

Roll.No.

21UCGAT4004

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

B.Sc.Statistics - END SEMESTER EXAMINATIONS - NOVEMBER 2025

SEMESTER - IV

21UCGAT4004- Statistical Methods

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Explain the various methods that are used in the collection of primary data, pointing out their merits and demerits.
2. Describe the various types of diagrammatic representation of data.
3. Find Bowley's coefficient of skewness for the following frequency distribution.

X	0	1	2	3	4	5	6
Frequency	7	10	16	25	18	11	8

- 4.
5. Define regression co-efficient and state its properties.
6. Write down the testing procedure based on mean for a single sample.
7. Explain Type-I and Type-II errors.
8. Define ANOVA and write down its assumptions .

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. The scores of two batsmen A and B in 10 innings during a certain session are
A: 32 28 47 63 71 39 10 60 96 14
B: 19 31 48 53 67 90 10 62 40 80
Find which of the batsman A or B is more consistent using coefficient of variation.
10. The ranking of two students in two subjects A and B are as follows:

A	6	5	3	10	2	4	9	7	8	1
B	3	8	4	9	1	6	10	7	5	2

Calculate rank correlation coefficient.

Contd...

11. A sample of 100 students taken from a large population. The mean height of the students in this sample is 160 cm. Can it be reasonably regarded that, in the population, the mean height is 165 cm, and the standard deviation is 10 cm?
12. Explain the procedure for one way ANOVA.
13. Discuss in detail the scope and limitations of Statistics.
