CNS Ultimate Guide

Module 1: Introduction to Network Security & Cryptography

- Security Services and mechanisms |
- Playfair Cipher |
- Security Goals |
- Classical Encryption Techniques |

Module 2: Cryptography: Key management, distribution and user authentication

- HMAC & CMAC |
- Block Cipher Modes ||
- Kerberos && Kerberos with diagram and how to use authentication ||
- Hash function properties and applications |
- RSA Numerical |
- Digital Sig |
- AES vs DES |

Module 3: Malicious Software

- Malware and Types ||
- DOS with types |

Module 4: IP Security, Transport level security and Email Security

- SSH Protocol Stack |
- SSL Protocols ||
- IPSEC with modes ||
- Role of AH and ESP |

Module 5: Network Management Security and Network Access Control

- NAC Enforcement Methods ||
- Need(Use cases) of NAC ||
- What is NAC and Elements ||
- Network Management Sec & SNMP V3 |

Module 6: System Security

- Firewall Design Principles with advantages and disadvantages ||
- IDS and Types ||