

CCT Data Center

1.0 Data Center Basics

- 1.1 Describe a data center
- 1.2 Describe cloud computing
- 1.3 Describe virtualization (server, network and storage)
- 1.4 Describe PCIe SSDs and NVMe
- 1.5 Describe raid storage
- 1.6 Differentiate between these Layer 2 technologies (Ethernet, Fast Ethernet, Gigabit Ethernet)
- 1.7 Describe SAN technology (SAN network type)
- 1.8 Describe SAN cabling (FCoE, PCIe)
- 1.9 Describe UTP and connectors
- 1.10 Describe fiber and connectors
- 1.11 Describe twinaxial and connectors
- 1.12 Describe SFP and QSFP transceivers

2.0 Cisco Equipment and Related Hardware

- 2.1 Describe the Cisco Unified Computing System (UCS) components
- 2.2 Describe the Cisco UCS B-series Blade servers components and chassis layout
- 2.3 Describe the Cisco UCS C-series rack mount servers components and chassis layout
- 2.4 Describe Cisco UCS fabric interconnects and fabric extenders
- 2.5 Identify the Cisco UCS LED and chassis layout
- 2.6 Describe the Cisco UCS network adapters and expansion modules
- 2.7 Describe the Cisco UCS S-series Storage servers components and chassis layout
- 2.8 Describe the Cisco UCS E-series servers components and chassis layout
- 2.9 Describe the Cisco Nexus switches family components
- 2.10 Describe Cisco ACI and NX-OS mode
- 2.12 Describe the Cisco MDS 9700 product family components
- 2.12 Identifying the MDS 9700 Family Storage networking modules

3.0 Cisco UCS and Cisco NX-OS software operation

- 3.1 Describe the Cisco Integrated Management Controller (CIMC)
- 3.2 Describe features and functionality of Cisco UCS Manager
- 3.3 Describe the different command modes for Cisco NX-OS software
- 3.4 Determine the current mode of the device
- 3.5 Verify the device configuration
- 3.6 Know how to use and interpret the basic Cisco NX-OS commands
- 3.7 Identify a configuration file from a Cisco device
- 3.8 Using the device file systems, directories, and files
- 3.9 Perform password recovery on a Cisco NX-OS switch device

4.0 Service-Related Knowledge

- 4.1 Use the hardware tools needed for repair
- 4.2 Make a physical connection from laptop to Cisco console port
- 4.3 Perform installation process steps and expected outcomes
- 4.4 Perform initial setup tasks
- 4.5 Service restoration verification
- 4.6 Perform remedial procedures on Cisco devices
- 4.7 Upgrade the BIOS on a Cisco UCS Server Blade with the GUI
- 4.8 Perform Cisco UCS Fabric Interconnect (FI) upgrade/downgrade procedure
- 4.9 Firmware Automatic Synchronization
- 4.10 Upgrade Cisco Integrated Management Controller firmware on a Cisco UCS Server C-Series
- 4.11 Troubleshoot Cisco UCS servers