

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

P. Pages : 2

Time : Three Hours



GUG/W/24/10589

Max. Marks : 80

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

1. a) Calculate mean from the following data. 8

Sr. no. of Student	Marks
1	40
2	50
3	55
4	78
5	58
6	60
7	73
8	35
9	45
10	48

- b) Calculate the geometric mean 8
Item 25, 30, 42, 95, 135, 310, 415 220, 97, 10

OR

- c) Find out the mean, median & mode form the following- 16

Marks: upto	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No of Students	2	20	50	95	130	150	156	160

2. a) Find out mean Deviation from the mode & its co-efficient- 8

Size of item	0-4	4-8	8-12	12-16	16-20	20-24	24-28
Frequency	7	9	13	18	25	10	5

- b) Find out Q. D and its coefficient. 8

Income	500	600	700	800	850	900	1000	1050	1100	1200
No. of employees	7	12	18	20	25	21	17	11	6	2

OR

- c) Find out S.D; C.V and coefficient of skewness- 16

Weekly Wages in Rs.	No. of Workers	Weekly Wages	No of Worker
0-5	8	25-30	200
5-10	14	30-35	145
10-15	36	35-40	66
15-20	72	40-45	32
20-25	114	45-50	13

3. a) Find out correlation from the given data- 8
 i) $\sum dx dy = 252$ ii) $n = 25$
 iii) S.D. of $x = 6$ iv) Variance of $y = 81$
- b) Find out coefficient of correlation (m) 8
 i) $n=16$ ii) Probable error's = 0.125.

OR

- c) Calculate the coefficient of correlation and the probable errors. 16

Weight Kg.	Age in Year				
	20	22	24	26	Total
100-105	20	15	10	3	48
105-110	10	7	-	5	22
110-115	9	12	-	9	30
115-120	1	-	6	7	14
120-125	-	6	-	-	6
Total	40	40	16	24	120

4. a) Calculate the Index Number's from the following data. 8
 i) Laspeyre's method ii) Dorbish & Bowley's method
 $\sum p_0 q_0 = 445$; $\sum p_1 q_1 = 570$
 $\sum p_0 q_1 = 516$; $\sum p_1 q_0 = 521$

- b) Compute Fisher's Ideal quantity index number from the following. 8

Commodities	2021		2022	
	Qty in units	Total exp.	Qty in units	Total exp.
A	20	40	15	75
B	4	16	5	40
C	10	10	12	24
D	5	25	6	60

OR

- c) Find out Index Number's by following Methods- 16

		Wheat	Rice	Jowar
Price per Unit	2015	80	100	5
	2016	100	160	8
Quantity per unit	2015	40	20	10
	2016	50	10	8

- 1) Laspeyre's Method 2) Paasche's method
 3) Dorbish & Bowley's method 4) Fisher Ideal Index

5. Write short note- 4
 a) Explain the scope of statistics. 4
 b) What is Range method. 4
 c) Nature of skewness. 4
 d) Characteristics of index numbers. 4
