

7433

Syllabus For BCA Course For Batch (2007-2010)-effective From July 2007

5BCA5(B) MATHEMATICAL STATISTICS

UNIT-I

Frequency distributions, Histograms and frequency polygons, Measures of central tendency : Mean, Mode, Median, Dispersion, Mean deviation and standard deviation.

UNIT-II

Moments, Skewness, kurtosis, Elementary probability theory: Definition, conditional probability, Probability distribution, mathematical expectation

UNIT-III

Theoretical distribution:

Binomial, poisson and Normal distribution, Relation between the binomial, poisoned Normal distribution.

Correlation and regression, liner correlation, measure of correlation, least square regression lines.

UNIT-IV

Curve fitting: Method of least square, least square line, least squares Parabola. chi-square test :definition of chi-square, signification test : contingency test, coefficient of contingency

UNIT-V

Basic of sampling theory: Sample mean and variance, students t-test, test of Hypotheses and significance, degree of freedom, Z-test, small and large sampling, Introduction to monte carlo method.

Text & Reference Books :

- **Mathematical statistics: J.N .Kapoor and H.C. Saxena**
- **Mathematical statistics: M.Ray and H. Sharma**