BSP457 BIOSTATISTICS AND BIOINFORMATICS LAB

Course Outcomes:

After successful completion of the course, students will be able to :

CO 1. Perform suitable statistical tests for evaluation of data
CO 2. Make suitable graphical representations of data
CO 3. Perform statistical tests - t test, F-test, ANOVA
CO 4. Develop the skill to use search engines, internet tools and databases.
CO 5. Gain the practical knowledge of restriction mapping and microarray techniques.

Biostatistics

1. Measurement of Central tendencies, mean, median,mode
2. Measures of dispersion range SD, CV&SE
3. Scatter plot, Simple Correlation & Regression, MultipleCorrelations
4. Construction of frequencytable
5. Theoretical distribution, Binomial poison &normal
6. Statistical inference, normal, t test, chi-square &Ftest
7. Analysis of Variance

Bioinformatics

1. Introduction to bioinformatics
2. Basic feature of computers; flow charts and problems.
3. Search engines and internettools.
4. Biological databases
5. Use of databases (e.g. BLAST,FASTA)
6. Restriction mapping
7. Micro array techniques
8. Search engines
9. Web lab viewer and Ras mols