INFORMATION SECURITY

1. Introduction

Objective: This course aims at imparting good understanding of information security, workstation & network security and introduction to various security and cryptography technologies

Credits: 3-0-0

2. Course Outline

UNIT - I: Introduction to Computer Security & Hackers .

UNIT - II: Security Concepts Confidentiality, Integrity, Authority, Privilege and Basics of Defense

UNIT - III: Network Technology OSI layer model, TCP model, Overview of networked systems, Network design and topology.

UNIT - IV: Legal Issues

UNIT - V: Basics of Hacking

UNIT - VI: Security Policies

UNIT - VII: Access Control, Permissions & Passwords

UNIT - VIII: Risk and Risk Analysis

UNIT - IX: E-mail & Phishing

UNIT - X: Viruses, Spyware, and Malware

UNIT - XI: Incident Response

UNIT - XII: Computer Forensics

UNIT - XIII: The Human Element

UNIT - XIV: Cryptography

3. Reading Material

Text Books

1. Principles of Computer Security: Conklin, White, Cothren, Williams, and Davis. McGraw Hill.

Reference Books

1. Cryptography and Network Security: W Stallings. PHI.
2. Cryptography Theory and Practice: D R Stinson. CRC.

Suggested Assignments

1. Installing windows and linux
2. Network ports and communication
3. Hacking Practices
4. Cracking Passwords
5. E-Mail Phishing
6. Basic Computer Forensics Lab