SECOND ALLIED COURSE – III : BIOSTATISTICS

UNIT I:

Use of statistics in biology. Measures of central tendancy – mean, median, mode. Measure of dispersion – standard deviation – standard error. Correlation coefficient, probability.

UNIT II:

Marginal, conditional distributions- continuous and discrete distributions, analysis, regression, - T test, chi square test, binomial, normal and exponential distribution. Biostat programme.

UNIT III:

Null hypothesis, level of significance, test of significance for mean / different.

UNIT IV:

Curve fitting – least square method – finite differences – difference operators – newton's forward and backward formula. Basics of the application of SPSS 7.5 window softwave package.

UNIT V:

MS-Excel for computing data. Newton Raphson method, false position method – Solution of simultaneous algebraic equations.

REFERENCE:

1. Introduction to numerical methods 1990. S.S. Shasta.
2. Computer oriented numerical methods 1971, V. Rajaraman.
3. Numerical methods Goel and Mittal Pragati publications.
4. Statistical methods. S.P. Gupta. S. Chand and Co.
5. High Engineering Mathematics.   1996 Dr. B.S, Agarwal Khanna Publishers.
6. Introduction to Biostatistics by Sokal and Rohif (1973).   Toppan Co., Japan.