PS#5 - Economics 352 – I.O. Wissink S05

1. Answer “True, False or Uncertain” and defend/explain if not true.
   a) Testing for short-run losses is a sure fire way to test for the act of predatory pricing.
   b) The U.S. Antitrust laws make monopoly, per se, illegal.
   c) It always pays for an upstream monopolist to monopolize the downstream market, thereby extending his monopoly power to the retail level.
   d) According to U.S. Antitrust policy, any and all cooperative price and/or quantity agreements between horizontal firms are per se illegal. No exceptions.

2. Graphically demonstrate why a firm that predates on an identical rival firm (i.e., identical with respect to cost structure) will typically incur significantly larger short-run losses.

3. What are the necessary ingredients for successful predation that is damaging to competition?

4. What is “war-chesting?”

5. Suppose you are a milk farmer and feel you are being exploited by a monopsonistic buyer of milk, namely Jennylea. Is there anything you can do about this? Could what you’re planning to do be interpreted as illegal? If so, how?

6. Is there any incentive for a monopolist manufacturer to vertically integrate into distribution if the distributor charges competitive prices? Explain.

7. Describe two ways in which a manufacturer can “solve” the problem of double-markups without resorting to vertically integrating forward into the distribution market.

8. What are the competitive and anticompetitive arguments with respect to resale price maintenance?

9. Imagine you are an ice-cream vendor sharing the local beach with a vendor of a rival brand of ice-cream. One day you find out that the other vendor has started to undercut your prices. Because you are sure your prices are rock-bottom, you confront your rival and complain of predatory behavior. What (quite possibly legitimate) excuses might the rival give? Your answers should complete the sentence: “Moi? Stealing your business by pricing below cost? No way! I am just . . .”

10. Alpha Airlines, the only carrier currently offering flights to and from Smalltown, has got wind of plans by Beta Airlines to enter its market. In an effort to deter Beta, Alpha threatens that it will respond to Beta’s entry with a price war. Suppose Beta believes the threat. In what ways can it minimize its losses from such a price war other than by giving up its plans altogether?

11. Two firms with costs \( C(q) = 50 + q + 2q^2 \) share a market in which demand is perfectly inelastic at \( Q = 10 \). If Firm 1 preys on Firm 2 by lowering price to an amount \( x \) below minimum average cost, how large a loss does it incur itself compared to that inflicted on Firm 2? Is its own loss necessarily larger than that of Firm 2?

12. Draw an extensive-form game showing that a firm expands output in Period 1 only because the resulting reduction in costs in Period 2 from “learning by doing” enables it to deter entry. In other
words, the payoffs must be such that the firm would not expand output if it did not fear entry.

13. Limit pricing refers to prices set by firms below the profit maximizing one given by MR = MC. If a monopolist faces a market demand of \( Q = 16 - P \), and has total costs of \( C(q) = 40q - 12q^2 + q^3 \), calculate the ‘normal’ (strategy-free) simple monopoly price and the limit price (assuming the potential entrant has identical costs).

14. Which of the following activities do you think is more likely to be carried out in-house by a manufacturer than to be contracted out to another firm specializing in the activity, and why?
   a) keeping company books
   b) research & development of new products
   c) retailing
   d) advertising

15. A sugar-refining monopoly has three main markets: the catering industry, the confectionery industry, and the soft-drink industry. Of these, the soft-drink industry can most easily switch to alternative sweeteners. Why might it be profitable for the monopoly to vertically integrate into the soft-drink industry?

16. The graph below depicts the annual market demand for aspartame. Suppose there are currently two companies, Searle Inc. and ADC Inc., producing aspartame and the aspartame produced by the two companies are identical. The competition between the two companies is such that each company is charging a price of $12. (Assume that when the companies charge the same price, half of the consumers buy from Searle and half buy from ADC.)
The following graph depicts Searle’s costs of producing aspartame.

Suppose that Searle is thinking about acquiring ADC Inc. Searle believes that if it acquires ADC, it will have a monopoly on aspartame for 3 years. After 3 years, Searle believes that other companies will enter the aspartame market and drive Searle’s profits to zero. If Searle does not acquire ADC, Searle believes that competition with ADC will result in both companies continuing to charge a price of $12 for the next 3 years. After 3 years, Searle believes that other companies will enter the aspartame market and drive Searle’s profits to zero.

Assume that Searle’s costs of producing aspartame do not change if Searle acquires ADC Inc. In addition, Searle estimates that it could sell ADC’s factory and equipment for $40. What is the maximum amount Searle is willing to pay to acquire ADC? (Assume that Searle cannot price discriminate after the acquisition. Also, assume that Searle’s profits are obtained at the start of each year and the annual interest rate is 10%).