

## TIME SERIES ANALYSIS

Introduction:- Most of the economic and business data like prices, national income, population, imports, exports production, consumption, sales, profit etc. are collected on the basis of time (such as days, months, years). These data are subject to regular and irregular changes constantly with the passage of time.

Eg:- Sometimes prices show upward trend and sometimes the declining trend.

For the measurement of such changes in the values of data over time, the study of time series is extremely useful.

Meaning of time series:- The set of data collected on the basis of time (such as days, months, years) is called as time series.

Under time series, there are two types of variables

(i) Independent variable → This represents the time.

(ii) Dependent variables → This represents changes taking place in the value of data (population, sales, production etc.) with the passage of time.

Eg:-

Table-I	
Year	Production (in tonnes)
1975	50
1976	52
1977	53
1978	55
1979	60

Table-II	
Year	Population (in crores)
1931	27.9
1941	31.9
1951	36.3
1961	43.8
1971	54.5