End-of-chapter Questions

Chapter 9: Decreasing Cost Services: the Natural Monopolies

1. Why is it ‘natural’ to establish the natural monopolies as monopoly suppliers in their markets?
2. What is the optimal price for the services of a natural monopoly? Why? What are some of the difficulties with this price?
3. If priced efficiently, natural monopolies make losses.
    a. How should the government cover these losses?
    b. Why do governments in the U.S. set price equal to average cost to avoid these losses? Is there any disadvantage to average cost pricing?
4. a. Why is the investment decision different for a natural monopoly than it is for a standard private service?
    b. Distinguish between the easy and hard cases of natural monopoly in terms of the investment decision and give examples of each.
5. To what extent does the standard profitability criterion for private investment decisions apply to the easy case? And to the hard case?
6. Discuss the following: ‘A natural monopoly should be established only if a profit-maximizing private monopoly operating the service could at least break even.’
7. a. What is the investment rule for the hard case decreasing cost service?
    b. At what point is the demand so low that a hard case decreasing cost service should not be provided?
8. Suppose the government decides to minimize the deficit of a hard case decreasing cost service.
    a. How should it set output and price?
    b. Is minimizing the deficit a good strategy for the government to follow? Why or why not?
9. a. Why are both nonexclusive goods and zero-marginal-cost decreasing cost services nonrival in consumption?
    b. Should they be provided in the same way because they are both nonrival in consumption? Explain.

10. a. Why is software an example of a natural monopoly?
    b. Why would software firms like to make all-or-none offers to their customers for use of their products? Would society like them to make all-or-none offers? Explain.