## BACHELOR IN PROSTHETICS AND ORTHOTICS THIRD YEAR

## PAPER VI – RESEARCH METHODOLOGY / PROJECT DEVELOPMENT

Q.P. Code: 802436

Time: Three Hours Maximum: 100 Marks

**Answer All questions** 

I. Elaborate on:  $(3 \times 10 = 30)$ 

1. Elaborate on various research designs applicable in Orthotic/Prosthetic projects?

- 2. Explain various parametric and non parametric tests.
- 3. What is Sampling? Enumerate various method of sampling technique.

II. Write notes on:  $(8 \times 5 = 40)$ 

- 1. Normal distribution.
- 2. Cross sectional study.
- 3. Calculation of Mean for Ungrouped data.
- 4. Explain in brief Type I and Type II error.
- 5. Histogram Vs bar diagram.
- 6. What is hypothesis? Explain null and alternate hypothesis.
- 7. Case control Study.
- 8. What are the elements of Informed Consent?

## III. Short answers on: $(10 \times 3 = 30)$

- 1. Interpretation of correlation coefficient.
- 2. Cluster sampling.
- 3. Define confidence interval.
- 4. What is scatter diagram?
- 5. What is literature review and why is it necessary?
- 6. Define randomization.
- 7. Define Mean, Median and Mode.
- 8. Prevalence and incidence.
- 9. What are the contents of research proposal?
- 10. Disadvantage of cohort study.

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