



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION



WORKSHEET- 35

SUBJECT - STATISTICS

Term : Final

Topic - Index Number
Full Marks: 15

Class: XI
Date:08 .02. 2021

Select the correct alternatives

1X15

a)Purchasing power of money is

i) equal to price index number

ii) unequal to price index number

iii) reciprocal of price index number

iv) none

b)Points to be kept in mind while constructing Price index are

i)Selection of the base period

ii) selection of the commodities

iii)Collection of data

iv) all of the above

c)Average of the quantities of base and current period is used as weights in

i)Laspayers' formula

ii) Paasche's formula

iii) Marshall-edgeworth formula

iv) none

d)Real wage = _____

i)100/ price index number

ii) $\frac{\text{Actual wage}}{\text{cost of living index number}} \times 100$

iii) $\frac{\text{cost of living index number}}{\text{actual wage}} \times 100$

iv) none of these

e)For selection of commodities , a house to house survey is conducted on sample of families belonging to the class under consideration, it is called

i) family budget enquiry

ii) judgement sampling

iii) random sampling

iv) none

- f) $I_{01} = \left\{ \prod \left(\frac{p_1}{p_0} \right) \right\}^{1/n}$, this formula is known as
- Simple arithmetic mean of price relative
 - simple geometric mean of price relative
 - simple harmonic mean of price relative
 - none
- g) In case of Fisher's price index
- price index x quantity index = value index
 - price index x quantity index = 0
 - price index x quantity index = 1
 - none
- h) The time reversal test requires
- $I_{01} = I_{10}$
 - $I_{01} = 1/I_{10}$
 - $I_{01} + I_{10} = 0$
 - none of these
- i) Fisher's Index satisfies
- factor reversal test
 - time reversal test
 - both (i) and (ii)
 - none
- Q) The following table gives the prices and quantities of a number of commodities in Calcutta. Compute index numbers of prices for 1984 with 1979 as base year.

commodity	unit	1979 (price)	1979 (quantity)	1984 (price)	1984 (quantity)
Rice	Kg	8	4	10	8
Ghee	Kg	25	2	29.50	3
Egg	Dozen	5	5	6.50	6
Milk	litre	2	3	4	7

- j) Find out simple aggregative index
- 120
 - 125
 - 200
 - 250
- k) Find out the simple arithmetic mean of price relatives
- 143.25
 - 143
 - 150
 - 167
- l) Find out price index using Laspeyres' formula
- 125
 - 126
 - 126.9
 - 150
- m) Find out price index using Paasche's formula
- 128.7
 - 125
 - 127.8
 - 230
- n) Find out price index using Marshall-Edgeworth formula
- 127.4
 - 128.04
 - 120
 - 234
- o) Find out price index using Fisher's formula
- 127.8
 - 227.4
 - 220.5
 - 125.50

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