

M.Tech(IT) : Group C
Paper Code : MT23C
Paper Title : E-Commerce, M-Commerce & Network Security

SYLLABUS

1. Introduction

Introduction, Model for Network Security, OSI Security Architecture, Goals of n/w security, Standards and Standard setting organization, Applications

2. Firewall

Introduction ,Packet Filtering ,Protection Schemes, Firewall Design principles, Hardware and Software required, Types of Firewalls, performance issue, Protocols used ,Introduction to NAT, VPN, Stateful Firewalls, limitation of Stateful FireWalls, Application Firewalls, Circuit Firewalls, SOCKS, ACL, CHECK Point, CISCO PIX, CISCO firewalls case study.

3. Threats in Networks

Attack Possibilities in Communication Systems, Passive Attacks, Active Attacks, Methods of Attack and Principle Countermeasures based on the TCP/IP Protocols, Password Snooping and IP Masquerade, Hopping, IP Address Spoofing, Internet Routing Attacks

4. Security Practice

Electronic Mail Security, IP Security, Architecture, Web Security Secure Sockets Layer and Transport Layer Security, study of virtues and related Threats, Digital Signature and Authentication Protocols,
DNS Security

Reference:

1. Raymond R. Panko “Corporate Computer and Network Security”, Pearson Education
- 2 Willam stallings “Cryptography and Network Security”, Pearson Education