McMaster University Department of Economics
ECON 1B03
Fall 2011

Test 2 VERSION 4

ANSWERS

Saturday November 12, 2011
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 binding price ceiling causes
a. a shortage, which is temporary, since market adjustment will cause price to rise.
b. a shortage, which cannot be eliminated through market adjustment.
c. a surplus, which cannot be eliminated through market adjustment.
d. a surplus, which is temporary, since market adjustment will cause price to rise.

____ 2. A price ceiling that is not binding will
a. cause a shortage in the market.
b. cause the market to be less efficient.
c. cause a surplus in the market.
d. have no effect on the market price.

____ 3. A newly imposed minimum wage set above the equilibrium wage in a labor market will
a. make every worker who is earning a wage below the minimum better off.
b. make workers earning more than the minimum wage worse off.
c. cause the equilibrium wage in the market to rise.
d. cause some workers to get a raise and some workers to lose their jobs.

____ 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 not change if both curves were elastic.
c. price of a car would decrease by more than $500.
d. price of a car would decrease by exactly $500.

____ 5. A tax placed on the seller of a product will
a. lower both equilibrium price and quantity.
b. lower equilibrium price and raise equilibrium quantity.
c. raise equilibrium price and lower equilibrium quantity.
d. raise both equilibrium price and quantity.

____ 6. If a tax is imposed on a market with inelastic demand and elastic supply,
a. the burden of the tax will depend on whether it is imposed on the buyers or the sellers.
b. buyers will bear most of the burden of the tax.
c. the burden of the tax will be shared equally between buyers and sellers.
d. sellers will bear most of the burden of the tax.
e. it is impossible to determine how the burden of the tax will be shared.

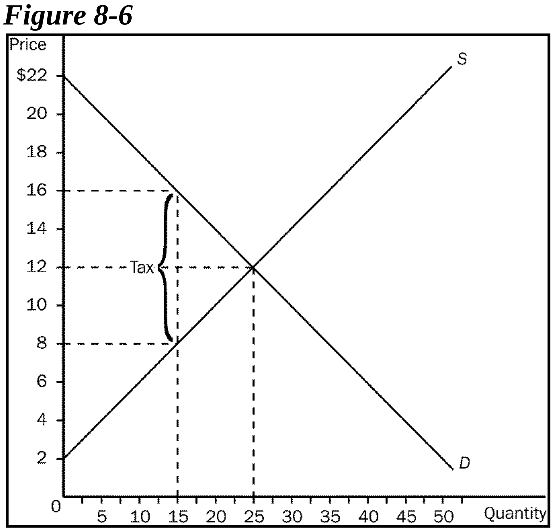
____ 7. Suppose that a tax is placed on books. If the buyer pays the majority of the tax we know that the
a. government has placed the tax on the seller.
b. demand curve is more inelastic than the supply curve.
c. supply curve is more inelastic than the demand curve.
d. government has placed the tax on the buyer.

____ 8. A tax has a deadweight loss because
a. it induces buyers to consume less and sellers to produce less.
b. it induces the government to spend more.
c. it causes a disequilibrium in the market.
d. the loss to buyers is greater than the loss to sellers.

____ 9. When evaluating the size of the deadweight loss due to a tax we know that the
a. smaller the decrease in both quantity demanded and quantity supplied, the greater the deadweight loss.
b. greater the elasticities of supply and demand, the greater the deadweight loss.
c. smaller the elasticities of supply and demand, the greater the deadweight loss.
d. primary factor that determines the size of the deadweight loss in the percentage the tax is of price.

____ 10. Total surplus with a tax is equal to
a. consumer surplus, producer surplus, and tax revenue.
b. consumer surplus minus producer surplus.
c. consumer surplus, producer surplus, and total surplus.
d. consumer surplus and producer surplus.

Figure 8-6



____ 11. **Refer to Figure 8-6**. The total surplus with the tax levied on the seller would equal
a. $200.
b. $220.
c. $230.
d. $240.
e. $210.

____ 12. **Refer to Figure 8-6**. The amount of deadweight loss in this market resulting from the levying of the tax is
a. $50.
b. $20.
c. $40.
d. $30.
e. $60

____ 13. **Refer to Figure 8-6**. The benefits to the government (total tax revenue) would be
a. $150.
b. $100.
c. $120.
d. $80.

____ 14. Suppose that the equilibrium quantity in the market for widgets has been 200 per month. Then a tax of $5 per widget is imposed on widgets. The price paid by buyers increases by $2 and the after-tax price received by sellers falls by $3. The government is able to raise $750 per month in revenue from the tax. The deadweight loss from the tax is
a. $250.
b. $50.
c. $75.
d. $125.

____ 15. A tax of $10 per unit is imposed on a certain market. The tax reduces the equilibrium quantity in the market by 200 units. The deadweight loss from the tax is
a. $2000.
b. There is not enough information to answer the question.
c. $1000.
d. $500.

