

B.B.A. (CBCS Pattern) Semester - I
UCB1C07 - Statistical Methods for Business-I

P. Pages : 2

Time : Three Hours



GUG/S/23/10589

Max. Marks : 80

- Notes : 1. All question are compulsory.
2. All question carry equal marks.

1. a) Define statistics and explain importance of statistics. 8

b) Calculate Geometric mean. 8

Income in Rs.	1000	80	40	750	100	150	120	60
No. of Person	1	50	25	2	3	4	3	5

OR

c) Calculate mean median and mode 16

Marks	No. of students
Less than 20	4
Less than 30	16
Less than 40	56
Less than 50	97
Less than 60	124
Less than 70	137
Less than 80	146
Less than 90	150

2. a) Find out Range and its co-efficient. 8

Marks	5-9	10-14	15-19	20-24
No. of students	3	6	4	1

b) Find out mean deviation from mean and its co-efficient. 8

Age	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No of Person	18	16	15	12	10	5	2	2

OR

c) Calculate Bowley coefficient of skewness 16

Wages in Rs.	0-10	10-20	20-30	30-40	40-50	50-60
No of workers	15	17	19	27	19	12

3. a) Calculate co-efficient of correlation. 8

X = 165	166	167	167	168	169	170	172
Y = 167	168	165	168	172	172	169	171

- b) Find out correlation. 8
Sum of product of corresponding deviation of x and y = 1035.86
Standard deviation of x series = 20.94
Standard deviation of Y series = 12.2
No. of Pairs = 10

OR

- c) Calculate co-efficient of correlation Age of wife 16

Age of Husband	20-30	30-40	40-50	50-60	60-70	Total
60-70	4	3	1	-	-	08
70-80	2	5	2	1	-	10
80-90	1	2	3	2	1	9
90-100	-	1	3	5	2	11
100-110	-	-	1	1	5	7
Total	7	11	10	9	8	45

4. a) Information available as under: 8

Commodity	Base year		Current year	
	Price	Quantity	Price	Quantity
Dal	06	50	10	56
Rice	02	100	02	120
Wheat	04	160	06	60
Jawar	10	30	12	24
Sugar	08	40	12	36

Find out.

- i) Fisher Ideal Index Number ii) Time Reversal test
iii) Factor Reversal test.

- b) Find out Index number 8

Commodity	Quantity		Price	
	2015	2016	2015	2016
Sugar	16	20	50	16
Dalda	05	08	10	15
Ghee	04	06	20	25

By

- i) Laspeyres method ii) Paasches method

OR

- c) Dorbish and Bowley Index and Fisher Ideal Index. 16

Commodity Year	Rice		Wheat		Jawar	
	Price	Quantity	Price	Quantity	Price	Quantity
2021	04	50	03	10	02	05
2020	10	40	08	08	04	04

5. Short answer :

- a) Explain the limitation of statistics. 4
b) State the objective of Dispersion. 4
c) Define correlation and explain its characteristics. 4
d) Explain the limitation of Index Numbers. 4
