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**Steps or Problems in the Construction of Price Index Numbers:**  
**The construction of the price index numbers involves the following steps or problems:**

### **1. Selection of Base Year:**

The first step or the problem in preparing the index numbers is the selection of the base year. The base year is defined as that year with reference to which the price changes in other years are compared and expressed as percentages. The base year should be a normal year.

In other words, it should be free from abnormal conditions like wars, famines, floods, political instability, etc. Base year can be selected in two ways- (a) through fixed base method in which the base year remains fixed; and (b) through chain base method in which the base year goes on changing, e.g., for 1980 the base year will be 1979, for 1979 it will be 1978, and so on.

### **2. Selection of Commodities:**

The second problem in the construction of index numbers is the selection of the commodities. Since all commodities cannot be included, only representative commodities should be selected keeping in view the purpose and type of the index number.

**In selecting items, the following points are to be kept in mind:**

- (a) The items should be representative of the tastes, habits and customs of the people.
- (b) Items should be recognizable.
- (c) Items should be stable in quality over two different periods and places.
- (d) The economic and social importance of various items should be considered
- (e) The items should be fairly large in number.
- (f) All those varieties of a commodity which are in common use and are stable in character should be included.

**3. Collection of Prices:**

**After selecting the commodities, the next problem is regarding the collection of their prices:**

- (a) From where the prices to be collected;
- (b) Whether to choose wholesale prices or retail prices;
- (c) Whether to include taxes in the prices or not etc.

**While collecting prices, the following points are to be noted:**

- (a) Prices are to be collected from those places where a particular commodity is traded in large quantities.
- (b) Published information regarding the prices should also be utilised,
- (c) In selecting individuals and institutions who would supply price quotations, care should be taken that they are not biased.

(d) Selection of wholesale or retail prices depends upon the type of index number to be prepared. Wholesale prices are used in the construction of general price index and retail prices are used in the construction of cost-of-living index number.

(e) Prices collected from various places should be averaged.

#### **4. Selection of Average:**

Since the index numbers are, a specialised average, the fourth problem is to choose a suitable average. Theoretically, geometric mean is the best for this purpose. But, in practice, arithmetic mean is used because it is easier to follow.

#### **5. Selection of Weights:**

Generally, all the commodities included in the construction of index numbers are not of equal importance. Therefore, if the index numbers are to be representative, proper weights should be assigned to the commodities according to their relative importance.

For example, the prices of books will be given more weightage while preparing the cost-of-living index for teachers than while preparing the cost-of-living index for the workers. Weights should be unbiased and be rationally and not arbitrarily selected.

#### **6. Purpose of Index Numbers:**

The most important consideration in the construction of the index numbers is the objective of the index numbers. All other problems or steps are to be viewed in the light of the purpose for which a particular index number is to be prepared. Since, different index numbers are prepared with specific purposes and no single index number is 'all purpose' index number, it is important to be clear about the purpose of the index number before its construction.

#### **7. Selection of Method:**

The selection of a suitable method for the construction of index numbers is the final step.

**There are two methods of computing the index numbers:**

- (a) Simple index number and
- (b) Weighted index number.

Simple index number again can be constructed either by – (i) Simple aggregate method, or by (ii) simple average of price relative's method. Similarly, weighted index number can be constructed either by (i) weighted aggregative method, or by (ii) weighted average of price relative's method. The choice of method depends upon the availability of data, degree of accuracy required and the purpose of the study.