

Khalsa College, Amritsar

An Autonomous College

BACHELOR OF PHYSIOTHERAPY (PART-III)

Paper – V Research Methodology and Biostatistics

Time: 3 Hrs.

100

M. Marks:

Theory: 80

Internal Assessment: 20

1. There will be Ten Questions of equal Marks distribution. Candidate will have to answer any eight questions.
2. The questions should be equally distributed in the whole syllabus.

Description:

Section – I

1. Introduction: Importance of research in clinical practice, scientific approach, characteristics, purposes and limitations.
2. Ethical issues in research, elements of informed consent.
3. Structure of a research proposal.

Section – II

1. Research Question including literature review.
2. Measurement: Principles of measurement, reliability and validity.
3. Experimental sampling and design.
4. Descriptive research.

Section – III

Biostatistics:

1. Descriptive statistics
2. Comparison of means, T – tests.
3. Analysis of Variance.
4. Qualitative and quantitative observations, Measures of Central Tendency – Arithmetic Mean, Median and Mode, Position of averages. Graphical representation of data.
5. Measures of dispersion – range, variance, mean deviation, standard deviation and coeff. of variation. Frequency distribution
6. Correlations

Books Recommended:

1. Methods in Biostatistics – Mahajan - J.P.
2. Statistics in Medicine - Colton - Little Brown, Boston.
3. Research for Physiotherapist: Project Design and Analysis - Hicks - Churchill Livingstone.
4. Biostatistics: The manual for Statistical methods for use in health and nutrition - K.V. Rao- J.P.
5. Research methods in Behavioural Sciences - Mohsin - Orient Publications