____ 16. If the supply of land is fixed, a tax on land would be paid
a. only by workers.
b. partly by landowners and partly by land users.
c. entirely by the renters or users of the land.
d. entirely by the landowners.

____ 17. Market demand is Qd = 200 - 7P and market supply is Qs = 3P. The government imposes a tax on firms which results in a new supply curve of Qs = 3P - 15. The amount of the per unit tax is
a. $5
b. $20
c. $1.50
d. $15

____ 18. Market demand is Qd = 200 - 7P and market supply is Qs = 3P. The government imposes a tax on firms which results in a new supply curve of Qs = 3P - 15. The quantity traded after the tax has been levied is
a. 21.5
b. 60
c. 49.5
d. 10.5

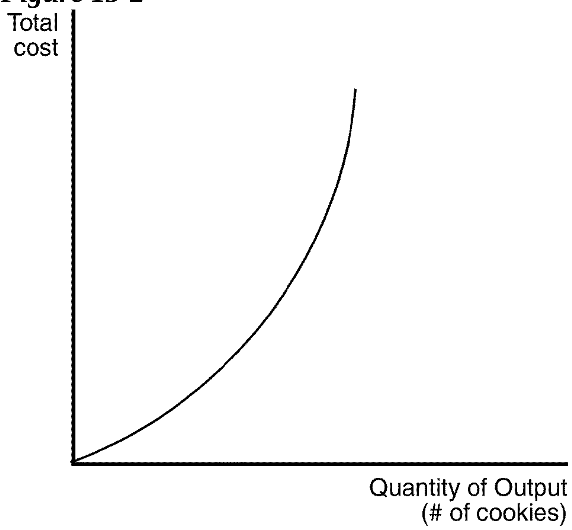
____ 19. Market demand is Qd = 200 - 7P and market supply is Qs = 3P. The government imposes a tax on firms which results in a new supply curve of Qs = 3P - 15. The deadweight loss due to the tax is
a. $26.25
b. $408.38
c. $247.50
d. $52.50

____ 20. Economic profit is equal to
a. total revenue minus accounting profit.
b. total revenue minus the accounting cost of producing goods and services.
c. total revenue minus the opportunity cost of producing goods and services.
d. total revenue minus the explicit cost of producing goods and services.
e. average revenue minus the average cost of producing the last unit of a good or service.

____ 21. The marginal product of labour is equal to the
a. incremental profit associated with a one unit increase in labour.
b. increase in labour necessary to generate a one unit increase in output.
c. incremental cost associated with a one unit increase in labour.
d. increase in output obtained from a one unit increase in labour.

The figure below depicts a total cost function for a firm that produces cookies. Use the figure to answer the following questions.

Figure 13-2



____ 22. **Refer to Figure 13-2**. The changing slope of the total cost curve reflects
a. decreasing marginal product.
b. decreasing average total cost.
c. decreasing average variable cost.
d. increasing fixed cost.

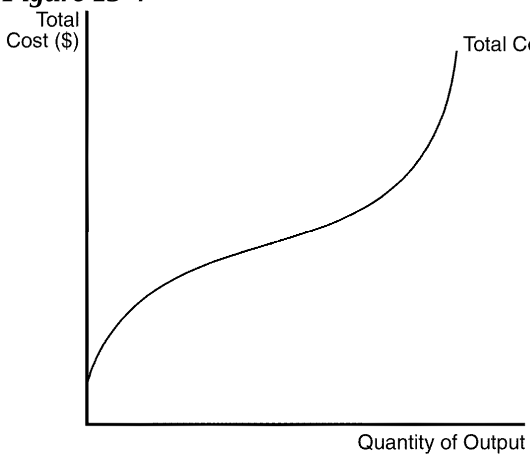
____ 23. When a firm's only variable input is labour, then the slope of the production function measures the
a. marginal product of labour.
b. quantity of output.
c. total cost.
d. quantity of labour.
e. marginal opportunity cost of labour.

____ 24. The cost of producing the typical unit of output is the firm's
a. average total cost.
b. variable cost.
c. opportunity cost.
d. marginal cost.

____ 25. If marginal cost is rising,
a. marginal product must be rising.
b. marginal product must be falling.
c. average variable cost must be falling.
d. average fixed cost must be rising.

____ 26. The marginal cost curve crosses the average total cost curve at
a. a point where the marginal cost curve is rising.
b. the efficient scale.
c. the minimum point on the average total cost curve.
d. All of the above are correct.

Figure 13-4



____ 27. **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 (iii)
b. (i) and (ii)
c. (ii) and (iii)
d. All of the above are correct.

Adrian's Premium Boxing Service subcontracts with a chocolate manufacturer to box premium chocolates for their mail order catalogue business. She rents a small room for $150 a week in the downtown business district that serves as her factory. She can hire workers for $275 a week.

