# St. Claret College

# Autonomous, Bengaluru

ROLL NO:
DATE:

### PG END SEMESTER EXAMINATION-FEB 2025

M.Sc. (Psychology) FIRST SEMESTER

MPY 1524: STATISTICS IN PSYCHOLOGY

TIME: 3 hours.

MAX. MARKS: 70

This paper contains TWO printed pages and THREE parts

## **Instructions:**

- 1. Verify and ensure that the question paper is completely printed.
- 2. Any discrepancies or questions about the exam paper must be reported to the COE within 1 hour after the examination.
- 3. Students must check the course title and course code before answering the questions.

### **PART-A**

# Answer FOUR questions out of SIX. Each answer carries FIVE marks.

[5x4 = 20]

- 1. What is Kurtosis? What are its different types?
- 2. Define Hypothesis. What are its different types?
- 3. Elaborate on the different levels of Measurement
- 4. Write the assumptions of One-Way ANOVA.
- 5. Name the non-parametric counterparts of the following parametric tests:
  - a. Paired Sample t-test
  - b. One Way ANOVA
  - c. Independent Sample t-test
  - d. Pearson's Product Moment
  - e. Repeated Measures ANOVA
- 6. Write the assumptions for point biserial correlation test.

# EIBRARY MI \* Bengaluru-13 \*

### PART-B

# Answer any TWO questions out of THREE. Each answer carries TEN marks.

[10x2=20]

- 7. Write an Essay highlighting the importance of Statistics in Psychology
- 8. Use Median test to find if there is a significant gender difference in Happiness for the given data

Male	28	22	24	26	22	18	13	25	18	26
Female	20	29	30	26	28	16 '	24	32	19	21

9. What is Regression? Elaborate on the different models of Regression.

## PART-C

# Answer any TWO questions out of THREE. Each answer carries FIFTEEN marks.

[15X2=30]

10. Calculate the Arithmetic Mean, Median, Mode and Standard Deviation for the given dataset:

Sl. No.	Class Interval	Frequencies
1	1-10	5
2	11-20	7
3	21-30	12
4	31-40	15
5	41-50	11
6	51-60	9

11. A researcher has undertaken a study to find if there is a significant impact of the duration of playing videogames on the social intelligence of 12 college students. The data collected is tabulated below. Find if the duration of playing video games has a significant impact on the social intelligence of the subjects.

Duration	Ouration Social Intelligence Scores											
<2hrs (X1)	53	55	60	48	49	43	58	54	62	48	45	50
2-4hrs (X2)	40	45	42	46	40	38	36	42	32	30	31	35
>4hrs (X3)	33	32	36	28	29	24	29	30	31	34	32	38

12. A researcher has undertaken a study to find if there is a significant gender difference in Academic Motivation. His observations are tabulated below. The data doesn't follow a normal distribution. Use an appropriate statistical test to find if there is a significant gender difference in Academic Motivation.

	T													
Male	25	22	23	29	18	32	26	18	37	36	21	24	26	20
Female	28	32	35	36	34	37	38	32	34	26	39	33	37	36

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