# STATISTICAL TESTING AND INTERPRETATION

### Paper no.- HSG -405

**ID - 4** 

Credits -4 +0=4

Sem. -4 (M.Sc.R.M.)

Marks - 50 +0= 50

#### **OBJECTIVES**

- 1. To facilitate the students to become familiar and understand research .
- 2. To enable students to develop the requisite stills for conducting research.

#### **UNIT : 1**

- Measures of central tendency Mean, Arithmetic Mode, Advantages and disadvantages and its application.
- Measures of dispersion Definition, computations, Ments, Dements, Uses and Properties of different measures of dispersion.
- Range, Mean deviation, Standard deviation, variance, Quartile deviation or Semi inter quartile range, Relative measures of Dispersion, Co - efficient of variance, Standard error, Probable error, Skewness and its measures and kurtosis.

### **UNIT : 2**

Correlation and Regression – correlation – co – efficient of correlation, Karl pearson method, Coefficient of rank co – relation and product

### **UNIT : 3**

Testing of hypothesis – steps in the hypothesis, testing – stating the null and alternative hypothesis, selection of sample statistics. selecting the level of significance. drawing conclusion – Tests for population means using large and small samples. test for comparision hypothesis testing.

# UNIT:4

- Introduction to designs CRD, RBD, Factorial designs, Analysis and application in the field of home science.
- Selection of measuring instruments, Characteristics of a standardized test, reliability and validity.
- An introduction to test procedures, Test of significance, chi square  $(x^2)$ , F test and significance, "t" test and 2 score.

# **References :**

- Kapoor, V.K; Business Mathematics, Sultan chand and Suris Delhi.
- Spiegel, M.R; Probability and statistics.
- Elphence, D.N; Fundamentals of statistics.
- Bhardvaj, R.S; Business statistics.
- Kapoor and Sexsens; Fundamentals of statistics.
- Shah, B.S; ]Cctr Aa>kDaxaS  $\Box$  a pepr 1.
- Vohra, N.D; Quantitative Teachniques in Management, Tata Mc Graw Hill, New Delhi.
- Chaudhary, C.N; Research Methodology, RBSA Publication, S.M.N.S. Highway, Jaipur, Raj. India.
- Essentials of Agricultural Statistics, E.v. Divalcara Sastry, Pointer Publications, Jaipur, Raj. India.
- A Handbook of Agricultural statistics, Dr. S.R.S. Chandel, Achal Prakashan Mandiv 117/574, Pandunagar, Kanpur – 2