

COURSE TITLE: STATISTICS IN EDUCATION AND PSYCHOLOGY

COURSE CODE: MED CU CR 105

(80 + 20) 4 credits

Unit-I: Measure of Central Tendency & Variability

- i. Concept of descriptive & inferential Statistics
- ii. Concept of computation of measures of Central tendency variability
- iii. Graphic method and percentiles computations of percentiles and percentiles ranks; graphic methods line graphic bar diagram, pie chart, Ogive their application and use.

Unit-II: Parametric and Non-parametric Statistics

- i. **Parametric:-**
 - a) Meaning and advantages
 - b) Critical ratio and t test (for correlated and un-correlated means)
 - c) ANOVA-one way
- ii. **Non-Parametric:**
 - a) Meaning and advantage
 - b) Chi-Square & Contingency tables

Unit-III: Correlation and Normal Probability Curve

A)

- i. Meaning of correlation and co-efficient of correlation as a ratio.
- ii. Use of correlation.
- iii. Calculation of co-efficient of correlation
 - a) Rank order and Tetrachoric (Problem Questions)
 - b) Product moment coefficient of correlations (including scatter gram)

B)

- i. The meaning and importance and importance properties of the normal distribution.
- ii. Measuring divergence from normally skewness and kurtosis
 - a) Raw scores into standard scores
 - b) % of cases between given %age

Unit-IV

- i. AVOVA two way
- ii. Sign Test
- iii. Mann Whitney U-test
- iv. Median test

Suggested Readings:

1. Blamer, P.J & Elementary Statistical Method in Education and Psychology (Chapter IV Boston: Houghton Mifflin Co., 1977)
2. Garret, H.E Statistics in Psychology and Education Bombay: Allied Pacific Private Ltd., 1976

3. Guilford , J.P
Fundamental Statistics in psychology and Education (New York: Hill Book Co.)
4. Popham, W.J.
Education Statistics Use and Interpretation New York: Harper & Row, 1967
5. Verma, L & Sharma
Statistics in Education and Psychology.
6. Rasool, G. & Lal & N.K.
Application of Statistics in Education & Psychology (Paca Dunga: Kapoor Brothers)
7. Nadeem & Faizan
Statistics in Education and Psychology B.V. Publications.
8. Mangal, S.K.
Statistics in Education and Psychology Prentice Hall of India
9. Mendenhall, W. And Ramey,
M(1988) Statistics for psychology, Massachusetts: Duxbury Press.
10. Troils, M.E. (2001)
Elementary Statistics, New York: Addison Wasley Longman, Inc.
11. Kothari, C.R. (1988)
Research Methodology, Method and Techniques Guwahati/New Delhi: Wisely Eastern Limited