Time : Three Hours   Full Marks: 40

Questions are of value as indicated in the margin

Answer **any four** questions

1 Consider a monopolist selling a durable good. How does the selling strategy of the monopolist differ from that of an ordinary monopolist? If the monopolist were to sell the good over several periods, how would the prices change, assuming that the demand for the product remains the same in every period?   6 + 4

2 Suppose two firms producing a homogeneous product engage in price competition and set up their locations at two extreme ends of a linear city. If transport cost of theconsumers who are uniformly distributed within these two limits is quadratic what would be the demandfunction facing the two firms? What would be the equilibrium prices and profits ofthe two firms?4 + 6

3. Explain how an owner in a Cournot Oligopoly can gain by delegating /hiring a manager who is paid a compensation based on a combination of sales and profits. How are total output, prices and profits affected if both firms hire managers?   5 + 5

4. Consider a duopoly market with differentiated products where firms compete in quantities.
(a)Will the firms prefer to be a leader or follower in this Stackelberg type Quantity Leadership game?(b)Will their preference to be leader or follower remain the same under Price Leadership?   5 + 5

5 Explain the model of Dixit where a monopolist incumbent tries to deter a potential entrant from entering the market. What will be the cost faced by the entrant in trying to deter entry? Willsuch an attempt be always successful?   5 + 2 + 3

6. Show that in a market with a linear demand curve, if there are n firms with symmetric unit costs, a horizontal merger between any $m < n$ firms where $n \geq 3$ does not resultin gains for the constituent firms unless a sufficiently large number of firms merge. Is merger likely to be more profitable if there exist 'synergies'?   7 + 3

7Consider a situation where there are 2 upstream and 2 downstream firms where D1 and D2 can buy inputs from both U1 and U2. Suppose cost of one upstream firm (U1) is lower than the other (U2) show that both D1 and D2 make more profits by buying from U1.Show that if U1 and D1 integrate vertically, the profit maximizing integrated firm still sells to D2 but less than before.   10

8   How is licensing through a fixed fee different from licensing by royalty. Is one methodlikely to generate more profits for an outside innovator than the other? Explain.   4+ 6