

Microeconomic Principles
Second Exam — Spring 2006
Schellberg

Part I (60 Points)

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- I. Which of the following reasons have been used to justify government involvement in the economic decision-making process?
 - a. Competitive forces in free markets always lead to the most efficient allocation of resources.
 - b. The market-determined income distribution may be considered inequitable.
 - c. The government can provide a legal framework that enforces property rights.
 - d. All of the above reasons have been used to justify government involvement in economic decision making.
 - e. Only b) and c) have been used to justify government involvement in economic decision making.
2. Private property rights:
 - a. reduce the incentive to undertake actions that increase the value of resources.
 - b. give individuals the power to use or enhance the value of goods in a way the owner sees fit.
 - c. always increase the incentive to deplete available resources.
 - d. reduce the incentive to research and develop new ideas.
3. Under a system in which private property rights are enforced, could a 60-year-old owner of a tree farm benefit by planting and caring for a crop of Douglas firs, most of which will not be ready to cut for 50 years?
 - a. No, because undoubtedly the tree farmer will be dead before the crop will be ready for harvest.
 - b. No, because the value of the tree farmer's land will decline since its use will be restricted to nurturing Douglas firs for the next 50 years.
 - c. Yes, the tree farmer can benefit by increasing the value of the land if and when the tree farmer decides to sell.
 - d. Yes, the tree farmer can benefit, but only if the project is subsidized by the government or private conservation groups.
4. External costs are those that are:
 - a. borne by free riders.
 - b. borne by exporting firms.
 - c. borne by parties not directly involved in a transaction.
 - d. borne by the government.
 - e. borne by the firm that creates a negative externality.
5. The presence of negative externalities leads to a misallocation of societal resources because:
 - a. whenever external costs are imposed on outside parties, the good should not be produced at all.
 - b. less of the good than is ideal for society is produced.
 - c. there are some costs associated with production that the producer fails to take into consideration.
 - d. the government always intervenes in markets when negative externalities are present, and the government is inherently inefficient.

6. Which of the following provides an example of an externality?
- the air pollution generated when you drive your car
 - the view that passersby and neighbors enjoy when observing your rose garden
 - the free concerts neighbors hear when an accomplished musician practices at home
 - all of the above
7. Nonrivalry in consumption and the inability to exclude nonpaying consumers from using the goods are characteristics of what kinds of goods?
- durable
 - nondurable
 - public
 - private
8. Which of the following statements is false?
- Rational people will gather information as long as the expected marginal benefits of information gathering are greater than the expected marginal costs.
 - Gathering more information is always advisable.
 - Gathering information can be very costly.
 - Government-provided information can be a good and efficient mechanism for reducing market failure from information costs.
9. There are two types of costs associated with production: _____ costs that require monetary payments, and _____ costs that do not.
- implicit; accounting
 - accounting; explicit
 - implicit; explicit
 - explicit; implicit
 - accounting; economic
10. If Rocco's Rib Joint took in \$35,000 in revenue last week and had out-of-pocket expenses of \$31,500:
- it is clear that Rocco made an economic profit of \$3,500.
 - Rocco really didn't make any profit since he needs to put the difference between revenue and out-of-pocket expenses back into the firm.
 - it is not clear whether Rocco earned any profit last week because it depends on the magnitude of the implicit costs.
 - Rocco clearly did not earn an economic profit.
11. An economist's measurement of profit differs from an accountant's in that:
- accountants calculate total revenue differently than do economists.
 - economists do not always include all of the opportunity costs when calculating total production costs.
 - accountants do not always include all of the opportunity costs when calculating total production costs.
 - economic profit generally exceeds accounting profit.
12. Economists normally assume that the goal of a firm is to:
- sell as many units of output as possible.
 - maximize profits.
 - sell products at the highest prices possible.
 - maximize sales revenue.
13. An example of an explicit cost of production is:
- the cost of foregone labor earnings for an entrepreneur.
 - the cost of flour for a baker.
 - the foregone rent that could have been earned if land owned by a firm was not used as its parking lot.

