Supporting Cisco Devices for Field Technicians v1.0 (800-150)

Exam Description: Supporting Cisco Devices for Field Technicians (FLDTEC 800-150) is a 120-minute exam associated with the Cisco Certified Technician Certification. This exam tests a candidate's knowledge and skills related to on-site replacement of Cisco technologies across routing, switching, data center, UCS, and collaboration platforms. This includes hardware identification, cabling, configuration backup and restoration, and software upgrades/downgrades. The Cisco Certified Technician course helps candidates prepare for this exam.

The following topics are general guidelines for the content likely to be included on the exam. However, other related topics may also appear on any specific delivery of the exam. To better reflect the contents of the exam and for clarity purposes, the guidelines below may change at any time without notice.

20% 1.0 Networking Foundations

- 1.1 Identify common network devices, components, and functions
  - 1.1.a Local area networks
  - 1.1.b Wireless topology
  - 1.1.c Lightweight WLAN
- 1.2 Identify the layers of the host-to-host communications model
  - 1.2.a OSI model
  - 1.2.b TCP/IP stack
  - 1.2.c Data encapsulation and de-encapsulation
- 1.3 Describe network cabling at Layer 1
  - 1.3.a Ethernet media standards
  - 1.3.b UTP cabling and connectors
  - 1.3.c Fiber optic cabling and connectors
- 1.4 Describe network switching and Layer 2 technologies
- 1.5 Explain IP addressing and subnetting
  - 1.5.a IP address ranges
  - 1.5.b IPv4 addressing
  - 1.5.c Network masks
  - 1.5.d Flat and subnetted topologies
- 1.6 Explain network routing at Layer 3
  - 1.6.a Path determination
  - 1.6.b Layer 3 addressing (IPv4, IPv6, and packet forwarding)
  - 1.6.c MAC addressing (discovery and mapping)
- 1.7 Identify Cisco infrastructure networking devices, roles, and functions

- 1.7.a Campus network architecture (core, distribution, and access layers)
- 1.7.b LAN core and distribution switches
- 1.7.c LAN access switches (Catalyst and Meraki)
- 1.7.d Network edge and aggregation routers (Catalyst edge platforms, ASRs, and NCS)
- 1.7.e Branch routers (Catalyst edge platforms and ISRs)
- 1.7.f Firewalls

1.8 Identify Cisco data center networking devices, roles, and functions
- 1.8.a Cisco Nexus data center switches
- 1.8.b Cisco multilayer director switches

1.9 Identify Cisco UCS servers, roles, and functions

1.10 Identify Cisco collaboration devices, roles, and functions

15% 2.0 Common Service Tasks and Tools

2.1 Explain the Cisco device boot-up process
2.2 Identify common Cisco IOS commands
2.3 Identify tools for device file management
2.4 Confirm physical layer connectivity
2.5 Access devices remotely over a network (common Windows tools)
2.6 Explain how to connect to the console port
2.7 Describe how to capture device status
2.8 Describe techniques for password recovery
2.9 Identify common tools for device replacement
2.10 Locate serial numbers on Cisco devices

10% 3.0 Cisco Software

3.1 Compare IOS bundle and install modes
3.2 Describe Cisco software licensing models
3.3 Manage Cisco software images
- 3.3.a Image file backup and transfer (FTP/TFTP and USB)
- 3.3.b Install Cisco IOS (install and bundle modes)

3.4 Manage device configuration files

10% 4.0 Cisco Infrastructure and Collaboration Architecture

4.1 Identify infrastructure components, endpoints, and collaboration devices
- 4.1.a Infrastructure devices
- 4.1.b Network endpoints
- 4.1.c Collaboration endpoints

4.2 Examine on-premises collaboration deployments
- 4.2.a Collaboration endpoints
- 4.2.b Call controllers
- 4.2.c Call signaling and media flow
- 4.2.d Cisco Unified Communications Manager (Cisco UCM)

4.3 Describe the role of collaboration infrastructure in video endpoints
- 4.3.a Telepresence Management Suite
- 4.3.b Cisco meeting server and meeting management

4.4 Explain Cisco cloud services in enterprise communication and collaboration
- 4.4.a Webex meetings
- 4.4.b Webex Teams, Calling, Control Hub
- 4.4.c Cisco hosted collaboration solutions

35% 5.0 Cisco Hardware Replacement

5.1 Explain safety and environmental protocols
- 5.1.a Safe work zone
- 5.1.b ESD discharge

5.2 Describe the process for replacing Cisco devices
- 5.2.a Cisco Catalyst switches and edge platforms
- 5.2.b Cisco Catalyst edge platforms
- 5.2.c Cisco Meraki switches
- 5.2.d Cisco ISR routers
- 5.2.e Cisco ASR routers
- 5.2.f Cisco 8000 Series
- 5.2.g Cisco NCS Series
- 5.2.h Cisco Secure Firewall
- 5.2.i Cisco Nexus switches
- 5.2.j Cisco MDS switches
- 5.2.k Cisco UCS infrastructure components
- 5.2.l Cisco UCS B-Series, C-Series, and X-Series
- 5.2.m Cisco UCS E-Series
- 5.2.n Cisco collaboration devices

5.3 Describe the process for configuring Cisco NX-OS software
- 5.3.a NX-OS supported platforms
- 5.3.b NX-OS operating modes
- 5.3.c NX-OS CLI commands
- 5.3.d Cisco ACI and NX-OS boot modes
- 5.3.e Password recovery in NX-OS

5.4 Describe Cisco collaboration endpoint solutions
- 5.4.a IP phones
- 5.4.b Video endpoints

10% 6.0 Cisco UCS and Data Center Architecture

6.1 Identify devices in a data center network
- 6.1.a LAN/SAN and Unified Fabric
- 6.1.b Cisco Nexus switches, UCS servers, and MDS directors
- 6.1.c Server deployment models (ToR, EoR, and FEX)

6.2 Describe components in a virtualized data center architecture

- 6.2.a Virtual machines
- 6.2.b Hypervisors
- 6.2.c Cloud computing and deployment models
- 6.2.d Cloud delivery models

6.3 Explain Cisco UCS devices and their placement in UCS architecture

- 6.3.a Campus networks, edge locations, and data centers
- 6.3.b Cisco UCS components and connectivity