

**CENTRE FOR DISTANCE AND ONLINE EDUCATION
SRI SRI UNIVERSITY, CUTTACK**

MASTER OF ARTS (YOGA)

TUTOR MARKED ASSIGNMENT

Course Code: MSY-SCT-302

Exam: July 2026

Course Name: Research Methodology and Statistics

Session: February 2025

Semester: 3rd

Total Marks: 100

A. Answer any eight questions (essay type). Answer in about 350-500 words each.

(10 X 8 = 80)

1. What is Hypothesis? Explain the different types of Hypotheses with suitable examples.
2. Provide a detailed note on the concept of Plagiarism, explaining its different forms.
3. Write a detailed note on the types of Data Scales used in research.
4. Explain the different types of Probability Sampling and Non-Probability Sampling techniques.
5. Explain about the steps involved in the Research Process, using suitable examples.
6. Create a detailed concept note for a cross-sectional survey study on Yoga, based on a PICOTS framework of your choice.
7. The number of students practicing different yoga styles is given below: Hatha=38; Vinyasa=27; Ashtanga=14; Kundalini=9; Power=22; Iyengar=20; Bikram=11; Restorative=16; Yin=13; Aerial=24; Prenatal=8; Sri Sri=47. Draw a bar graph to represent the above data.
8. Calculate Mean, Median, Mode and Range for the following dataset, clearly mentioning the steps, formulas and procedures involved: 47, 23, 35, 23, 41, 29, 35, 52, 41, 23, 38, 47, 29, 41, 35, 38, 47, 29, 52, 41.
9. Create a detailed Concept Note of a Randomized Controlled Trial on Yoga, based on PICOTS framework of your choice.
10. What are the measures of Central Tendency? Explain in detail.

B. Write short notes on any four. Answer in about 150-200 words each.

(5 X 4 = 20)

1. Briefly describe the Empirical Rule of Standard Deviation in the context of Normal Distribution.
2. Briefly describe the key characteristics of a Normal Distribution.
3. What is a sample in a yoga research study?
4. Differentiate between independent, dependent, control, and confounding/extraneous variables.
5. What is meant by data and its types?
6. What is the purpose of statistics in yoga studies?