- d. provided by none of the above.
14. Diminishing marginal product of labor occurs when:
- adding another unit of labor increases output, but not by as large a margin as the last unit of labor employed.
 - the average product of labor begins to rise.
 - adding another unit of labor increases output by a larger margin than the last unit of labor employed.
 - all inputs are varied simultaneously in the same proportion.

Diagram 8-1

# of Pickers	Total # of Oranges Picked
1	1,000
2	2,000
3	3,000
4	3,900
5	4,700
6	5,400
7	6,000
8	6,200
9	6,000

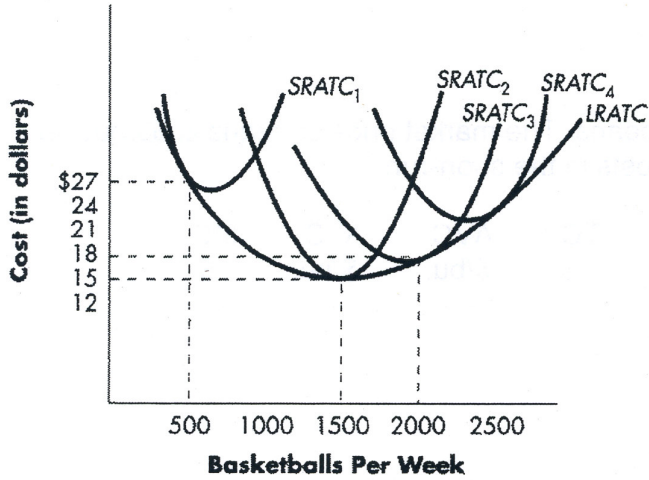
Answer the following questions based on the table above.

15. Refer to Diagram 8-1. The marginal product of labor begins to diminish with the addition of the picker.
- fourth
 - fifth
 - seventh
 - eighth
 - ninth
16. Which of the following most accurately describes the long-run period?
- The long run is a period of time in which a firm is unable to vary some of its factors of production.
 - In the long run, the firm is able to expand output by utilizing additional workers and raw materials, but not physical capital.
 - The long run is of sufficient length to allow a firm to alter its plant capacity and all other factors of production.
 - The long run is of sufficient length to allow a firm to transform economic losses into economic profits.
 - Both a) and b) most accurately describes the long-run period.

17. Which of the following is always true?
- When marginal cost is less than average total cost, average total cost is increasing.
 - When average fixed cost is falling, marginal cost must be less than average fixed cost.
 - When average variable cost is falling, marginal cost must be greater than average variable cost.
 - When marginal cost is greater than average total cost, average total cost is increasing.
18. The change in total cost resulting from a one-unit increase in production is called:
- average fixed cost.
 - average variable cost.
 - marginal cost.
 - average opportunity cost.
 - marginal revenue.
19. Costs that vary with output are called:
- variable costs.
 - fixed costs.
 - marginal product.
 - overhead costs.
20. Average fixed cost:
- remains unchanged as output expands.
 - is defined as the change in total cost divided by the change in output.
 - always increases as output increases.
 - always decreases as output expands.
21. The vertical distance between the average total cost curve and the average variable cost curve equals:
- marginal cost.
 - average fixed cost.
 - total fixed cost.
 - total variable cost.
 - marginal product.
22. When there are diseconomies of scale in production:
- long-run average total cost declines as output expands.
 - long-run average total cost increases as output expands.
 - average fixed cost increases as output expands.
 - marginal cost decreases as output expands.
 - the marginal product of an input diminishes with increased utilization.
23. Economies of scale:
- are the result of a diminishing marginal product.
 - pertain to the long run only.
 - refer to the increase in output that results from the increased utilization of a single input.
 - imply that the average total cost curve will fall continuously as output increases in the short run.

Diagram 8-10

Use the following diagram to answer the following questions.



