CompTIA A+ Certification Exam:
Core 1 & 2 Objectives

CompTIA
A+

EXAM NUMBER: CORE 1 & 2 (220-1001 & 220-1002)

Course Outline

Core 1 (220-1001)

Mobile Devices

- Install and configure laptop hardware and components.
- Install components within the display of a laptop.
- Use appropriate laptop features.
- Compare and contrast characteristics of various types of other mobile devices
- Connect and configure accessories and ports of other mobile devices.
- Configure basic mobile device network connectivity and application support.
- Use methods to perform mobile device synchronization.

Networking

- Compare and contrast TCP and UDP ports, protocols, and their purposes.
- Compare and contrast common networking hardware devices.
- Given a scenario, install and configure a basic wired/wireless SOHO network.
- Compare and contrast wireless networking protocols.
- Summarize the properties and purposes of services provided by networked hosts.
- Explain common network configuration concepts.
  Compare and contrast Internet connection types, network types, and their features.
- Given a scenario, use appropriate networking tools.

Hardware

- Explain basic cable types, features, and their purposes.
  Identify common connector types.
- Install RAM types.
  Select, install and configure storage devices.
- Install and configure motherboards, CPUs, and add-on cards.
- Explain the purposes and uses of various peripheral types.
- Summarize power supply types and features.
- Select and configure appropriate components for a custom PC configuration to meet customer specifications or needs.
- Install and configure common devices.
- Configure SOHO multifunction devices/printers and settings.
- Install and maintain various print technologies.

Virtualization and Cloud Computing

- Compare and contrast cloud computing concepts.
- Set up and configure client-side virtualization.

Hardware and Network Troubleshooting

- Use the best practice methodology to resolve problems.
- Troubleshoot problems related to motherboards, RAM, CPUs, and power
- Troubleshoot hard drives and RAID arrays.
- Troubleshoot video, projector, and display issues.
- Troubleshoot common mobile device issues while adhering to the appropriate procedures.
- Troubleshoot printers.
- Troubleshoot common wired and wireless network problems.

Core 2 (220-1002)

Operating Systems

- Compare and contrast common operating system types and their purposes.
- Compare and contrast features of Microsoft Windows versions.
- Summarize general OS installation considerations and upgrade methods.
- Use appropriate Microsoft command line tools.
- Use Microsoft operating system features and tools.
- Use Microsoft Windows Control Panel utilities.
- Application installation and configuration concepts.
- Configure Microsoft Windows networking on a client/desktop.
- Use features and tools of the Mac OS and Linux client/desktop operating systems.

Security

- Summarize the importance of physical security measures.
- Explain logical security concepts.
- Compare and contrast wireless security protocols and authentication methods.
- Detect, remove, and prevent malware using appropriate tools and methods.
- Compare and contrast social engineering, threats, and vulnerabilities.
- Compare and contrast the differences of basic Microsoft Windows OS security settings.
- Given a scenario, implement security best practices to secure a workstation.
- Implement methods for securing mobile devices
- Implement appropriate data destruction and disposal methods.
- Configure security on SOHO wireless and wired networks.

Software Troubleshooting

- Troubleshoot Microsoft Windows OS problems.
- Troubleshoot and resolve PC security issues.
- Use best practice procedures for malware removal.
- Troubleshoot mobile OS and application issues.
- Troubleshoot mobile OS and application security issues.

Operational Procedures

- Compare and contrast best practices associated with types of documentation.
- Implement basic change management best practices.
- Implement basic disaster prevention and recovery methods.
- Explain common safety procedures.
- Explain environmental impacts and appropriate controls.
- Explain the processes for addressing prohibited content/activity, and privacy, licensing, and policy concepts.
- Use proper communication techniques and professionalism.
- Identify the basics of scripting.
- Use remote access technologies.