

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2019 – 2020 & thereafter)

B. Sc. DEGREE EXAMINATION, NOVEMBER 2023
PSYCHOLOGY
THIRD SEMESTER

COURSE : ALLIED – CORE
PAPER : STATISTICS IN PSYCHOLOGY
SUBJECT CODE : 19PY/AC/ST35
TIME : 3 HOURS

MAX.MARKS:100

SECTION – A

I. ANSWER ALL QUESTIONS. EACH ANSWER NOT TO EXCEED 50 WORDS.
(10x3=30)

1. Define statistics and graphical representation.
2. Differentiate between descriptive and inferential statistics.
3. Compare arithmetic and weighted mean.
4. Define variance and coefficient of variation.
5. What is standard error?
6. Discuss on divergence from normality.
7. Mention any three characteristics of parametric test.
8. Define correlation and its types.
9. What do you mean by chi square test?
10. State the conditions in the use of sign test.

SECTION – B

II. ANSWER ANY FIVE QUESTIONS. EACH ANSWER NOT TO EXCEED 250 WORDS.
(5x8=40)

11. Discuss on assumptions of nonparametric distributions and theoretical foundations of Mann Whitney U test.
12. Draw a histogram, frequency polygon and an ogive for the following data.

Marks	0 - 10	10 – 20	20 - 50	50 - 60	60 - 80	80-100
No of Students	4	6	21	14	10	16

13. Illustrate applications of normal distribution with examples.
14. An Intelligence test was given to a group of boys and girls. The results are as follows

	Mean	SD	N
Boys	95	20	250
Girls	100	15	150

Is there a significant difference in the intelligence scores obtained by boys and girls?

15. Calculate the Spearman correlation for the following data.

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

16. Elaborate on coding, tabulation and classification of data.

17. Enumerate merits and demerits of central tendencies.

18. Describe the theoretical foundations of F test & ANOVA.

SECTION – C

**III. ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED
1200 WORDS. (2x15=30)**

19. Discuss the need and importance of statistics. Elaborate on the function and limitation of statistics.

20. Calculate Karl Pearson's coefficient of correlation from the following data

X	13	12	10	10	8	6	6	5	3	2
Y	11	14	11	7	9	11	3	7	6	1

21. Enumerate the characteristics of normal distribution. Illustrate with diagrams.

22. Find the mean & median, using that find the mode for the following data

Class Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
f	5	9	13	21	20	15	8	3
