

# **KOLHAN UNIVERSITY, CHAIBASA**

## **DEPARTMENT OF STATISTICS**

### **Proposed Syllabus for FYUGP, NEP-2020**

**(Effective from Academic Year-2022-23 onwards)**

### **(Semster-1)**

## **Multi-Disciplinary Course- (MDC)-Introduction to Statistics**

**Credits:** Theory: 03 (Full marks: 75, Pass Marks: 30)

### **Unit I**

Introduction: Definition and scope of Statistics, concepts of statistical population and sample. Scales of measurement -nominal, ordinal, interval and ratio. Variables and attributes, Diagrammatical Representation of Data, Summarization of Data: Frequency Distribution and Graphical Presentation.

### **Unit II**

Measures of Central Tendency: mathematical and positional. Measures of Dispersion: range, quartile deviation, mean deviation, standard deviation, coefficient of variation, moments, measures of skewness and kurtosis.

### **Unit III**

Bivariate data: Definition, scatter diagram, simple correlation, rank correlation. Fitting of linear and quadratic regression using principle of least squares. Theory of attributes and consistency of data, independence and association of attributes, measures of association and contingency for 2x2 and rxs contingency tables.

### **References:**

1. Gun, A.M., Gupta, M.K. and Dasgupta, B. (2013). Fundamental of Statistics, Vol I, World Press, Kolkata.
2. Gun, A.M., Gupta, M.K. and Dasgupta, B. (2011). Fundamental of Statistics, Vol II, World Press, Kolkata.
3. Miller, I. and Miller, M. (2006). John E. Freund's Mathematical Statistics with Applications, (7th Edn.), Pearson Education, Asia.
4. Mood, A.M. Graybill, F.A. and Boes, D.C. (2011). Introduction to the Theory of Statistics, 3rd Edn., (Indian Edition), Tata McGraw-Hill Pub. Co. Ltd.

