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 NOVEMBER - 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. Describe descriptive statistics and Inferential statistics in detail.
- 2. Describe normal distribution, its properties, and its importance in statistics.
- 3. Compute the average deviation from the following distribution.

Scores	f	
80-84	4	
85-89	4	
90-94	3	
95-99	0	
100-104	3	
105-109	3	
110-114	1	

- 4. Sketch the distribution of differences between means.
- 5. Discuss one-tailed and two-tailed Hypothesis Testing.
- 6. Classify different types of skewness and Kurtos is with an a example.
- 7. Explain Variance in detail.
- 8. Infer Chi-square with an example.

Section C

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

9. Plot histograms, and frequency polygons on the different axes for the following distributions. (N=75)

Contd...

Scores	f		
75-79	1		
70-74	3		
65-69	5		
60-64	8		
55-59	11		
50-54	18		
45-49	10		
40-44	8		
35-39	6		
30-34	3		
25-29	1		
20-24	1		

- 10. Define mean, median and mode. Discuss when each one of them should be computed and why.
- 11. What is correlation? Decribe its characteristics and applications.
- 12. Elucidate hypothesis testing.
- 13. Twelve adolescent girls and boys randomly selected from a coeducational senior secondary school were tested through a personality inventory. The scores so collected are given now. Can you conclude, using the Runs test that boys and girls differ significantly in terms of their personality make-up.

Scores on personality inventory

Girls:	156	139	142	135	183	135	178	115	211	174	111	120
Boys :	125	110	92	128	86	77	79	86	96	106	90	85

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