

# **Network Management - 15 Days**

## **Computer Network Fundamentals**

- Introduction to Network
- Types of Networks
- OSI Reference Model
- TCP/IP Model
- Application Layer Protocol
- Transport Layer Protocol
- Network Layer Protocol
- Data Link Layer Protocol
- Network Topology
- Ethernet Cabling

## **IPv4 Protocol**

- IPv4 Header
- IPv4 Addressing
- Subnetting
- CIDR
- VLSM

## **Router Configuration and Security**

- Router's Modes
- Setting the Router's Password
- IP Routing
- Configuring Static Routing
- Configuring Default Route
- Dynamic Routing
- Configuring Dynamic Routing Protocol
  - RIP
  - RIPv2
  - EIGRP
  - OSPF

## **Switch Configuration and Security**

- Setting and Breaking the Switch's Password
- Configuring Port Security
- Configuring VLAN and Inter-VLAN
- Configuring VTP
- Introduction to STP

## **Network Security**

- Introduction to Access Control List (ACL)
- Configuring ACLs

- Standard ACLs
- Extended ACLs

### **Network Address Translation**

- Introduction to NAT
- Configuring NAT
  - Static NAT
  - Dynamic NAT
  - PAT

### **Wireless LAN**

- Wireless standard
- Wireless topologies
- Wireless Protocol
- Configuring Wireless Access Point

### **Wide Area Network**

- Fundamentals of WAN Protocols
- Introduction and configuration of PPP
- Introduction to Frame Relay
- Introduction to ISDN

### **IPv6 Protocol**

- IPv6 Header
- IPv6 Addressing
- Configuring Static Routing with IPv6
- Configuring RIPng
- Configuring EIGRPv6
- Configuring OSPFv3