21UPCAT3003

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.(Psy) END SEMESTER EXAMINATIONS APRIL-2023 SEMESTER - III **21UPCAT3003 - Statistics in Psychology**

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

- 1. Sketch the importance of statistics in psychology.
- 2. Compute the mean, median and mode for the following data. 9,14,8,13,10,10,11,12,10
- 3. Interpret the concept of skewness.
- 4. Differentiate type I and type II errors in testing of hypothesis.
- 5. Define degree of freedom and explain the same for t-test of single and independent samples.
- 6. Elaborate sign test.
- 7. What is variance? Explain its methods with formulae.
- 8. Elaborate frequency polygon.

Section C

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

- 9. Describe the levels of measurement in detail.
- 10. Compute the SD for the following

IQ	f
127-129	1
124-126	2
121-123	3
118-120	1
115-117	6
112-114	4
109-111	3
106-108	2
103-105	1
100-102	1

- 11. Explain normal distribution and its properties with example.
- 12. Describe in detail about hypothesis testing with a 't' test for independent means.
- 13. A one rupee coin is tossed in the air 100 times and the recorded results of these 100 throws indicate 40 heads and 60 tails. Using the chisquare test, find out whether this result is better than mere "chance". (critical value- 3.841)
