SEMESTER 1

Psy-03
APPLIED STATISTICS

Unit I

Probability: Concepts of Probability; Laws of Probability; Binomial and Normal Distribution. Regression: Linear Regression; Method of Least Square

Unit II

Hypothesis Testing: Nature of Hypothesis Testing; 't' Test; Chi-Square Test of Independence. Non-Parametric Statistics: Mann-Whitney 'U'; Wilcoxon Signed Rank; Spearman's Rank Correlation Coefficient; Kendall Rank Correlation Coefficient; Kolmogrov Simirnov Test; Wald Wolfowitz Runs Test

Unit III

Experimental Designs: Concept and Types. Analysis of Variance: One-Way; Two Way ANOVA; Post Hoc Tests, Kruskal- Wallis and Friedmans Tests. MANOVA

Unit IV

Repeated Measurement and Other Experimental Design: One–Factor Repeated; Randomized Block Design: Latin Square; Nested Factor Design. Factor Analysis **Introduction to Computer Analysis**: SPSS and MINITAB

Reading

N. Weiss & M. Hassett. (1987) **Introductory Statistics**, Addison WesleyPublishing Co; Arizona State University
G.A. Foerguson & M. Takane. (1989)**, Statistics 1: Analysis in Psychology and Education**. 6th Ed. McGraw Hill New York.
S.Siegel. (1956), **Nonparametric Statistics for Behavioral Sciences**, McGraw Hill
K.D. Broota (1989)**, Experimental Design in Behavioral Research**, Wiley Eastern, New Delhi
F.N. Kerlinger, (1995) **Foundation of Behavioral Research,** Prism Books, Delhi
D.J. Sheshkin, (2000), **Handbook of Parametric and Non Parametric Statistical Procedures** 2nd Ed. Chapman & Hall/CRC, London.

SEMESTER 1