C
c. C + E
d. D + E

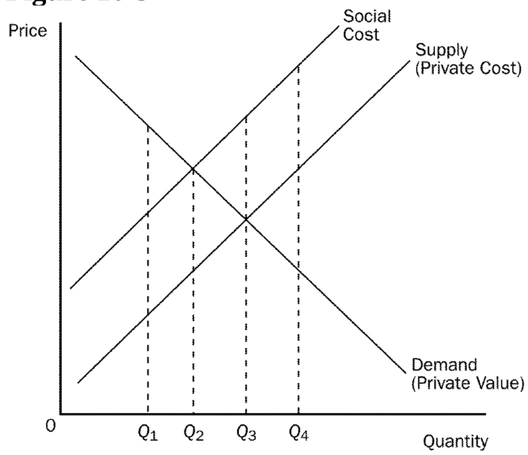
____ 15. Total surplus with a tax is equal to
a. consumer surplus and producer surplus.
b. consumer surplus minus producer surplus.
c. consumer surplus, producer surplus, and total surplus.
d. consumer surplus, producer surplus, and tax revenue.

____ 16. Market demand is Qd = 520 -3P and market supply is Qs = 2P - 30. The government levies a per unit tax on consumers of the good; the new market demand is Qd' = 490 - 3P. The amount of the per unit tax is
a. $10
b. $5
c. $30
d. $20

____ 17. Market demand is Qd = 520 -3P and market supply is Qs = 2P - 30. The government levies a per unit tax on consumers of the good; the new market demand is Qd' = 490 - 3P. The deadweight loss due to the tax is
a. $30
b. $60
c. $90
d. $120

____ 18. When negative externalities are present in a market
a. producers will be affected, but not consumers.
b. overproduction will occur.
c. demand will be too high.
d. the market will still maximize total benefits.

Figure 10-3



____ 19. **Refer to Figure 10-3.** The equilibrium quantity would be at
a. Q_1.
b. Q_2.
c. Q_3.
d. Q_4.

____ 20. **Refer to Figure 10-3.** The optimum amount of this product from society's standpoint would be
a. Q_1.
b. Q_2.
c. Q_3.
d. Q_4.

____ 21. **Refer to Figure 10-3.** This market
a. has no need for government intervention.
b. would benefit from a tax on the product.
c. would benefit from a subsidy placed on the product.
d. would optimize total well-being at Q_3.

____ 22. Which of the following statements about a market that is affected by a positive externality is correct?
a. The optimum level of output is less than the free market level of output and the optimum price is greater than the free market price.
b. The optimum level of output is greater than the free market level of output and the optimum price is greater than the free market price.
c. The optimum level of output is less than the free market level of output and the optimum price is less than the free market price.
d. None of the above are correct.

____ 23. The marginal product of labour is equal to the
a. incremental cost associated with a one unit increase in labour.
b. incremental profit associated with a one unit increase in labour.
c. increase in labour necessary to generate a one unit increase in output.
d. increase in output obtained from a one unit increase in labour.

____ 24. Assume a certain firm regards the number of workers it employs as variable, and that it regards the size of its factory as fixed. This assumption is often realistic
a. in the short run, but not in the long run.
b. in the long run, but not in the short run.
c. both in the short run and in the long run.
d. neither in the short run nor in the long run.

____ 25. On a 100-acre farm, a farmer is able to produce 3,000 bushels of wheat when he hires 2 workers. He is able to produce 4,400 bushels of wheat when he hires 3 workers. Which of the following possibilities is consistent with the property of diminishing marginal product?
a. The farmer is able to produce 5,600 bushels of wheat when he hires 4 workers.
b. The farmer is able to produce 5,800 bushels of wheat when he hires 4 workers.
c. The farmer is able to produce 6,000 bushels of wheat when he hires 4 workers.
d. All of the above are correct.

____ 26. The amount by which total cost rises when the firm produces one additional unit of output is called
a. average cost.
b. marginal cost.
c. fixed cost.
d. variable cost.

Scenario 13-4

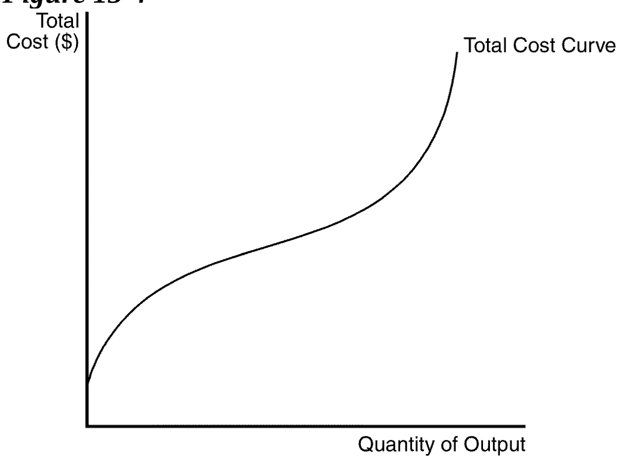
For the following questions, assume that a given firm experiences decreasing marginal product of labour with the addition of each worker regardless of the current output level.

