CompTIA.

CompTIA Strata - Fundamentals of Technology

1.0 Computer Hardware

1.1 Demonstrate the proper use of the following devices:
- Monitors
  - Adjust monitor settings (brightness, contrast, etc)
- Desktop
- Server
- Portable
  - Laptop
  - PDA
  - Smartphone
  - Netbook

1.2 Explain the characteristics and functions of internal and external storage devices
- CD/CD-RW Drive
- DVD/DVD-RW Drive
- Blu-Ray Disk Drive
- USB storage (solid state vs. magnetic disk)
- Multi card reader and writer
- Hard drives
- Mobile media devices (e.g. MP3 player or PDAs)

1.3 Explain the characteristics and functions of peripheral devices
- Digital camera
- Web camera
- Speaker
- Tuner
- Microphone
- Printer / scanner

1.4 Explain the characteristics and functions of core input devices
- Keyboard
- Mouse
- Tablet (touch screen)
- Numeric keypad
- Gamepad

2.0 Compatibility Issues and Common Errors

2.1 Identify basic compatibility issues between:

- Processor performance
- RAM memory
- USB (1.1, 2.0)
- Firewire
- PS/2
- Ethernet
- Wireless networks

2.2 Recognize common operational problems caused by hardware
- Critical error message or crash
- System lockup (freeze)
- Application will not start or load
- Cannot logon to network
- Driver / hardware compatibility
- Input device will not function

2.3 Demonstrate the ability to minimize risks
- Data loss
- Loss of service
- Damage to equipment

3.0 Health, Safety and Preventative Maintenance

3.1 Recognize safety hazards and identify corresponding guidelines
- Hazards
  - Fire
  - Flood
  - Electrical surges
  - Extreme storms
  - Environmental hazards
- Guidelines
  - Use of ESD equipment
  - Use of tools and equipment
  - Electricity and safety
  - Hazardous substances
  - Wire placement and safety
  - Environmental legislation and regulations (e.g. disposal of materials)

3.2 Identify preventative maintenance products, procedures, and how to use them
- Liquid cleaning compounds
- Types of materials to clean contacts and connections
- Compressed air
- Cleaning monitors
- Cleaning removable media devices
- Ventilation, dust and moisture control on the PC hardware interior
- Surge suppressors
- Replacing printer consumables