Supplemental Study Questions for the Final Exam
(to be combined with all previous study questions)

4*.1. Give short, concise definitions of the following:
   a. rent seeking behavior               i. tradeable emission permits
   b. deadweight loss                    j. public good
   c. cartel                             k. nonrival good
   d. externality                        l. nonexclusive good
   e. marginal external cost             m. monopoly
   f. marginal external benefit          n. monopolistic competition
   g. marginal social cost               o. perfect oligopoly
   h. marginal social benefit            p. monopolistic oligopoly

4*.2. Why, in the case of a monopolist, is marginal revenue at any output less than output price?

4*.3a. Draw a pair of diagrams, one above the other, illustrating the profit-maximizing output for the monopolist with abnormal profit. The top diagram should contain short-run total cost, total variable cost, total revenue, and profit curves; the bottom diagram should contain short-run average cost, average variable cost, short-run marginal cost, and marginal revenue curves. In the bottom diagram shade in the area that represents abnormal profit. Make your diagrams large and label all curves, axes, and points.

   b. How would your diagrams change if the firm were loosing money, i.e., had negative profit?

4*.4a. Explain why a monopolist maximizes its long-run profit by producing that output for which marginal revenue equals long-run marginal cost.

   b. Can the profit-maximizing monopolist produce an output that lies in the inelastic portion of the demand curve it faces? Why or why not?

   c. Does long-run profit maximization by a monopolist imply that it must produce at the minimum point of its long-run average cost curve? Why or why not?

   d. Does long-run profit maximization by a monopolist imply that its revenue is maximized? Why or why not?

4*.5. How does the presence of monopoly create market failure and rule out Pareto optimality (efficiency)?

4*.6. Why doesn't the abnormal profit of a monopolist, unlike that of the perfect competitor, reduce to zero in the long run?
4*.7. Assume constant returns to scale in the long run and that the long-run production function of the perfectly competitive firms does not change when combining them into a monopoly. Under these conditions, draw a diagram comparing the price and output under the two forms of competition and, in that diagram, indicate the social cost (deadweight loss) of the monopoly. Make your diagram large and label all curves, axes, and points.

4*.8. Explain how price regulation of a monopoly can reduce the social cost (deadweight loss) of monopoly.

4*.9. How do the demand curves facing the perfectly competitive firm, the monopolist, and the monopolistically competitive firm differ? Explain why these differences arise.

4*.10. Draw a diagram containing the long-run average and marginal cost curves, the demand curve facing the firm, and the marginal revenue curve for a profit-maximizing monopolistically competitive firm at long-run equilibrium. Make your diagram large and label all curves, axes, and points.

4*.11. In the long run, how do price and output compare for a perfectly competitive firm and a firm with the same cost curves in a monopolistically competitive environment?

4*.12a. In what sense does the firm in an oligopoly situation face uncertainty?
   b. How do the oligopoly models of price leadership by a dominant firm, a cartel, and the kinked demand curve get around this uncertainty?

4*.13. In the price-leadership-by-a-dominant-firm model:
   a. After the dominant firm sets the market price, what is the output-supply behavior of the remaining firms in the industry?
   b. In light of the supply behavior of the remaining firms, how is the demand curve facing the dominant firm calculated?

4*.14. Describe the kinked-demand-curve oligopoly model. State your assumptions and draw the appropriate diagram. Make the diagram large and label all axes, curves, and points. Indicate how the model can explain long periods of price rigidity in an oligopolistic market.

4*.15. How does the presence of monopolistic competition or oligopoly create market failure and rule out Pareto optimality (efficiency)?

4*.16. How does the presence of an externality create market failure and rule out Pareto optimality (efficiency)?
4*.17. Explain why, in a market with a
a. negative externality, too much output (more than the efficient amount)
is produced and sold.
b. positive externality, too little output (less than the efficient amount)
is produced and sold.
If you use a diagram in your answer, make that diagram large and label all axes, curves, and points.

4*.18. Describe two methods for correcting the inefficiencies caused by the presence of an externality in a market.

4*.19. How does the presence of a public good generally create market failure and rule out Pareto optimality (efficiency)?

4*.20. Assuming we know the willingnesses to pay of all individuals for a public good, explain how one could calculate the efficient amount of that good to produce. If you use a diagram in your answer, make that diagram large and label all axes, curves, and points.

4*.21. Describe two difficulties in obtaining individuals' willingnesses to pay for a public good with any degree of accuracy. In practice, how do we actually determine the amount of a public good to produce?