## Lecture notes on Managerial Economics for students academic use by Dr.Neha Mathur Ma'am

## **Demand Forecasting**

All organizations operate in an atmosphere of uncertainty but decisions must be made today that affect the future of the organization. There are various ways of making forecasts that rely on logical methods of manipulating the data that have been generated by historical events. A forecast is a prediction or estimation of a future situation, under given conditions. Demand forecast will help the manager to take the following decisions effectively.

### The major short run decisions under demand forecasting are:

- \$ Purchase of inputs
- \$ Maintaining of economic level of inventory
- **\$** Setting up sales targets
- \$ Distribution network
- **\$** Management of working capital
- **\$** Price policy
- **\$** Promotion policy

# The major long run decisions under demand forecasting are:

- **\$** Expansion of existing capacity
- \$ Diversification of the product mix
- \$ Growth of acquisition
- \$ Change of location of plant
- **\$** Capital issues
- **\$** Long run borrowings
- **\$** Manpower planning

#### The steps to be followed under demand forecasting

- \$ Identification of objectives
- **\$** Nature of product and market
- \$ Determinants of demand
- **\$** Analysis of factors
- **\$** Choice of technology
- **\$** Testing the accuracy

## Criteria to choose a method of forecasting are:

\$ Accuracy

**\$** Flexibility **\$** Availability The following are needed for demand forecasting: **\$** Appropriate production scheduling **\$** Suitable purchase policy **\$** Appropriate price policy **\$** Setting realistic sales targets for salesmen **\$** Forecasting financial requirements **\$** Business planning **\$** Financial planning **\$** Planning man-power requirements To select the appropriate forecasting technique, the manager/forecaster must be able to accomplish the following: 1. Define the nature of the forecasting problem 2. Explain the nature of the data under investigation 3. Describe the capabilities and limitations of potentially useful forecasting techniques. 4. Develop some predetermined criteria on which the selection decision can be made. **Demand Forecasting Methods:** 1. Survey of buyers' intension 2. Delphi method 3. Expert opinion 4. Collective opinion 5. Naïve model 6. Smoothing techniques

**\$** Plausibility

**\$** Durability

7. Time series / trend projection

8. Controlled experiments

9. Judgmental approach