

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

[AHS 1123]

NOVEMBER 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. Distinguish between an Experimental and Survey Research. Explain fully the Survey Method of Research.
2. What points will you keep in mind while preparing a Research Report? Explain.
3. What are the applications of ANOVA One way and Two-way in Clinical Prosthetics?

II. Write notes on:

(8 x 5 = 40)

1. Distinguish between Statistic and Parameter.
2. State the advantages and limitations of Diagrammatic representation of Data.
3. What are the benefits of conducting an Experimental Study?
4. Explain the construction of Histogram.
5. Explain Non Linear Regression.
6. Write a note on elements of ANOVA.
7. Explain the process of Random Sampling.
8. What is a t-test? When it is used and for what purpose(s)? Explain by means of examples.

III. Short answers on:

(10 x 3 = 30)

1. Stratified Sampling.
2. Bibliography and its importance in context of Research report.
3. Footnotes.
4. Cross tabulation.
5. Collection of Data Through Questionnaires.
6. Role of Research in Clinical Prosthetics.
7. Standard Deviation.
8. Spearman's Rank Correlation.
9. Ogive.
10. Randomized Block Design (R.B. Design).
