**Economics 01 Practice Exam 2 Fall 2012**

**Multiple Choice. Choose the best answer given.**

1. Suppose *tacos* are free, then to maximize total utility, a consumer should eat *tacos* until his/her marginal utility is:

    a) at a maximum
    b) equals the price of *naan*
    c) negative
    d) zero

2. Suppose Psy, Johnny Depp, Penélope Cruz, Will Smith, and others belong to an oligopolistic entertainment industry. An oligopolistic entertainment industry is a market structure in which:

    a) All movie actors, actresses and singers are price takers
    b) There are many movie actors, actresses and singers, each with a small market share
    c) The movie acting services and singing services provided are always standardized
    d) None of the above

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

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

4. The marginal cost curve cuts the average total cost curve at

    a) The minimum of the marginal cost curve
    b) The maximum of the average total cost
    c) The minimum of the average total cost
    d) The minimum of the average variable cost curve

5. A perfectly discriminating monopolist:

    a) reduces economic efficiency compared to a regular monopolist
    b) creates more deadweight loss than a regular monopolist

c) charge the same high price to all individual consumers
d) none of the above

6. The long run average total cost curve

   a) Exhibits increasing returns to scale when it decreases as output increases
   b) Exhibits constant returns to scale when it decreases as output increases
   c) Is the average cost when fixed cost has been chosen to maximize total cost for each level of output
   d) None of the above

7. Suppose CDs of *Adele* and CDs of *Belinda* are perfect complements, then

   a) The indifference curves of these two goods will be horizontal
   b) The indifference curves of these two goods will be vertical
   c) The indifference curves of these two goods will be downward-sloping straight lines
   d) The indifference curves of these two goods will be L-shaped

8. Suppose Telefónica, based in Madrid, is a private telecommunication monopoly in Spain. The short run supply curve for Telefónica is

   a) The upward sloping portion of the average variable cost
   b) The marginal cost above the average total cost
   c) The marginal cost above the average variable cost
   d) None of the above; there is no supply curve for a monopolist

9. In general, a monopolist

   a) Produces more output than a perfectly competitive firm
   b) Sets a higher price than a perfectly competitive firm
   c) Incurs deadweight loss since he/she restricts production
   d) (b) and (c)

10. Suppose in an oligopolistic industry there are 3 firms. Their market shares are 40%, 30% and 30%. Then the Herfindahl-Hirshman Index is:

    a) 100
    b) 1,660
    c) 3,400
    d) 900

11. 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

12. In some industries, monopolists persist because:

a. There are barriers to entry
b. In some industries, there are significant economies of scale
c. The government grants exclusive right to only one firm
d. All of the above

13. In the short run, a perfectly competitive firm can theoretically:

a. make economic profits
b. make economic losses
c. make zero economic profits
d. all of the above

14. The chocolate industry, with companies including Nestle, Hershey, Cadbury, etc. can be analyzed as oligopolists. In general oligopolistic industries, collusion by firms:

a. can never be achieved because cheating is always the best strategy even with repeated interactions
b. is illegal in the United States
c. can be tacit and can be supported using tit-for-tat strategies with repeated interactions
d. (b) and (c)

15. Compared to monopoly and oligopoly, there are several important economic efficiency properties associated with perfect competition. These include:

a. with perfectly competivie firms, price equals to marginal cost
b. under perfect competition, there is no deadweight loss
c. with perfect competition, economic profits are zero in the long run
d. All of the above

**Short Answer Questions (10 points each)**

1. (10 points) Suppose Taylor Swift is choosing different amounts of low-carb chocolate and organic yogurt to consume. Her income is N. Draw and label a graph showing her budget line and her indifference curves. Indicate in your graph the optimal amount of low-carb chocolate and the optimal amount of organic yogurt that she should consume in order to maximize her total utility.

   Suppose the price of organic yogurt increases, while the price of low-carb chocolate and her income stay the same, show in a separate graph how her optimal consumption of the two goods changes.

2. (10 points) a) Consider the general case where the cost curves have the 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? Why or why not? What is the firm's short run supply curve?

   b) Again consider the general case where the cost curves have the standard shapes. Indicate in a separate set of graphs (one graph for the entire market and one graph for the firm) how the industry will adjust via entry or exit to establish the long run equilibrium. In the long run equilibrium, is the firm in your graph still making economic losses? Show the long run equilibrium for your firm in the graph. Also show the adjustment in the market.

3. (10 points) Suppose two rappers Jay-Z and 50 Cent can be analyzed as duopolists. They have two strategies: to cooperate with each other or to fight each other. Suppose if they both cooperate, each will get $15 million. If they both fight, each will get $5 million. If Jay-Z fights and 50 Cent cooperates, then Jay-Z gets $20 million and 50 Cents gets only $2 million. If Jay-Z cooperates and 50 Cent fights, then Jay-Z gets $2 million and 50 Cent gets $20 million.

Illustrate the game between Jay-Z and 50 Cents below. Write down the payoff matrix for this game. Which equilibrium will the two rappers choose? Why? Is there a dominant strategy? What is the Nash equilibrium?

4) (10 points) a) Suppose a natural monopolist is faced with high fixed costs and constant marginal costs. Show graphically the natural monopolist maximizing his/her economic profits. Show in your graph the monopoly price and the monopoly quantity. Indicate in your graph the amount of the economic profits and the extent of the consumer surplus.

b) Suppose this natural monopolist is regulated to set a price that equals the average total cost. Show the regulated monopoly price and the regulated monopoly quantity in a new graph below. How much are the economic profits? Show in your graph the extent of the consumer surplus.

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