SYLLABUS FOR
Ph.D. DEGREE PROGRAMME
BMB 701  
RESEARCH METHODOLOGY  
3 CREDITS
UNIT – I ANALYTICAL METHODS


Principles – Techniques and Applications of Electron Spin Resonance – Nuclear Magnetic resonance - Circular Dichroism (CD) – Optical Rotatory Dispersion (ORD)

UNIT – II PROTEIN PURIFICATION METHODS & PROTEOMICS


UNIT – III GENOMICS

UNIT IV – BIOSTATISTICS

Introduction – definition of statistics – population and universe – sample and population. 2 Lectures

Correlation regression and line fitting through graph points – standard curves – correlation – Linear regression analysis – fitting the best straight line through series of points. 3 Lectures

Handling of bulky data – construction a histogram - interpretation of histogram – the normal distribution - poisson distribution – the mean-mode-standard deviation-standard error. 3 Lectures

Proportion data – Examples of proportion data – Statistical treatment to proportion data – MPM – LD₅₀ - ED₅₀ - PD₅₀ ANOVA –t-test. 3 Lectures

Suggested Reading