

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

P. Pages : 2

Time : Three Hours



GUG/W/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 Function of statistics. 8

b) Calculate Geometric mean from the following data. 8

Size	40-49	50-59	60-69	70-79	80-89
F	25	90	294	80	58

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 quartile deviation from the following data. 8

Size	5	10	15	20	25	30	35
F	7	18	22	44	27	32	10

b) Calculation S.D. & Co-efficient of Variation for the following series. 8

Age	10	20	30	40	50	60	70	80	90	100
No. of Person	3	5	10	11	14	16	15	15	17	19

OR

c) Calculate Co-efficient of skewness by Karl Person's formula. 16

Class less than	120	130	140	150	160	170	180	190	200
Freq.	20	60	80	90	110	150	170	190	220

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
'Y' Series	-12	-8	-7	-5	-3	-3	-2	-1	0	+1

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

Year	2004	2005	2006	2007	2008	2009	2010
Price	300	380	390	410	432	440	454
Supply	180	168	173	160	185	190	250

OR

- e) 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) Himanshu bought a mobile for Rs. 60,000 and sold at Nilesh at a profit of 12%, Nilesh earned 18% profit on it and sold it to Dilip. Dilip sold it to earn profit 20%, at what price he should be sale the mobile. 8
- b) A Village has a population of 70000 if 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) In an examination 45% students failed in Marathi & 55% failed in English. if 15% students failed in both the subjects, find the percentage of those students passed in both the subjects. 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) Cash Discount and trade Discount. 4
