

Forecasting is the prediction of Future sales or Demand for a product. It is defined as the Estimation of future activities i.e. the estimation of time, quality, quantity of Future work. These estimate provide the basis for determining the demand of Man power, machines and material in future.

It is not a guess work but a projection based on passed sales figure and human judgement.

Need of forecasting

(58)

1. It helps in determining the volume of production & production rate.
2. It forms the basis for production budget, Labour budget, material budget etc.
3. It suggest the need for plant expansion.
4. It helps in product design & development.
5. It helps in determining price policies.
6. Helps in determining the extent of marketing, advertisement and distribution required.

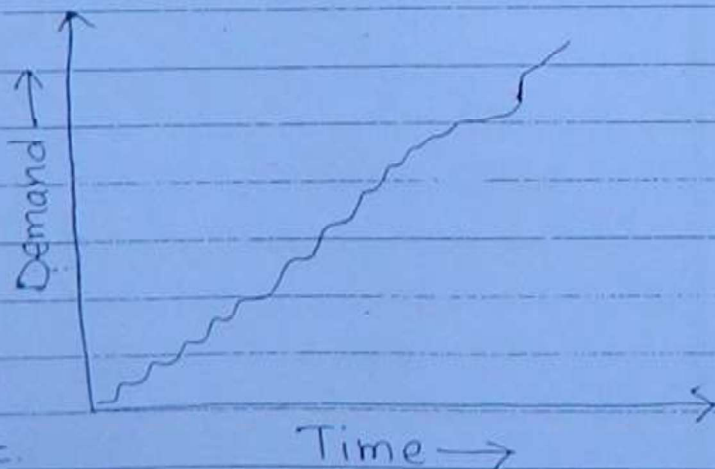
Types of Demand Variation

1. Trend Variation:

It shows a long term upward or downward movement in the demand or sales of a product.

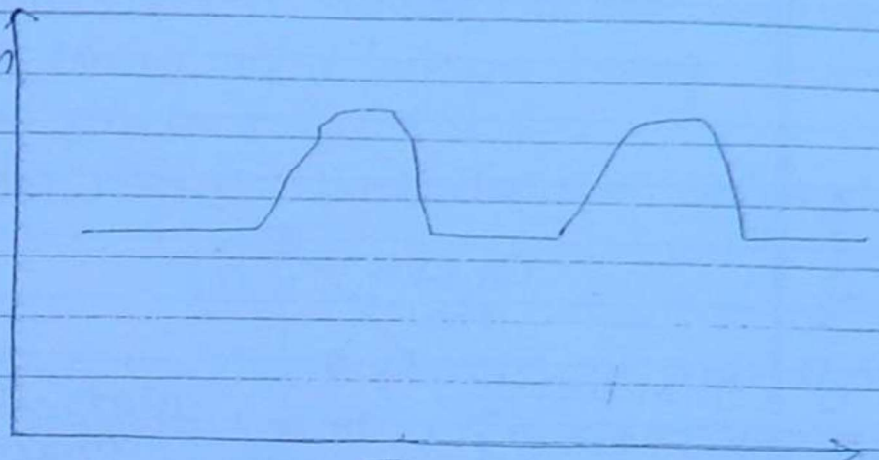
It shows a regular pattern.

eg. Newspapers, Cellphones etc.



2) Seasonal Variation:

It shows a 'short-term' regular variation related to the time of a day or day of a week.

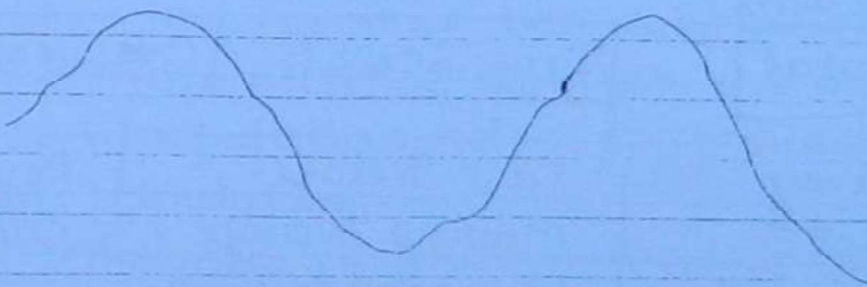


e.g. Electricity Bill (daily)
Movie Tickets etc.

