A. Definitions  (Briefly define six of twelve concepts below).  (24 points)

Subscriber Access Charge  Pareto Optimality
Economic efficiency  Incentive regulation
Consumers' Surplus  Pareto Improvement
Ramsey pricing  Marginal cost
Economies of scale and scope  Declining average costs
(International) Accounting rate  Contestability

Answer B - 1 or B - 2

B - 1.  Demand.  (16 points)
Describe the relationship between demand for usage and the demand for access.

What are factors which will shift down the demand for access?

Characterize the relative price elasticity relationships between exchange, toll and international toll traffic.  What is its significance?

B -2.  Optimal Pricing.  (16 points)
Show, graphically, the change in producer's and consumer's surplus when moving from non-marginal cost pricing to marginal cost pricing (assume a linear, constant marginal cost curve).

How does the rule P = MC help with the peak load problem in public utility pricing?
C. Policy Issues. (30 points)
Because the telecommunications networks are considered essential to economic growth and development, below-cost-pricing of subscribers’ access has been suggested to expedite the expansion of these networks. It is also argued that a network (subscribers’) externality justifies this policy.

Discuss and comment on the efficacy of the policy in light of the economic concepts developed in this course.

If you were the social policy-maker and wished “help” some group(s), what would be your policy prescription?

Since business customers may sometime receive price decreases as a result of moving toward efficient prices, does this mean the consumer does not receive any benefit? Yes or no? Explain.

Answer D - 1 or D - 2

D - 1. Price Rationalization. (20 points)
Characterize the pre-divestiture rate structure of the Bell System. Could the rate structure been improved? How? Show the changes and discuss its implications. Make whatever simplifying assumption you require.

D - 2. Cross-Subsidies. (20 points)
Telephone companies have practiced cross subsidization for some time -- what services have been subsidized; which service have been providing the subsidy?

How is it changing and what events forced the change?

Why would a policy-maker be concerned with these cross-subsidies?

Is the concept of consumers’ surplus of use to the policy-maker in this context?

E. Interconnection (10 Points)
Describe and discuss the interconnection issue in telecommunications? Where is it a current issue?

What role does the Efficient Component Pricing Rule play in this debate?