## SEM IV

## Intermediate Microeconomics

Answer the following questions:

1. A monopolist selling in two markets faces the demand curves $\mathrm{p}_{1}=164-2 \mathrm{q}_{1}$ and $\mathrm{p}_{2}=108-5 \mathrm{q}_{2}$ in the two markets. His marginal cost function is $\mathrm{MC}=8$. He has no fixed costs. If the monopolist can charge different prices in the two markets, what prices will he charge in each market? Do you consider scarcity to be an inevitable consequence of imposing price ceiling on a single market monopolist?
2. There are only two firms in an industry labeled 1 and 2 . The equation of the market demand curve is $\mathrm{p}=12-\left(\mathrm{q}_{1}+\mathrm{q}_{2}\right)$ and the total cost functions facing the firms are $C_{i}=4 q_{i}$ for $i=1,2$. Firm 1 acts as a leader and firm 2 as the follower. What are the quantities that the two firms will produce? What profits will they earn? 5
3. Suppose a profit maximizing monopolist is producing 800 units of output and is charging a price of Rs. 40 per unit.
a) If the elasticity of demand for the product is -2 , find the marginal cost of the last unit produced
b) What is the firm's percentage mark-up of price over marginal cost?
c) Suppose that the average cost of the last unit produced is Rs. 15 and the firm's fixed cost is Rs.2000. Find the firm's profit.
4. A monopolist is producing at a point at which marginal cost exceeds marginal revenue. How should it adjust its output to increase profit? 4

## N.B. You have to submit this assignment online within two days.

Copy the question at the beginning of each answer.

