# INFOSOFT IT SOLUTIONS

#### **Training | Projects | Placements**

Revathi Apartments, Ameerpet, 1st Floor, Opposite Annapurna Block, Infosoft It solutions, Software Training & Development Institute, +91-9059683947|91-9182540872

## **CompTIA Network+**

### **Networking Concepts**

- **OSI Model**: Explanation of the 7 layers and their functions.
- TCP/IP: Fundamentals of the TCP/IP protocol suite.
- Ethernet: Standards, cabling, and devices.
- **IP Addressing**: IPv4 vs. IPv6, subnetting, and addressing schemes.
- Routing: Basics of routing, static vs. dynamic routing protocols.
- **Switching**: VLANs, STP (Spanning Tree Protocol), and basic switching concepts.
- Wireless: Standards (802.11), encryption, and authentication.

#### **Infrastructure**

- Cabling Solutions: Types of cables and connectors (e.g., twisted pair, fiber optic).
- Topology: Different network topologies (star, mesh, bus, etc.).
- Network Devices: Routers, switches, hubs, access points, modems, etc.

• Storage Technologies: NAS (Network Attached Storage) and SAN (Storage Area Network).

#### **Network Operations**

- **Network Security**: Firewalls, IDS/IPS, VPNs, and network access control.
- **Network Monitoring**: Tools and techniques for monitoring and troubleshooting.
- **Network Management**: Configuration management, documentation, and policies.

#### **Network Security**

- Security Protocols: HTTPS, SSL/TLS, IPsec, etc.
- Threats and Vulnerabilities: Malware, phishing, DoS attacks, etc.
- Authentication and Access Control: Methods for authenticating and controlling access.

#### **Network Troubleshooting and Tools**

- Troubleshooting Methodology: Step-by-step troubleshooting process.
- **Networking Tools**: Command-line tools (ping, tracert, ipconfig/ifconfig, etc.).
- Hardware Tools: Cable testers, toners, and network analyzers.

#### **WAN Technologies**

- WAN Basics: VPN, MPLS, leased lines, etc.
- Cloud and Virtualization Technologies: Public vs. private clouds, virtual switches, etc.

## **Disaster Recovery and Business Continuity**

- Backup and Restore: Methods for data backup and restoration.
- **High Availability**: Clustering, failover, and load balancing.

#### **Network Design**

- Network Topologies and Architecture: Designing LAN and WAN networks.
- Virtualization and Network Optimization: SDN (Software-Defined Networking), QoS (Quality of Service).

#### **Policies and Best Practices**

• **Network Policies**: Acceptable Use Policy (AUP), password policies, etc.

#### **Emerging Technologies**

- **IoT** (**Internet of Things**): Security and networking considerations.
- Mobile and BYOD (Bring Your Own Device): Policies and security measures.