Date: 2-12-2024

LGS GROUP OF COLLEGES

WEEKLY TEST # MT3–Business Statistics/XII [I. Com]

TOPIC [Ch. # 4]

TEST# MT-3

PaperCode:1007	Name: ……	Roll No.							
Max. Marks: 35	Objective + Subjective	Time: 60 min							

SECTION-I OBJECTIVETYPE

Note: Four possible answer A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question. **(9 × 1 = 9)**

1) In chain base method, the base period is

(a) Fixed **(b)** Constant
(c) Not fixed **(d)** Zero

2) The most suitable average for index number is

(a) A.M **(b)** G.M
(c) Mode **(d)** Median

3) Price relative is percentage ratio of current year price and

(a) Base year price **(b)** Base year quantity
(c) Preceding year price **(d)** None of these

4) Fisher index number is called _____ index number.

(a) Bogus **(b)** Nominal
(c) Ideal **(d)** CPI

5) Index for base period is:

(a) 1 **(b)** 100
(c) Fix **(d)** None of all

6) A base year should be free from:

(a) Floods **(b)** Strikes
(c) Wars **(d)** All of above

7) If Laspayre's index = 116 and Paascha's index number = 110. Than Fisher index is:

(a) 110.96 **(b)** 116.0
(c) 113.69 **(d)** 112.96

8) When price of year is divided by the price of the preceding year, price we get:

(a) Value index **(b)** Link relative
(c) Simple index **(d)** Volume index

9) If all the values are not of equal importance, the index number is called:

(a) Simple index number **(b)** Composite index number
(c) Unweighted index number **(d)** Weighted index number

SECTION-II SUBJECTIVETYPE

Part-I

2. Write short answers to questions. **(7 x 2 = 14)**

i) What is un-weighted index number?
ii) Note down four uses of the index number.
iii) Define quantity index number.
iv) $\sum P_0q_0 = 3000$, $\sum P_1q_0 = 4300$, $\sum P_1q_1 = 4890$ and $\sum P_0q_1 = 4100$, find fisher index number.
v) Give that $P_0 = 4, 4, 3$ $q_0 = 70, 75, 80$ find $\sum W$.
vi) Distinguish between simple and composite index numbers.
vii) Write difference between fixed and chain base method.

Part – II

Note: Attempt all questions. **(4 x 3 = 12)**

3. Calculate index numbers for years for 2018, 2019, 2020 and 2021 by taking 2018 as base using Median as an average:

Years	Prices			
	Wheat	Rice	Cotton	Ghee
2018	12	3	4	4
2019	12	3	4	4
2020	13	3	5	4
2021	15	3	5	5

Q4. The average annual prices of four commodities for the year 1990 to 1993 are given in the following table. Construct price index numbers with 1990 as base mean as an average.

Year	Average Annual prices			
	A	B	C	D
1990	1.50	1.20	2.80	3.50
1991	1.75	1.40	3.00	4.20
1992	2.00	1.50	3.25	4.50
1993	2.25	1.60	3.40	4.75

Q5. Construct price index number for year 2000 on the base of year 1990.

Item	1990		2000	
	quantity	Price	Quantity	price
A	3	70	4	75
B	5	80	6	90
C	8	40	10	55
D	10	50	12	60

Find:

i) Laspayers' I.N
ii) Paaschs I.N
iii) Fisher