

Paper Code: HCSDS6031T	Data Security (Theory)	Marks: 100
Sl. No.	Topic	No. of Periods
Group A		32
1	Security, Attacks, Computer Criminals, Security Services, Security Mechanisms	5
2	Objectives, Block Ciphers and Stream Ciphers, Private Key and Public Key Cryptography: Diffie-Hellman, RSA Algorithms, Cryptanalysis	12
3	Secure programs, Non malicious Program errors, Malicious codes Virus, Worms and Trojan Horses, Trap doors, Salami attacks, Covert channels, Control against program	12
4	Introduction to Digital Watermarking and Steganography	3
Group B		33
5	Database Security, Requirements, Reliability, Integrity	5
6	Threats in security of networks, security controls, firewalls, intrusion detection systems, secure e-mails	10
7	Definition of entity authentication, password technique, challenge response technique and biometric authentication process, digital certificate	9
8	Security in network protocol suite	9
Total		65
Books and References:		
<ol style="list-style-type: none"> 1. Cryptography and Network Security by B.A.Forouzan, McGraw-Hill Publication 2. Cryptography and Network Security – Principles and Practice by William Stallings, PHI Publication 3. Computer Security and Cryptography by Alan G. Konheim, John Wiley and Sons Publications 4. Cryptography and Network Security by Atul Kahate, McGraw-Hill Publication 		