B.B.A. (CBCS Pattern) Sem-I

UCB1C07 - Statistical Methods for Business-I

P. Pages : 2 **GUG/W/22/10589**

Time : Three Hours * 0 3 8 1 * Max. Marks : 80

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

1. a) Define Median and explain its merits. **8**

b) Calculate Harmonic Mean from the following series. **8**

Marks	10	15	20	25	30	35
No. of student	1	2	3	5	3	6

OR

c) Calculate Mean, Median, Mode from the following distribution. **16**

Item	0-100	100-200	200-300	300-400	400-500	500-600
Frequency	15	14	12	10	8	4

2. a) Find out Range & its coefficient from the following series. **8**

Item	10	20	30	40	50
F	6	8	2	1	3

b) Calculate Mean deviation from median and its coefficient. **8**
Item 26, 28, 35, 38, 40, 45, 56, 59

OR

c) Calculate coefficient of variation, coefficient of SD from the following series. **16**

Marks.	0-500	500-1000	1000-1500	1500-2000	2000-2500
No. of student	25	20	30	35	18

3. a) Calculate coefficient of correlation between age of wife and age of husband. **8**

Age of Wife	100	110	115	120	125	130	135	140
Age of Husband	120	125	130	130	135	140	140	145

b) Given that :- N = 20 **8**
Probable Error = 0.042
Calculate the value of correlation

OR

c) Calculate the coefficient of correlation from the following. **16**

y/x	5	10	15	20	25	30	Total
10	-	1	1	2	8	12	24
15	1	2	5	9	80	11	108
20	2	15	42	98	36	8	201
25	5	20	51	37	10	2	125
30	8	16	8	5	4	1	42
Total	16	54	107	151	138	34	500

4. a) Find out Index Number by Laspeyres method. **8**

Item	1990		2000
	Price	Quantity	Price
A	90	25	130
B	60	50	90
C	110	30	90
D	130	20	160

b) Find out Index Number by Fisher's Ideal formula **8**
Given

$\varepsilon p_1 q_0 = 320$

$\varepsilon p_0 q_1 = 330$

$\varepsilon p_1 q_1 = 375$

$\varepsilon p_0 q_0 = 235$

OR

c) Find out Index Number by all method. **16**

	2010		2019	
	Price	Quantity	Price	Quantity
Rice	10	28	20	10
Wheat	15	38	25	12
Jawar	20	48	30	15
Bajra	25	58	45	20

5. Short note on. **16**

a) Define Mode.

b) Explain skewness

c) Define correlation

d) Explain Fishers Ideal Index Number.

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