(54)

Time →

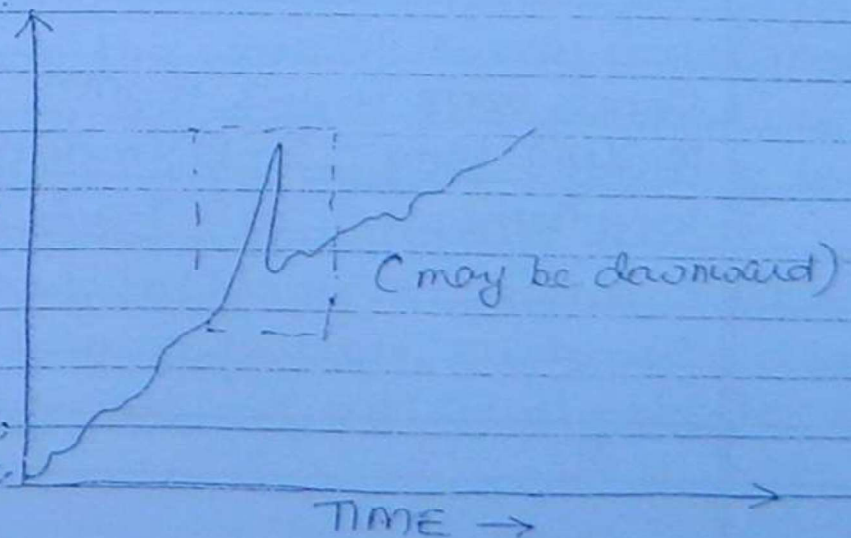
3) Cyclic Variation: Wave like variation lasting more than ~~the entire~~ a year & it is repeated after a certain period. e.g. Yearly Electricity Bill, Refrigerator, Woollen clothes.



4) Irregular Variation:

These are caused by unusual circumstances which are not reflected of typical behaviour/Normal behaviour.

These may be due to severe weather conditions, strike, plant shutdown etc.

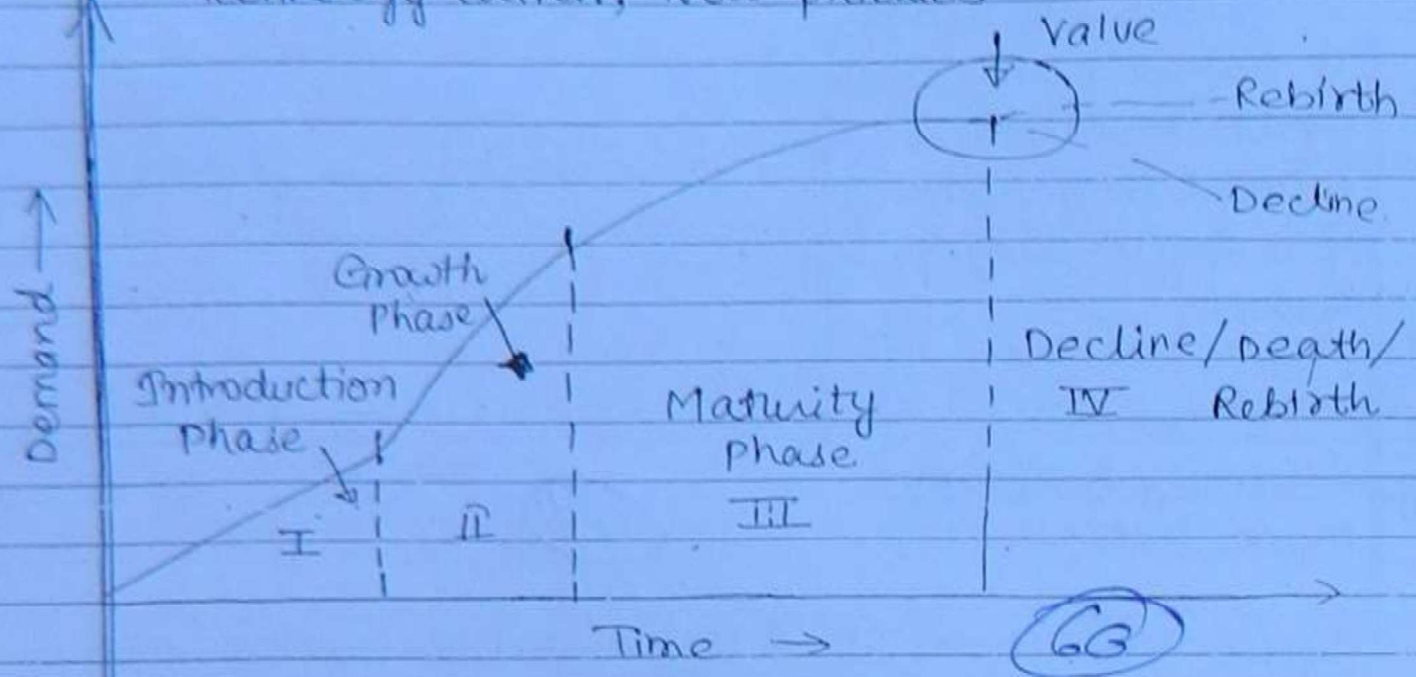


TIME →

Product life cycle :-

Date : *

Technology driven, New products



TYPES OF FORECASTING :-

Qualitative or Subjective

Long Term (2-5 Yrs)

Judgemental

- Opinion Survey
- Market Trial
- Market Research
- Delphi technique

Quantitative or Objective

(Short or Medium term)

Time Series

- Past Average
- Moving Average
- Weighted moving Average
- Exponential Smoothing

Causal or Economet

- Regression
- Correlation

Short term = 1-3 month

Medium term = 3-12 month

Long Term = 2-5 Years