

# Computer Collegi@te

## Cisco Certified Network Associate Version 2 (200-120)

**Exam Description:** The 200-120 composite CCNA v2 exam is a 1-½ hour test with 50–60 questions. The 200-120 CCNA exam is the composite exam associated with the CCNA Routing and Switching certification.

### Operation of IP Data Networks

- 1.1 Recognize the purpose and functions of various network devices such as Routers, Switches, Bridges and Hubs
- 1.2 Select the components required to meet a given network specification
- 1.3 Identify common applications and their impact on the network
- 1.4 Describe the purpose and basic operation of the protocols in the OSI and TCP/IP models
- 1.5 Predict the data flow between two hosts across a network
- 1.6 Identify the appropriate media, cables, ports, and connectors to connect Cisco network devices to Other network devices and hosts in a LAN

### LAN Switching Technologies

- 2.1 Determine the technology and media access control method for Ethernet networks
- 2.2 Identify basic switching concepts and the operation of Cisco switches.
- 2.3 Configure and verify initial switch configuration including remote access management
- 2.4 Verify network status and switch operation using basic utilities
- 2.5 Describe how VLANs create logically separate networks and the need for routing between them
- 2.6 Configure and verify VLANs
- 2.7 Configure and verify trunking on Cisco switches
- 2.8 Identify enhanced switching technologies

### IP addressing (IPv4/IPv6)

- 3.1 Describe the operation and necessity of using private and public IP addresses for IPv4 addressing
- 3.2 Identify the appropriate IPv6 addressing scheme to satisfy addressing requirements in a LAN/WAN environment
- 3.3 Identify the appropriate IPv4 addressing scheme using VLSM and summarization to satisfy Addressing requirements in a LAN/WAN environment
- 3.4 Describe the technological requirements for running IPv6 in conjunction with IPv4
- 3.5 Describe IPv6 addresses

## **IP Routing Technologies**

- 4.1 Describe basic routing concepts
- 4.2 Configure and verify utilizing the CLI to set basic router configuration
- 4.3 Configure and verify operation status of a device interface
- 4.4 Verify router configuration and network connectivity using
- 4.5 Configure and verify routing configuration for a static or default route given specific routing Requirements
- 4.6 Differentiate methods of routing and routing protocols
- 4.7 Configure and verify OSPF
- 4.8 Configure and verify interVLAN routing (Router on a stick)
- 4.9 Configure SVI interfaces
- 4.10 Manage Cisco IOS Files
- 4.11 Configure and verify EIGRP (single AS)

## **IP Services**

- 5.1 Configure and verify DHCP (IOS Router)
- 5.2 Describe the types, features, and applications of ACLs
- 5.3 Configure and verify ACLs in a network environment
- 5.4 Identify the basic operation of NAT
- 5.5 Configure and verify NAT for given network requirements
- 5.6 Configure and verify NTP as a client
- 5.7 Recognize High availability (FHRP)
- 5.8 Configure and verify syslog
- 5.9 Describe SNMP v2 and v3

## **Network Device Security**

- 6.1 Configure and verify network device security features
- 6.2 Configure and verify switch port security
- 6.3 Configure and verify ACLs to filter network traffic
- 6.4 Configure and verify an ACLs to limit telnet and SSH access to the router

## **Troubleshooting**

- 7.1 Troubleshooting during configuration in all topics

## **WAN Technologies**

- 8.1 Identify different WAN Technologies
- 8.2 Configure and verify a basic WAN serial connection
- 8.3 Configure and verify a PPP connection between Cisco routers
- 8.4 Configure and verify frame relay on Cisco routers