

ACHARYA NAGARJUNA UNIVERSITY :: NAGARJUNANAGAR-522 510
CBCS SCHEME OF EXAMINATION
STATISTICS SYLLABUS (SEMESTER-WISE)
WITH EFFECT FROM THE ACADEMIC YEAR 2015-16

Statistics (with Maths Combination)

Year	Semester	Title	Internal Marks	External Examination
I	I	Paper-I Descriptive Statistical and Probability	25	75

Statistics (with Non-Maths Combination)

Year	Semester	Title	Internal Marks	External Examination
I	I	Paper-I Elementary Mathematics	25	75

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CBCS SYLLSBUS (Semester-wise)

2015-16

B.A./B.Sc. I year : STATISTICS SYLLABUS

(with Mathematics Combination)

Semester-I (1 year)

Paper-I : Descriptive Statistics and Probability

Unit - I

Concepts of Primary and Secondary data. Methods of collection and editing of primary data, Designing a questionnaire and a schedule. Measures of Central Tendency - Mean, Median, Mode, Geometric Mean and Harmonic Mean.

Unit - II

Measures of dispersion: Range, Quartile Deviation, Mean Deviation and Standard Deviation. Central and Non-Central moments and their interrelationship. Sheppard's correlation for moments. Skewness and kurtosis.

Unit - III

Basic Concepts of Probability, random experiments, trial, outcome, sample space, event, mutually exclusive and exhaustive events, equally likely and favourable outcomes. Mathematical. Statistical. axiomatic definitions of probability. Conditional Probability and independence of events.

Unit - IV

Addition and multiplication theorems of probability for 2 and for n events. Boole's inequality and Baye's theorems and problems based on Baye's theorem.

Unit - V

Definition of random variable. discrete and continuous random variables, functions of random variable. Probability mass function, Probability density function, Distribution function and its properties.

Bivariate random variable - meaning, joint, marginal and conditional Distribution, independence of random variables

Practicals - Semester - I

1. Diagrammatic representation of data (Bar and Pie)
2. Graphical representation of data (Histogram, Frequency polygon, Frequency curves, Ogives)
3. Central and Non-central moments and Sheppard's corrections for moments.
4. Measures of Skewness and Kurtosis.
5. MS-Excel methods for the above Serial Numbers 1, 2, 4.

Note:

- 1 MS-Excel methods to be made mandatory for all the Semesters after proper training only to the teaching staff by the University concerned.
2. Reference books given at the end of the Second semester syllabus.