The figure above shows the long-run average total cost curve for a firm that produces basketballs, along with four short-run average total cost curves. Each of the short-run average total cost curves corresponds to a different plant size. SRATC₁ corresponds to Plant size 1, SRATC₂, corresponds to Plant size 2, and so forth.

24. Refer to Diagram 8-10. Which plant size is optimal for the firm to produce 2,000 basketballs per week?
- a. Plant 4
 - b. Plant 3
 - c. Plant 2
 - d. Plant 1

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PART II (40 points)

1. (12 points) Nils grows green beans. The market price of beans is \$6/bushel.
The chart below shows Nils' costs in the short-run.

Q (bushels)	TR \$	TFC	TVC \$	TC	AVC \$/bu.	ATC \$/bu.	MC \$
0		2	0				
1		2	3				
2		2	7				
3		2	12				
4		2	18				
5		2	25				

- a. Complete the chart above.
- b. Find the profit if Nils produces 4 bushels of green beans. Show your work.

2. (7 points) Suppose the city of Podunkville wants to build a new museum and cultural center to attract tourist to their small community. The federal government pays \$5 million dollars for this project after the city successfully lobbies for federal funding.

a. Who benefits from this project, and who bears the cost?

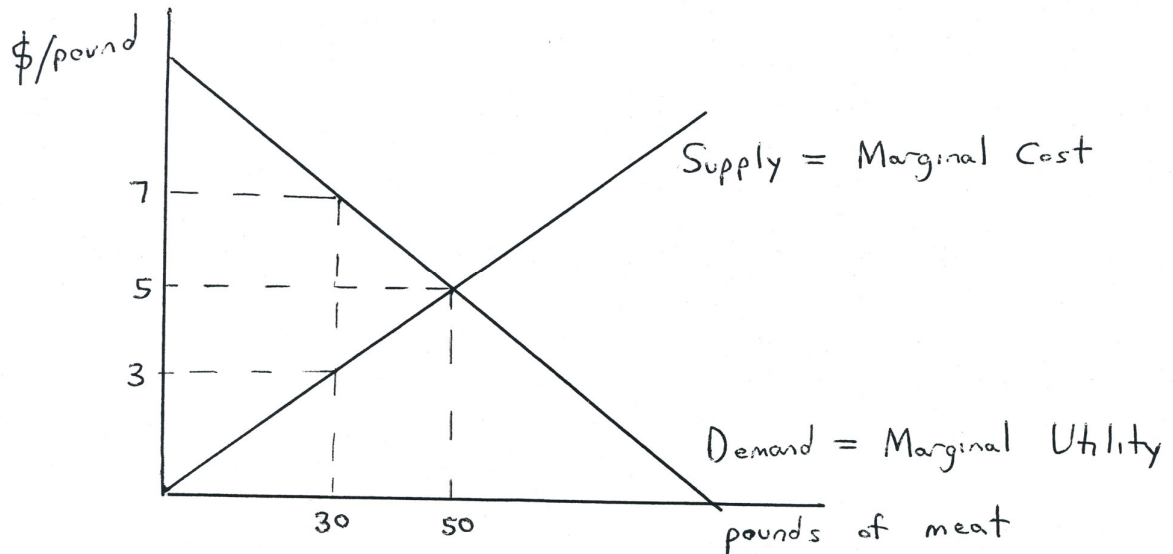
b. Explain how rational ignorance of the electorate allows this project to be approved.

3. (13 points)

a. What is market failure?

b. Give two examples of market failure. For each example, explain the nature of the problem, and what the government can do to alleviate the problem.

4. (8 points) The following graph shows the supply and demand for meat.



- If the price of meat is \$5/pound, how much meat will consumers buy?
- Sketch the consumer's surplus on the graph, if the price of meat is \$5/pound.
- Compute the value of consumer's surplus. Show your work. (The area of a triangle is $\frac{1}{2} \times \text{base} \times \text{height}$.)