Practice Test Economics 01 Midterm 2 Fall 2011

Multiple Choice: Choose the best answer

1. Suppose price of good x is $1 and price of good y is $10, then to maximize total utility, a rational consumer should consume until:

   a) the marginal utility of x divided by the marginal utility of y is 1
   b) the marginal utility of x divided by the marginal utility of y is 10
   c) the marginal utility of x divided by the marginal utility of y is 1/10
   d) none of the above

2. A perfectly competitive industry is one where

   a) All producers are price takers
   b) There is only one producer
   c) The output produced is standardized
   d) (a) and (c)

3. If an industry that is currently perfectly competitive were to become monopolized, which of the following would occur?

   a) Both price and output would remain unchanged
   b) Price would increase and output would decrease
   c) Both price and output would decrease
   d) Price would decrease and output would increase

4. The difference between the total cost of a given quantity of output and the variable cost of that output is

   a) The marginal product of labor
   b) The marginal cost of that output
   c) The total product of labor
   d) The fixed cost of that output

5. The average variable cost is at its minimum when:

   a) Marginal cost is greater than the average variable cost
   b) Marginal cost is smaller than the average variable cost
   c) Marginal cost equals the average variable cost
   d) None of the above

6. The difference between the average total cost curve and the average variable cost curve gets smaller at higher quantity of output because

   a) The average variable cost is a constant
   b) The average total cost is decreasing for all output levels
   c) The average fixed cost is decreasing as output increases
   d) The marginal cost is rising

7. Consider a standard monopolist and select the true statement/s:

   a) there is no supply curve with a monopolist
   b) there will be deadweight loss
   c) the profit-maximizing point is where price equals to marginal cost
   d) (a) and (b)

8. The optimal output rule says that

   a) Profit is maximized by producing the quantity of output at which the marginal revenue of the last unit produced is equal to its marginal cost
   b) Output should be chosen to minimize marginal cost
   c) One should produce as much output as possible
   d) both (b) and (c)

9. The short run supply curve for a perfectly competitive firm is

   a) The upward sloping portion of the average variable cost
   b) The upward sloping portion of the average total cost
   c) The marginal cost above the minimum of the average total cost
   d) The marginal cost above the minimum of the average variable cost

10. DeBeers became a monopoly by:

    a) Establishing control over a scarce resource input
    b) Economies of scale
    c) Technological superiority
    d) Ownership of a or patent

11. . One of the following factors makes it more difficult for an oligopolistic industry to collude:

    a) A small number of sellers
    b) The producers in the industry produce identical products
    c) The producers have very different marginal costs of production

d) The number of buyers is large

12. An indifference curve:

a. Is typically downward sloping
b. Traces out all consumption bundles that yield the same amount of total utility
c. Never crosses another indifference curve
d. All of the above

13. In oligopolistic industries:

a) Strategic interdependence is an important feature
b) There are only a few producers
c) How competitive the industry is can be measured by the Herfindhal-Hirshmann index
d) All of the above

14. Suppose on the y-axis we have quantity of good y and on the x-axis we have the quantity of good x. The slope of the budget line can be written as:

a) price of good y divided by price of good x
b) price of good x divided by price of good y
c) income of the consumer divided by price of good x
d) income of the consumer divided by price of good y

15. If good x and good y are perfect substitutes, then

a) indifference curves of good x and good y are straight lines
b) indifference curves of good x and good y can cross
c) indifference curves of good x and good y are L-shaped
d) none of the above

Short Answer Questions

1. Suppose Thelma and Louis are caught by police. They have two strategies: to confess or not to confess. If they both do not confess, each gets 5 years in jail. If they both confess, each will get 15 years. If Thelma confesses, and Louis does not, Thelma gets 2 years and Louis gets 20 years. If Louis confesses and Thelma does not, Thelma gets 20 years and Louis gets 2 years. Write down the payoff matrix for this game.

What is the dominant strategy and why? What is the Nash equilibrium?

2a. Suppose Rosalinda is choosing different amounts of burritos and strawberries to consume. Her income is N. The price of one burrito is P_b and the price of a pound of strawberry is P_s. Draw and label a graph showing her budget line and her indifference curves. Indicate in your graph the optimal amount of burritos and the optimal amount of strawberries that she should consumer in order to maximize her total utility. At the optimal consumption point, what is the relationship between the slope of the budget line and the slope of the indifference curve?

2b. Suppose Rosalinda's income rises while the price of a burrito and the price of a pound of strawberry stay the same, show in a separate graph how her optimal consumption of the two goods changes.

3. Consider the general case where all the cost curves have standard shapes. Suppose a perfectly competitive firm is incurring economic losses in the short run. Show this situation in a graph. Indicate how much economic losses are in your graph. Should the firm shut down in the short run in your graph?

4 a) Consider the special case and assume that the marginal cost is constant and that fixed cost is zero. Show graphically how a monopolist maximizes economic profits. What is the relationship between marginal revenue and the price? At the point when the monopolist is maximizing profits, what is the monopoly price and what is the monopoly quantity? Show in your graph the consumer surplus, the profits of the monopolist and the deadweight loss.

4 b) Consider the special case and assume that for a natural monopolist the marginal cost is constant and there is high fixed cost. Show graphically how the natural monopolist maximizes economic profits. At the point of profit maximization, what is the monopoly price and what is the monopoly quantity? Suppose now the natural monopoly is regulated. What is the best regulated price? What happens to economic profits with the regulation? How is the consumer surplus changed due to the regulation? Show graphically.

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