

Questions

1. Under what conditions we can use Delphi forecasting method?
2. How price incentives can impact demand?
3. What do you mean by counter cyclical demand?
4. Star hotel wants to forecast the Sunday occupancy of its 150 rooms hotel on 11 November 2012. The previous observations of Sunday occupancy are given below in the Table. Use three period moving average method to forecast the occupancy.

Period	Date (Sunday)	Occupancy
1	October 7	120
2	October 14	115
3	October 21	135
4	October 28	150
5	November 4	144
6	November 11	

5. Farmgreen has launched a new sandwich one week back as per Indian taste. The demand for these sandwiches for last seven days are given below. What is the forecast of the demand on next Monday using smoothing constant of 0.2 and 0.3?

Day	Demand
Monday	18
Tuesday	23
Wednesday	33
Thursday	28
Friday	30
Saturday	34
Sunday	36

6. Past sales data of a drug in a chemist shop is shown below. The drug sales is showing a declining trend. Forecast the requirement for next 2 periods using any method:

Period	1	2	3	4	5
Sales (in Rs.)	290	278	264	245	200

7. A hotel is planning to adopt overbooking because it has realized no-shows in the past season. The frequency table of no-shows is presented below. The opportunity cost of having empty room is Rs. 4000. Hotel manager decided to pay penalty of Rs. 2500 to overbooked guest for not accommodating him/her. What is the best overbooking strategy for this hotel?

No-shows	0	1	2	3
Frequency	3	4	2	1

8. For the same frequency of no-shows table in question 5, an airline overbooks for 2 seats for a specific flight. The revenues earned from one passenger (per seat) is Rs. 5000. In this scenario, what will be the unit opportunity loss for airlines?
9. A small clinic in a town has 6 physicians where each physician can examine 12 patients a day on average. Based on the past data, the clinic will have expected number of walk-in patients every day of the week as given below in the table. How the clinic should schedule the appointments to smooth out the demand.

Day	Mon	Tue	Wed	Thu	Fri
Walk-Ins	48	32	50	40	55