### **SEMESTER-VI**

#### CPSY-323

# STATISTICS – II (Theory & Practical) Credit Hour: 4

Type: Major

### **Course Objectives**

The Course aims to equip he Students with concepts, theoretical rational to use certain statistical analysis and also to learn the procedure to carry out these analyses. It is designed to enhance their competence in using SPSS for data processing, entry, analysis and interpretation of output files and also to select and report analysis in form of table and be able to interpret the findings.

### **Course Contents**

t-test. (Independent and matched samples)
 One-Way ANOVA), Two-Way ANOVA

Pearson Correlation

**Regression Analysis** 

• Non parametric statistics

Spearman's Rank Order Correlation, Point Biserial Correlation and phicoefficient Chi Square Test

Wilcoxan test, Mann Whitney -U test, Sign Rank test, Kruskal Wallis test

# <u>PRACTICAL</u>

 Computing differences between two Means by t-test (Independent and matched samples)

Computing differences between Multiple Group using F-test (One-Way ANOVA) Computing relationship between variables (Pearson Correlation)

Regression Analysis

Non parametric statistics

Spearman's Rank Order Correlation, Chi Square Test (Contingency Table and Proportions)

Wilcoxan test, Mann Whitney -U test, Sign Rank test, Kruskal Wallis
The process and interpretation of SPSS output in form of table and graphical
form per APA format.

• Techniques of Qualitative Data Analysis

## **Course Outcomes**

After completion of the Course the Student will be able to process research data, prepare variable view file, enter data, and select appropriate analysis as per type of data and hypotheses been formulated. They will also be able to interpret analysis output file, report results in form of tables and graphic form and interpret results in qualitative form in their research report, thesis and research article.

# Recommended Books

- Bryman, A. (2011). Quantitative data analysis with IBM SPSS 17, 18 and 19. London: Routledge.
- Coakes, S. J. (2010). SPSS version 17.0 for windows. Australia: John Wiley & Sons. Field, A. (2009). Discovering statistics using SPSS. (3rd ed.). Los Angeles: Sage Publishers.
- Gelfand, H. (2010). Mastering APA style. (6th ed.). Los Angeles: Sage Publishers. Kinnear, P.R. (2010). IBM SPSS statistics 18 made simple. New York: Psychology press.
- Maran, R., & Wing, K. (1997). Teach yourself word 97. California: IDG Books worldwide, Inc.
- Pogue, D. (2013). Windows 8: The missing manual. Massachusetts: O"Reilly Media, Inc Person, R. (1993). Using excel version 5 for windows. Indianapolis: Que Corporation. Rajathi, A., & Chandren, P. (2010). SPSS for you. India: MJM Publisher.
  - Relevant published articles should be included in the list of reading material