Microeconomics
Final Exam Study Guide

Note: Below is a list of study questions for the upcoming final exam. Please answer them (all of them or as many as you can) as a way of preparing for your final. Not all of the study questions will appear in the exam but a number of them will. Since you don't know which ones will be in it, it would be a good idea to answer all of them. Please don't ask me for the answers to the questions although you can ask me for clarification of the questions. Also, there could be a few more questions on the final that are not found on this list. The best way to use this study guide is to try to answer all the questions as best as you can and compare your answers with those of your classmates'. Then *discuss* why your answers are different so that you learn the reason why. Form a study group if you can. – Rudy

1. What kind of lessons or insight does the prisoners' dilemma provide?

2. In a game, what is a dominant strategy by definition?

3. In game theory, what is a Nash equilibrium?

Table 13-7
Teacher's Helper is a small company that has a subcontract to produce instructional materials for disabled children in public school districts. The owner rents several small rooms in an office building in the suburbs for $600 a month and has leased computer equipment that costs $480 a month.

Output (Instructional Modules per Month)	**Fixed Costs**	**Variable Costs**	**Total Cost**	**Average Fixed Cost**	**Average Variable Cost**	**Average Total Cost**	**Marginal Cost**
0	1,080						
1	1,080	400	1,480				400
2						965	450
3		1,350	2,430				
4		1,900			475		
5		2,500		216			
6			4,280				700
7		4,100					
8		5,400		135			
9		7,300					
10			10,880		980		

4. **Refer to Table 13-7**. What is the average fixed cost for the month if nine instructional modules (output) are produced?
a. $108.00
b. $120.00
c. $150.00
d. $811.11

5. In the short run, a firm incurs fixed costs
a. only if it incurs variable costs.
b. only if it produces no output.
c. only if it produces a positive quantity of output.
d. whether it produces output or not.

6. Whenever marginal cost is greater than average total cost,
a. marginal cost is rising.
b. marginal cost is falling.
c. average total cost is rising.
d. average total cost is falling.

7. At what level of output will average variable cost equal average total cost?
a. When marginal cost equals average total cost
b. For all levels of output in which average variable cost is falling
c. When marginal cost equals average variable cost
d. There is no level of output where this occurs, as long as fixed costs are positive.

8. Miller Technologies has average variable costs of $1 and average total costs of $3 when it produces 500 units of output. The firm's total fixed costs equal
a. $500
b. $1,000
c. $1,500
d. $2,000

9. If Franco's Pizza Parlor knows that the marginal cost of the 500th pizza is $3.50 and that the average total cost of making 499 pizzas is $3.30, then
a. average costs are rising at Q = 500.
b. average costs are falling at Q = 500.
c. total costs are falling at Q = 500.
d. average variable costs must be falling.

10. Diseconomies of scale occur when
a. average fixed costs are falling.
b. average fixed costs are constant.
c. long-run average total costs rise as output increases.
d. long-run average total costs fall as output increases.

11. A competitive firm might choose to set its price below the market price, because
a. this would result in higher average revenue.
b. this would result in higher profits.
c. this would result in lower total costs.
d. None of the above is correct.

12. Changes in the output of a perfectly competitive firm, without any change in the price of the product, will change the firm's
a. total revenue.
b. marginal revenue.
c. average revenue.
d. All of the above are correct.

13. Suppose a profit-maximizing firm in a competitive market produces rubber bands. When the market price for rubber bands falls below the minimum of its average total cost, but still lies above the minimum of average variable cost, the firm
a. will experience losses but will continue to produce rubber bands.
b. will shut down.
c. will be earning both economic and accounting profits.
d. should raise the price of its product.

14. If a profit-maximizing firm in a competitive market discovers that, at its current level of production, price is greater than marginal cost, it should
a. shut down.
b. reduce its output, but continue operating.
c. keep output the same.
d. increase its output.

15. You purchase a $30, nonrefundable ticket to a play at a local theater. Ten minutes into the show you realize that it is not a very good show and place only a $10 value on seeing the remainder of the show. Alternatively you could leave the theater and go home and watch TV or read a book. You place an $8 value on watching TV and a $6 value on reading a book.
a. You should leave the theater since the net benefit from seeing the remainder of the show is -$20, while going home will earn you at least $8 of satisfaction.
b. You should stay and watch the remainder of the show.
c. You should go home and watch TV.
d. You should go home and read a book.

