ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION OF WORKSHEET- 35

SUBJECT – STATISTICS

Term : Final

Topic – Index Number **Class: XI**

Full Marks: 15 **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) $\frac{Actual\ wage}{cost\ of\ living\ index\ number}$ x 100

iii) $\frac{cost\ of\ living\ index\ number}{actual\ wage}$ x 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) $I_{01}=\{\prod(\frac{p_1}{p_0})\}^{1/n}$, this formula is known as

i)Simple arithmetic mean of price relative

ii) simple geometric mean of price relative

iii) simple harmonic mean of price relative

iv) none

g)In case of Fisher's price index

i)price index x quantity index= value index ii) price index x quantity index = 0

iii) price index x quantity index= 1 iv) none

h) The time reversal test requires

i) $I_{01}= I_{10}$ ii) $I_{01} = 1/I_{10}$ iii)$I_{01} + I_{10}= 0$ iii) none of these

i) Fisher's Index satisfies

i) factor reversal test ii) time reversal test iii) both (i) and (ii) iv) 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

i) 120 ii) 125 iii) 200 iv) 250

k) Find out the simple arithmetic mean of price relatives

i) 143.25 ii) 143 iii) 150 iv) 167

l)Find out price index using Laspayers' formula

i) 125 ii) 126 iii) 126.9iv) 150

m)Find out price index using Paasche's formula

i) 128.7 ii) 125 iii) 127.8 iv) 230

n)Find out price index using marshall-edgeworth formula

i) 127.4 ii) 128.04 iii) 120 iv) 234

o) Find out price index using fisher's formula

i) 127.8 ii) 227.4 iii) 220.5 iv) 125.50

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