[Summary]

Index Numbers (Part – 2)

Subject:	Business Economics
Course:	B. A. (Hons.), 1st Semester, Undergraduate
Paper No. & Title:	Paper – 102 Statistics for Business Economics
Unit No. & Title:	Unit – 4 Index Numbers
Lecture No. & Title:	Lecture – 2 Index Numbers (Part – 2)

Summary

The different index number formulae that measure price and quantity changes have some bias. So statisticians have devised a number of tests to choose the most appropriate formula in a given situation. These tests are

1. Unit Test
2. Time Reversal Test
3. Factor Reversal Test
4. Circular Test

The unit test requires that the index number formula should be independent of the units in which the prices and quantities of the various commodities are quoted. All the formulae, except simple aggregate index number satisfy the unit test. The time reversal test requires the index number formula to possess time consistency by working both forward and backward with respect to time. Simple aggregate index, Marshall-Edgeworth index and Fisher index satisfy the time reversal test. Factor reversal test requires that the product of price and quantity indices should give the true value. Fisher index is the only index that satisfies factor reversal test and so it is also known as Fisher Ideal Index. Circular test is an extension of the time reversal test over several years. Kelly fixed base index satisfy the circular test.

To compare series of index numbers with different base periods, the base of the series is changed to have a common base period. The process is termed as base shifting. The application of base shifting is in splicing, where two or more overlapping series of index numbers are combined to obtain single continuous series. Real income and purchasing power of money can be obtained by deflating of index numbers.

The consumer price index is a measure of change in the price level of a basket of goods and services purchased by households during any given period with respect to some fixed base period. It is used to compute real income and purchasing power of money to know the level of inflation. BSE index is the weighted stock market index computed on the basis of free float capitalization method by considering 30 well established and financially sound companies. These 30 companies are representative of the various industrial sectors of the Indian economy that are listed on Bombay Stock Exchange.