SARDAR PATEL UNIVERSITY
Programme: BCA
Semester: VI
Syllabus with effect from: November/December-2013

Paper Code: US06EBCA01	Total Credit: 2
Title Of Paper: Information Security	

Unit	Description in detail	Weighting (%)
I	**Introduction** Attacks, services and mechanism Security attacks Security services A model for network security	25%
II	**Cryptography** Introduction Conventional encryption principles Basic terms : plaintext, ciphertext, cryptography, cryptanalysis Substitution ciphers vs. transposition ciphers Types of attack on encrypted messages Introduction to public key cryptography Applications for public-key cryptosystems	25%
III	**System Security** Intruders Viruses and related threats : trap doors, logic bombs, trojan horses, viruses, worms, bacteria The nature of viruses Types of viruses Antivirus approaches : detection, identification and removal	25%
IV	**Network Security** Digital signatures Firewalls : introduction, design principles, characteristics, types, configuration	25%

Basic Text & Reference Books :-

- William Stallings: Network Security Essentials (Applications and Standards), Pearson Education India, 2001.
- Tanenbaum A. S., Computer Networks, Prentice-Hall of India Pvt. Ltd., New Delhi, 1997.