

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

P. Pages : 2

Time : Three Hours



**GUG/W/23/10589**

Max. Marks : 80

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

1. a) Explain scope of statistics. 8  
b) Calculate Harmonic Mean from the following data: 8

Age	55	60	64	65	70	72	75
No. of person	3	4	6	7	5	2	1

**OR**

- c) Calculate mean, median, more from the following data: 16

Daily Wages	1-8	9-16	17-24	25-32	33-40	41-48	49-56	57-64	65-72	73-80
No of workers	2	4	7	13	18	24	17	9	5	1

2. a) Calculate mean Deviation from the median and its co-efficient. 8

Mark	40	42	44	46	48	50	52	54	56
No. of student	3	5	8	11	10	12	6	5	4

- b) Find out standard Deviation and Co-efficient of variation. 8

Mark	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18
No. of Student	3	6	10	12	10	8	6	5

**OR**

- c) Calculate Quartiles Skewness 16

Age (Below)	10	20	30	40	50	60
No. of person	15	32	51	78	97	109

3. a) Calculate Karl Parson's Coefficient of correlation using 30 and 25 respectively as the origin of x and y. 8

x	23	27	28	29	30	31	33	35	36	39
y	18	22	23	24	25	26	28	29	30	32

- b) In a question of correlation the  $\Sigma = 0.8$  and P.E = 0.08. What is the value of N=? 8

**OR**

- c) Following table given the distribution of the total population and those who are totally and partially blind among them. 16  
Find out if there is any relation between Age and Blindness and its P.E.

Age	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No of person (000's)	100	60	40	36	24	11	6	3
Blind	55	40	40	40	36	22	18	15

4. a) Calculate the Index Number from the following data. 8  
i) Laspeyres Method ii) Paasche's Method

Commodities	Base year		Current year	
	Quantity	Price	Quantity	Price
Sugar	10	12	13	14
Oil	13	09	18	07
Dalda	22	07	18	11
Rice	03	18	04	16

- b) Information available as under 8

Commodity	Base year		Current year	
	Price	Quantity	Price	Quantity
A	5	12	6	10
B	2	8	6	5
C	4	15	4	12
D	2	18	5	22

Find out

- i) Fisher Ideal Index Number  
ii) Time Reversal test  
ii) Factory Reversal test

**OR**

- c) Find out Dorbish and Bowley Index and Fishers Ideal Index 16

Commodity	2021		2022	
	Price	Total Value	Price	Total Value
A	5	50	4	48
B	8	48	7	49
C	6	18	5	20

5. Write short answers.

- a) Explain the limitation of statistics. 4  
b) State the objectives of Dispersions. 4  
c) Define correlation and explain the significance of correlation. 4  
d) Explain the uses of Index Numbers. 4

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