____ 27. **Refer to Scenario 13-4**. Average variable cost will be
a. always rising.
b. always falling.
c. U-shaped.
d. constant.

____ 28. **Refer to Scenario 13-4**. Marginal cost will be
a. always rising.
b. always falling.
c. U-shaped.
d. constant.

____ 29. When marginal cost exceeds average total cost,
a. average fixed cost must be rising.
b. average total cost must be rising.
c. average total cost must be falling.
d. marginal cost must be falling.

Figure 13-4



____ 30. **Refer to Figure 13-4**. Which of the following can be inferred from the figure above?
(i) Marginal cost is increasing at all levels of output.
(ii) Marginal product is increasing at low levels of output.
(iii) Marginal product is decreasing at high levels of output.

a. (i) and (ii)
b. (ii) and (iii)
c. (i) and (iii)
d. All of the above are correct.

Scenario 14-2
Assume a certain firm is producing 1,000 units of output (so Q = 1,000). At Q = 1,000, the firm's marginal cost equals $15 and its average total cost equals $11. The firm sells its output for $12 per unit.

____ 31. **Refer to Scenario 14-2**. At Q = 999, the firm's total cost amounts to
a. $10,985.
b. $10,990.
c. $10,995.
d. $10,999.

____ 32. **Refer to Scenario 14-2**. At Q = 999, the firm's profit amounts to
a. $993.
b. $997.
c. $1,003.
d. $1,007.

____ 33. When a firm in a competitive market receives $800 in total revenue, it has a marginal revenue of $20. What is the average revenue, and how many units were sold?
a. $5 and 100
b. $10 and 50
c. $20 and 10
d. $20 and 40

____ 34. A firm will shut down in the short run if, for all positive levels of output,
a. its loss exceeds its fixed costs.
b. its total revenue is less than its variable costs.
c. the price of its product is less than its average variable cost.
d. All of the above are correct.

____ 35. A firm in a competitive market has the following cost structure:

Output	Total Cost
0	$5
1	$10
2	$12
3	$15
4	$24
5	$40

This firm will shut down
a. if price falls below $3.33 and exit if it falls below $5.
b. if price falls below $5 and exit if it falls below $3.33.
c. if price falls below $7 and exit if it falls below $10.
d. and exit if price falls below $5.

____ 36. In a competitive market that is characterized by free entry and exit,
a. all firms will operate at efficient scale in the short run.
b. all firms will operate at efficient scale in the long run.
c. the price of the product will differ across firms.
d. the number of sellers in the market will steadily decrease over time.

____ 37. In a perfectly competitive market, market demand is Qd = 300 - 4P and market supply is Qs = 6P. Each identical firm has marginal costs MC = 3Q. How many firms are there in this market?
a. 10
b. 18
c. 24
d. 16

____ 38. In a perfectly competitive market, market demand is Qd = 300 - 4P and market supply is Qs = 6P. Each identical firm has constant average total costs ATC = 35. Firms are experiencing
a. economic losses and there will be exit in the long run.
b. economic profits and there will be entry in the long run.
c. zero economic profit and the market is in long run equilibrium.
d. normal returns and there will be some entry in the long run.

____ 39. In a perfectly competitive market, market demand is Qd = 300 - 4P and market supply is Qs = 6P. Each identical firm has constant average total costs ATC = 35. If this is an increasing cost industry, the long run supply curve will be
a. horizontal at P = 35.
b. upwards sloping and linear.
c. upwards sloping but nonlinear.
d. downwards sloping but nonlinear.

____ 40. In a perfectly competitive market, market demand is Qd = 300 - 4P and market supply is Qs = 6P. Each identical firm has constant average total costs ATC = 35. In long run equilibrium, how many units of output will be traded in the market?
a. 140
b. 160
c. 180
d. 210

____ 41. BONUS: MDCL 1305 is
a. a fixed input for lecture production.
b. a fixed input for lecture production in the short run.
c. a variable input for lecture production since it can hold anywhere from zero to 600 students.
d. not considered an input for lecture production since other classrooms could be usd.