

Chapter 8

Introduction to Index Number

1 Marks Questions

1. What do you mean by index numbers?

Ans. An index number is a statistical device for measuring changes in the magnitude of a group of related variables.

2. State two categories of price index numbers.

Ans. (a) Simple index numbers

(b) Weighted index numbers.

3. Define base year.

Ans. Base year is the year of reference from which we want to measure extent of change in the current year.

4. Name the consumer groups for which CPI is computed.

Ans. There are three consumer groups for which CPI is computed :

(i) CPI for industrial worker

(ii) CPI for urban non manual employees

(iii) CPI for agricultural labourers.

5. What is price relative?

Ans. A price relative is the percentage ratio of the value of a variable in the current year to its

value in the base year.

6. Give Lapser's formula for weighted index number.

Ans.

$$P_{01} = \frac{\sum P_1 q_0}{\sum P_0 q_0} \times 100$$

7. Where can we get some important index numbers such as CPI, WPI IIP etc.?

Ans. Economic survey

8. Write the formula for calculating index of industrial production.

Ans.

$$IIP_{01} = \frac{\sum \left(\frac{q_1}{q_0} \right)^w}{\sum W} \times 100$$

9. How many types of CPI are constructed in India?

Ans. There are three types of CPI.

(i) CPI (IW)

(ii) CPI (UNME)

(iii) CPI (AL)

10. Define current year.

Ans. Current year is the year for which average change is to be measured or index number is to be calculated.

11. What is the difference between simple index number and weighted index numbers?

Ans. In simple index number, all items of the series are accorded equal weight age or importance but in weighted index number different items of the series are accorded different weightage, depending upon their relative importance.

12. Give the formula to calculate the rate of inflation.

Ans.

$$\text{Rate of inflation} = \frac{A_2 - A_1}{A_1} \times 100$$

Here, A_1 = WPI for week first (1)

A_2 = WPI for week second (2)

13. Which sign is used to indicate the price index number?

Ans. P_{01}

14. What does wholesale price index indicate?

Ans. WPI indicates the change in the general price level.

15. Give Panache's formula for weighted index number.

Ans.

$$P_{01} = \frac{\sum P_1 q_1}{\sum P_0 q_1} \times 100$$

16. Which index number is known as cost of living index?

Ans. Consumer price index (CPI)

17. Mention the weight of primary articles in wholesale price index.

Ans. 22.02 % (or) 22%

18. In how many groups all the commodities are classified for WPI?

Ans. Three

19. Mention the weightage of different groups in index of industrial production.

Ans.

	Groups	Weight age
(i)	Mining	10.47
(ii)	Manufacturing	79.36
(iii)	Electricity	10.17

20. Which index number is generally used to measure inflation?

Ans. Wholesale price index number

21. Which change is measured in consumer price index?

Ans. Retail prices

22. Which item having the highest weight in CPI for industrial worker?

Ans. Food

23. In which index number there is a relative importance of the items?

Ans. Weighted index numbers.

VERY SHORT ANSWER TYPE QUESTIONS. [ONE MARK QUESTIONS]

1. What do you mean by index numbers?

Ans. An index number is a statistical device for measuring changes in the magnitude of a group of related variables.

2. State two categories of price index numbers.

Ans. (a) Simple index numbers

(b) Weighted index numbers.

3. Define base year.

Ans. Base year is the year of reference from which we want to measure extent of change in the current year.

4. Name the consumer groups for which CPI is computed.

Ans. There are three consumer groups for which CPI is computed :

(i) CPI for industrial worker

(ii) CPI for urban non manual employees

(iii) CPI for agricultural labourers.

5. What is price relative?

Ans. A price relative is the percentage ratio of the value of a variable in the current year to its value in the base year.

6. Give Laspeyres's formula for weighted index number.

Ans.
$$P_{01} = \frac{\sum P_1 q_0}{\sum P_0 q_0} \times 100$$

7. Where can we get some important index numbers such as CPI, WPI IIP etc.?

Ans. Economic survey

8. Write the formula for calculating index of industrial production.

Ans.
$$IIP_{01} = \frac{\sum \left(\frac{q_1}{q_0} \right)}{\sum W} \times 100$$

9. How many types of CPI are constructed in India?

Ans. There are three types of CPI.

(i) CPI (IW) (ii) CPI (UNME) (iii) CPI (AL)

10. Define current year.

Ans. Current year is the year for which average change is to be measured or index number is to be calculated.

11. What is the difference between simple index number and weighted index numbers?

Ans. In simple index number, all items of the series are accorded equal weightage or importance but in weighted index number different items of the series are accorded different weightage, depending upon their relative importance.

12. Give the formula to calculate the rate of inflation.

Ans. Rate of inflation =
$$\frac{A_2 - A_1}{A_1} \times 100$$

Here, A1 = WPI for week first (1) A2 = WPI for week second (2)

13. Which sign is used to indicate the price index number?

Ans. P₀₁

14. What does wholesale price index indicate?

Ans. WPI indicates the change in the general price level.

15. Give Paasche's formula for weighted index number.

Ans.
$$P_{01} = \frac{\sum P_1 q_1}{\sum P_0 q_1} \times 100$$

16. Which index number is known as cost of living index?

Ans. Consumer price index (CPI)

17. Mention the weight of primary articles in wholesale price index.

Ans. 22.02 % (or) 22%

18. In how many groups all the commodities are classified for WPI?

Ans. Three

19. Mention the weightage of different groups in index of industrial production.

Ans.

Groups	Weightage
Mining	10.47
Manufacturing	79.36
Electricity	10.17

20. Which index number is generally used to measure inflation?

Ans. Wholesale price index number

21. Which change is measured in consumer price index?

Ans. Retail Price

22. Which item having the highest weight in CPI for industrial worker?

Ans. Food

23. In which index number there is a relative importance of the items?

Ans. Weighted index numbers.