16. A sunk cost is one that
a. changes as the level of output changes in the short run.
b. was paid in the past and will not change regardless of the present decision.
c. should determine the rational course of action in the future.
d. has the most impact on profit-making decisions.

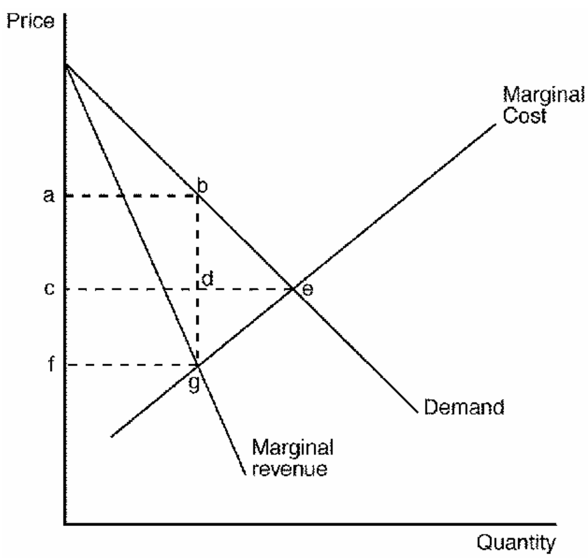
17. The exit of existing firms from a competitive market will
a. increase market supply and increase market prices.
b. increase market supply and decrease market prices.
c. decrease market supply and increase market prices.
d. decrease market supply and decrease market prices.

18. When firms in a perfectly competitive market face the same costs, in the long run they must be operating
a. under diseconomies of scale.
b. with small, but positive, levels of profit.
c. at their efficient scale.
d. where price is equal to average fixed cost.

17. Which of the following is an example of a barrier to entry?
(i) A key resource is owned by a single firm.
(ii) The costs of production make a single producer more efficient than a large number of producers.
(iii) The government has given the existing monopoly the exclusive right to produce the good.

a. (i) and (ii)
b. (ii) and (iii)
c. (i) only
d. All of the above are examples of barriers to entry.

Figure 15-5
The figure below depicts the demand, marginal revenue and marginal cost curves of a profit-maximizing monopolist.



20. **Refer to Figure 15-5**. Which of the following areas represents the deadweight loss due to monopoly pricing?
a. Triangle bde
b. Triangle bge
c. Rectangle acdb
d. Rectangle cfgd

21. One method used to control the ability of firms to capture monopoly profit in the United States is through
a. government purchase of products produced by monopolists.
b. government distribution of a monopolist's excess production.
c. enforcement of antitrust laws.
d. regulation of firms in highly competitive markets.

22. When is price discrimination a rational strategy for a profit-maximizing monopolist?

23. A firm cannot price discriminate if
a. its marginal revenue curve is linear for all levels of output.
b. it operates in a competitive market.
c. buyers only reveal the price they are willing to pay for the product.
d. it has a constant marginal cost.

24. Perfect price discrimination describes a situation in which the monopolist
a. knows the exact willingness to pay of each of its customers.
b. charges exactly two different prices to exactly two different groups of customers.
c. maximizes consumer surplus.
d. experiences a zero economic profit.

Table 16-19

Brian and Matt own the only two bicycle repair shops in town. Each must choose between a low price for repair work and a high price. The annual economic profit from each strategy is indicated in the table. The profits are shown as (Matt, Brian) in each cell.

		Brian	
		Low Price	*High Price*
Matt	*Low Price*	(1500, 1500)	(5000, 200)
	High Price	(200, 3000)	(4000, 4000)

25. **Refer to Table 16-19**. Which of the following statements is correct?
a. Matt's dominant strategy is to charge a low price.
b. Brian's dominant strategy is to charge a high price.
c. The dominant strategy for both Brian and Matt is to charge a low price.
d. Matt's dominant strategy is to charge a high price.

26. In the case of a technology spillover (a positive externality like education), what can the government do to encourage firms to internalize such a positive externality?

27. When new firms have an incentive to enter a competitive market, what effect will their entry have?

28. In the long-run equilibrium of a competitive market, the number of firms in the market adjusts until the market demand is satisfied at a price equal to
a. average fixed cost for the marginal (typical) firm.
b. the maximum of marginal cost of the marginal firm.
c. the minimum of average total cost of the marginal firm.
d. the minimum of average variable cost of the marginal firm.

29. What is price discrimination?