



‘সমানো মন্ত্র: সমিতি: সমানী’

UNIVERSITY OF NORTH BENGAL
BBA/B.Com. LL.B. Honours 1st Semester Examination, 2023

BUSINESS STATISTICS**PAPER CODE: CC02**

Time Allotted: 3 Hours

Full Marks: 100

*The figures in the margin indicate full marks.***Answer Question No. 7 and any four questions from the following**

1. (a) Describe the scope of Statistics in Economics. 8+6+6
 (b) Explain the term “Cumulative Frequency Distribution”.
 (c) Ages (yrs) of 100 students are given below:

Age:	10	11	12	13	14	15	16	Total
Student:	15	20	12	35	4	6	8	100

Form a cumulative frequency distribution in the order less than 11, less than 12... etc.

2. (a) The A.M. of the following distribution is 67.45 inches. Find the missing frequencies: 12+8

Height (inches):	60-62	63-65	66-68	69-71	72-74	Total
Frequency:	15	f ₁	126	f ₂	24	300

- (b) Show the relationship between Arithmetic Mean, Geometric Mean and Harmonic Mean.

3. (a) Find the Median from the following table: 10+10

Class Boundaries:	15-25	25-35	35-45	45-55	55-65	65-75
Frequencies:	4	11	19	14	0	2

- (b) Calculate Mode from the following table:

Class Interval:	50-59	60-69	70-79	80-89	90-99	100-109
Frequencies:	5	20	40	50	30	6

4. (a) State the merits and demerits of Standard Deviation. 10+10

- (b) Compute (i) Quartile Deviation and (ii) Coefficient of Quartile Deviation from the following data:

Wages (in Rs.):	12	14	17	21	27	30	36
No. of Workers:	4	6	8	7	12	10	4

5. (a) Explain the concept of Correlation.

8+12

(b) Find the two regression equations from the following table:

X:	1	2	3	4	5
Y:	2	3	5	4	6

If $X = 2.5$, what will be the value of Y ?

6. (a) Explain the concept of Simple Random Sampling with Replacement and Simple Random Sampling without Replacement.

14+6

(b) There are 100 students in a class of which 36 are boys studying statistics and 13 are girls not studying statistics. If there are 55 girls in all, find the probability that a boy picked up at random is not studying statistics.

7. Write short notes on any *four* of the following:

5×4 = 20

- (a) Importance of Statistics
- (b) Sample and Population
- (c) Equally Likely Events
- (d) Primary Data
- (e) Mode
- (f) Stratified Sampling.

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