

SARDAR PATEL UNIVERSITY
Programme: BSC (BIOTECHNOLOGY)
Semester: VI
Syllabus with effect from: June 2012

Paper Code: US06CBIT04	Total Credit: 3
Title Of Paper: Virology	

Unit	Description in detail	Weighting (%)
1	Origin and LHT system virus classification. Bacterial viruses- general structure (nucleic acids, capsids, envelope). Assay of viruses -physical counts, Hemagglutination, plaque assay, pock method, end point method.	
2	Multiplication of bacterial viruses--lytic cycle -one step growth curve and molecular mechanism, lysogeny -establishment of lysogenic state, immunity regulation of lytic state and lysogenic state, significance of lysogeny.	
3	Animal viruses- structure and multiplication of adenovirus, hepatitis B,C& E virus, vaccinia virus, Reovirus and HIV. Introduction to Prions.	
4	Plant viruses: Structure of TMV. Multiplication and movement, symptoms, transmission and control measures of viral diseases.Introductionto viroids.	

Basic Text & Reference Books:

- Genetics of viruses and bacteria - Hayes; Microbiology - Davis
- An introduction to viruses - Biswas & Biswas
- Plant viruses - A D Singh

