

**PAPER XXXI - CYBER SECURITY**

**UNIT I:**

Overview – Symmetric Ciphers : Classical Encryption Techniques

**UNIT II :**

Symmetric Ciphers : Block ciphers and the Data Encryption Standards Public-key Encryption and Hash Functions: Public-Key Cryptography and RSA

**UNIT III:**

Network Security Practices : Authentication applications – Electronic Mail Security

**UNIT IV:**

Network Security Practices : IP Security – Web Security

**UNIT V:**

System Security : Intruders – Malicious Software – Firewalls

**Text Book:**

1. William Stallings, "Cryptography and Network Security – Principles and Practices", Prentice-Hall, Third edition, 2003

**References:**

1. Johannes A. Buchanan , "Introduction to cryptography", Springer-Verlag.
2. Atul kahate , "Cryptography and Network Security", TMH