Table 13-2

Number of Workers	Chocolates Produced per Week	Marginal Product of Labor	Cost of Factory	Cost of Workers	Total Cost of Inputs
0	0				
1		330	150	275	425
2	630				
3		150		825	975
4	890				
5	950	60		1,375	
6		10			1,800

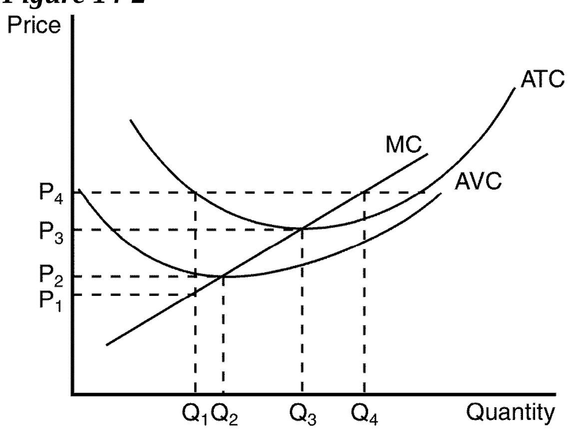
____ 28. **Refer to Table 13-2 on the previous page**. What is the marginal product of the second worker?
a. 110
b. 300
c. 200
d. 260
e. 340

____ 29. **Refer to Table 13-2**. What is the total cost associated with making 890 boxes of premium chocolates per week?
a. 1,600
b. 1,575
c. 1,250
d. 1,400
e. 1,325

____ 30. **Refer to Table 13-2**. During the week of July 1st, Adrian doesn't box any chocolates. What are her costs during the week?
a. 0
b. 425
c. 275
d. 150

The graph below depicts the cost structure for a firm in a competitive market. Use the graph to answer the following questions.

Figure 14-2



____ 31. **Refer to Figure 14-2**. When price falls from P_3 to P_1, the firm finds that
a. it should produce Q_1 units of output.
b. fixed cost is higher at a production level of Q_1 than it is at Q_3.
c. it should produce Q_3 units of output.
d. it is unwilling to produce any output.

____ 32. **Refer to Figure 14-2**. When price rises from P_3 to P_4, the firm finds that
a. fixed costs are lower at a production level of Q_4.
b. profit is maximized at a production level of Q_3.
c. average revenue exceeds marginal revenue at a production level of Q_4.
d. it can earn a positive profit by increasing production to Q_4.

____ 33. **Refer to Figure 14-2**. Which of the following statements best reflects the situation faced by the firm when price falls from P_4 to P_2?
a. Average total cost is lower than at the previous level of output so it increases production.
b. Marginal revenue is lower than marginal cost at the previous level of output, so it decreases production.
c. Marginal revenue is higher than marginal cost at the previous level of output, so it increases production.
d. The firm will earn profit equal to $(P_4 - P_2) \times Q_2$.

____ 34. Which of these curves is the competitive firm's supply curve?
a. the average total cost curve above marginal cost
b. the marginal cost curve above average variable cost
c. the average fixed cost curve
d. the average variable cost curve above marginal cost

____ 35. To begin, a competitive firm is selling its output for $10 per unit and it is maximizing its profit. Now, the price rises to $14 and the firm makes whatever adjustments are necessary to maximize its profit at the now-higher price. Once the firm has adjusted, which of the following statements is correct?
a. The firm's marginal revenue is lower than it was previously.
b. The firm's quantity of output is higher than it was previously.
c. The firm's marginal cost is lower than it was previously.
d. All of the above are correct.

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

____ 37. In a perfectly competitive market, market demand is Qd = 5160 - 15P and market supply is Qs = 200P. Each identical firm has MC = .5Q. In the short run, how much will each firm produce?
a. 74
b. 48
c. 24
d. 100

____ 38. In a perfectly competitive market, market demand is Qd = 5160 - 15P and market supply is Qs = 200P. Each identical firm has ATC = 20. Each firm is
a. making economic profits and there will be entry in the ling run.
b. making economic losses and there will be exit in the long run.
c. just covering its variable costs and will continue to produce.
d. breaking even and the market is in long run equilibrium.

____ 39. In a perfectly competitive market, market demand is Qd = 5160 - 15P and market supply is Qs = 200P. Each identical firm has ATC = 20. Market quantity traded in the long run is
a. 4880
b. 4800
c. 4860
d. 4940

____ 40. In a perfectly competitive market, market demand is Qd = 5160 - 15P and market supply is Qs = 200P. Each identical firm has ATC = 20. If this is a constant cost industry, the long run supply curve will be

a. upward sloping and linear.
b. horizontal but at an indeterminable price level without knowing marginal costs..
c. upward sloping but non-linear.
d. horizontal at P = 20.

____ 41. BONUS: The Economics Department is located in which building?

a. CNH
b. KTH
c. TSH
d. DSB