

**SARDAR PATEL UNIVERSITY**  
**Programme: MSC (Information Technology)**  
**Semester: III**  
**Syllabus with effect from: June 2010**

<b>Paper Code:</b> PS03CINT03	<b>Total Credits: 4</b>
<b>Title Of Paper:</b> Information Security	

Unit	Description in detail	Weightage (%)
<b>1</b>	<b>Understanding TCP/IP:</b> Addressing methods Network configuration and access files TCP/IP daemons, utilities and commands Audit trails- Unix logs, accounting and utilities, Windows NT audit trails Architecture for securing VPN IP Spoofing and sniffing – sniffing methods, sniffing results, sniffing prevention, ARP, ICMP and TCP Spoofing	<b>18 %</b>
<b>2</b>	<b>Firewalls:</b> Introduction to firewall Components and characteristics Types of firewall Building firewalls Brief idea of using network security reporting tools – SATAN	<b>16 %</b>
<b>3</b>	<b>Encryption:</b> Techniques Cryptography Digital ID's, Certificates and Signatures Symmetric (secret key) Cryptography Asymmetric Cryptography Cryptanalysis SSL	<b>16 %</b>
<b>4</b>	<b>PGP (Pretty Good Privacy):</b> Overview Using PGP, generating, distributing, signing public keys Keys and Key management, Message Operations	<b>18 %</b>
<b>5</b>	<b>Operating System Security:</b> NT Overview Logon and authentication Intranet related features of NT Web Server IIS Proxy Server Configuring Services and ports in NT Unix Security	<b>16 %</b>
<b>6</b>	<b>Java and CGI Security:</b> Java virtual machine Setting Java Security	<b>16 %</b>

**Basic Text & Reference Books:**

- Internet Security – Professional Reference, Techmedia
- Maximum Security Author – Anonymous Techmedia

