

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423]

APRIL 2023

Sub. Code: 2474

**BACHELOR IN PROSTHETICS AND ORTHOTICS
THIRD YEAR - (Regulation 2017-2018 onwards)
PAPER IV – RESEARCH METHODOLOGY AND BIO STATISTICS
*Q.P. Code: 802474***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Diagrammatic presentation of Data such as:
 - a) Bar diagram
 - b) Pie diagram
 - c) Line diagram
 - d) Pictogram and Cartogram.
2. Measurement and Scaling Techniques:
 - i) Measurement scales
 - ii) Source of Measurement error.
3. Testing of Hypothesis with example.

II. Write notes on:

(8 x 5 = 40)

1. Applications of Biostatistics.
2. Types of Research approaches.
3. Data collection from Experiments and Surveys.
4. Criteria for selecting sampling procedure.
5. Types of Analysis.
6. Ogive or Cumulative frequency curves.
7. Statement of Research Problem and purpose and objective.
8. Methods of collecting Primary data.

III. Short answers on:

(10 x 3 = 30)

1. Need for sampling.
2. Descriptive statistics.
3. Meaning of Research Design.
4. Need for Research Design.
5. Definition of Biostatistics.
6. Qualitative Data with example.
7. Cumulative and Relative frequency distribution.
8. Inclusive method of classification of Data.
9. Meaning of Research.
10. Objective of Research.
