

B.C.C.A.- II CBCS Pattern Semester-III
UBCCAT301 - Statistics Technique and Business Mathematics-I

P. Pages : 2
 Time : Three Hours



GUG/S/24/10626
 Max. Marks : 80

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

1. a) What do you mean by Statistics? Explain the scope of statistics. 8
 b) From the following data. Calculate Geometric mean and Harmonic mean. 8

Size	40-49	50-59	60-69	70-79	80-89
F	10	70	189	60	38

OR

- c) Calculate mean, median, mode from the following data. 16

Weigh (Lbs)	No. of Student
Above 90	105
"- 100	100
"- 110	80
"- 120	40
"- 130	28
"- 140	22
"- 150	14
"- 160	10
"- 170	3

2. a) Find out mean deviation from mean and median from the following data. 8

Size	5	10	15	20	25	30	35
F	2	8	19	24	17	12	10

- b) Which shows greater Deviation or more variables. 8

Series A	192	288	236	229	184	260	348	291	330	248
Series B	83	87	93	109	124	126	126	101	102	108

OR

- c) Calculate Co-efficient of skewness from the following information 16

Sr. No	1	2	3	4	5	6	7	8	9
Profit	120	140	166	170	171	172	175	180	190

3. a) Calculate the co-efficient of correlation for the following 'X' & 'Y' series by Karl Pearson's method. 8

'X' Series	-6	-4	-3	-2	0	+1	+4	+5	+6	+9
'X' Series	-12	-8	-7	-5	-3	-3	-2	-1	0	+1

- b) Calculate coefficient of concurrent Deviations from the given data. 8

No. of workers	300	350	400	450	500	550
No. of butes consumed	30	32	33	35	40	50

OR

- c) Calculate the co-efficient of correlation and probable error from the following 'X' & 'Y' series. Also prove that 'r' is significant. 16

'X' Series	5	6	7	9	12	15	14	16	17	19
'Y' Series	16	20	22	25	24	26	28	29	31	39

4. a) A Shopkeeper brought a T.V. for Rs. 47500 and sold to customers for Rs. 30,200 what was his profit percentage? 8

- b) A Village has a population of 70000 of which 70% are males and rest females. If 30% of females are married find out the % of married males. 8

OR

- c) The population of a city increase by 10% in one year and decrease by 10% the next year. If at the end of second year, the population is 199000. What was it at the beginning of 1st year? 8

- d) Mr. Prabhakar purchased a cooler for 10,000 and sold it to Mr. Hira at a profit of 10% Mr. Hira then sold it to Mr. Kedar at a profit of 5%. How much percent more did Mr. Kedar pay than Mr. Prabhakar. 8

5. Write answer in short.

- a) State objective of collection of data. 4
- b) Write the note on positive skewness and negative skewness. 4
- c) Write importance of correlation. 4
- d) Define Profit & Loss. 4
