1. How many FireWire devices can a single FireWire port support?
      A. 12
      B. 25
      C. 32
      D. 54
      E. 63
      F. 127

2. Which type of memory transfers data twice as fast as SDRAM and increases performance by transferring data twice per cycle?
      A. DDR-SDRAM
      B. DRAM2
      C. D-SDRAM
      D. ROM

3. Which type of video connector has a 24-pin or 29-pin female connector and provides compressed digital output to a monitor?
      A. AAV
      B. DVI
      C. HDMI
      D. RCA
      E. VGA

4. How many universal serial bus (USB) devices can be connected to a USB port?
      A. 256
      B. 127
      C. 64
      D. 128

5. What is the maximum data speed of high-speed USB 2.0?
      A. 1.5 Mbps
      B. 12 Mbps
      C. 380 Mbps
      D. 480 Mbps
      E. 480 Gbps
      F. 840 Gbps

6. Which IEEE standard defines the FireWire technology?
      A. 1284
      B. 1394
      C. 1451
      D. 1539

7. What is the maximum data rate supported by the IEEE 1394a standard?
      A. 200 Mbps
      B. 380 Mbps
      C. 400 Mbps
      D. 800 Mbps
      E. 900 Mbps

8. What is the purpose of a heat sink installed on a processor?
      A. To set the processor voltage
      B. To cool the processor
      C. To set the processor speed
      D. To ground the processor

1. What class of fire extinguisher is used to extinguish electrical equipment fires?
    A. Class A
    B. Class B
    C. Class C
    D. Class D

2. Which of the following is a fact sheet that summarizes information about material identification, including hazardous ingredients that can affect personal health, fire hazards, and first aid requirements?
    A. ESD
    B. MSDS
    C. OSHA
    D. UPS

3. Which of the following can cause permanent damage to electrical components if you do not use proper tools and safety procedures?
    A. ESD
    B. UPS
    C. MSDS
    D. OSHA

4. What is the minimum level of electrostatic discharge that a person can normally feel?
    A. 5 volts
    B. 1000 volts
    C. 3000 volts
    D. 10,000 volts

5. Which recommendation should be followed first when a fire in the workplace is out of control?
    A. Try to use the elevators to get to the lowest floor faster.
    B. Get out of the room or building and contact emergency services for help.
    C. Use the company water system to stop the fire from extending to other areas.
    D. Try to control the fire with proper extinguishers.

6. Which of the following tools are recommended for cleaning a PC? (Choose two.)
    A. Antibacterial spray
    B. Compressed air
    C. Mild abrasive detergent
    D. Nylon brush
    E. Rubbing alcohol
    F. Soft cloth

7. How does a technician discharge static buildup?
    A. Touching the painted part of the computer case
    B. Touching an unpainted part of the computer case
    C. Touching an antistatic wrist strap before touching any computer equipment
    D. Touching an antistatic mat before touching any computer equipment

8. Which device is designed specifically to protect computers and electrical devices from excess electrical voltage?
    A. Power strip
    B. Standby power supply
    C. Surge protector
    D. Uninterruptible power supply

9. Which of the following effects can be observed on computer components as a result of climate? (Choose three.)
    A. Components overheat if it is too hot.
    B. Moisture damages computer parts if it is too humid.
    C. Components work too slowly if it is too cold.
    D. The risk of ESD increases if the humidity is too low.
    E. The risk of ESD increases if the temperature is too high.

F. Components overheat if the humidity is too low.

10. Which condition refers to a sudden and dramatic increase in voltage, which is usually caused by lighting?
    A. Brownout
    B. Sag
    C. Spike
    D. Surge

1. A technician is installing a new power supply in a computer. Which type of power connector should be used to connect to a CD-ROM?
    A. Berg
    B. Mini-Molex
    C. Molex
    D. 20-pin ATX connector

2. A technician is installing a new power supply in a computer. Which type of power connector should be used to connect to an ATX motherboard?
    A. Berg
    B. Mini-Molex
    C. Molex
    D. 20-pin connector

3. When a technician installs a new CPU, what will help maintain even contact and heat distribution between the CPU and heat sink?
    A. Silicon spray
    B. Graphite paste
    C. Glue
    D. Thermal compound

4. When installing a CPU in a ZIF socket, how should the technician align the pins to avoid damage?
    A. Pin 1 is always aligned with the corner opposite the base of the lever.
    B. Pin 1 on the CPU is aligned with Pin 1 on the ZIF socket.
    C. Pin 1 is aligned with the corner closest to the memory.
    D. The removed corner of the CPU is always aligned with the corner opposite Pin 1.

5. A technician is installing additional memory in a computer. How can the technician guarantee that the memory is correctly aligned?
    A. The label on the memory module should always face the CPU.
    B. A notch in the memory module should be aligned with a notch in the memory slot.
    C. The arrows on the memory module should be aligned with the arrows on the motherboard slot.
    D. All memory and motherboard slots are color-coded, with one red end and one blue end.

6. When mounting a motherboard in a computer case, what does the technician use to prevent the motherboard from touching the bottom of the case?
    A. Standoffs
    B. Ground-fault isolators
    C. Silicon spray
    D. Grounding straps

7. When installing adapter cards in a computer, how should a technician properly secure the card?
    A. Install the card, and attach it to the expansion slot using thermal paste.
    B. Install the card, and attach it to the motherboard using thermal pads.
    C. Install the card, and secure it using metal retaining clips located on the expansion slot.
    D. Install the card, and secure it to the case with a screw.

8. Which two connectors are used to connect external peripherals?
    A. EIDE
    B. Molex

C. PATA

D. PS/2

E. USB

1. Which of the following common tasks are performed during preventive maintenance?
(Choose three.)
      A. Check and secure loose cables.
      B. Update the RAM.
      C. Clean the mouse and keyboard.
      D. Update drivers.
      E. Reinstall the operating system.
      F. Install additional peripherals.

2. In which of the following situations is it recommended to ask the customer to sign a liability release form before attempting any kind of repair? (Choose two.)
      A. The technician needs to share the responsibility with the customer.
      B. The information on the computer is critical.
      C. The technician is unable to back up the customer information.
      D. The information in the backup is confidential.
      E. The customer is unable to provide a backup.

3. What is the first step in the troubleshooting process?
      A. Gather data from the computer.
      B. Gather data from the customer.
      C. Verify the obvious issues.
      D. Evaluate the problem and implement the solution.
      E. Close with the customer.
      F. Try quick solutions.

4. Which type of question allows the customer to completely describe the problem?
      A. Closed-ended
      B. Open-ended
      C. Specific
      D. Technical

5. What is the last step in the troubleshooting process?
      A. Gather data from the computer.
      B. Gather data from the customer.
      C. Verify the obvious issues.
      D. Evaluate the problem and implement the solution.
      E. Close with the customer.
      F. Try quick solutions.

1. Which open-source operating system is available on multiple hardware platforms?
   - a. Linux
   - b. Mac OS X
   - c. Windows 2000
   - d. Windows XP
2. Which registry file contains information about the hardware and software in the computer system?
   - a. HKEY_CLASSES_ROOT
   - b. HKEY_CURRENT_USER
   - c. HKEY_LOCAL_MACHINE
   - d. HKEY_USERS
3. How can the command line be accessed in Windows XP?
   - a. Start > Run > Prompt
   - b. Start > Run > cmd
   - c. Start > Control Panel > Prompt
   - d. Start > All programs > Accessories > Terminal
   - e. Start > Run > Terminal

4. Which file system is recommended for Windows XP for large file support and enhanced security?
   - a. DirectX
   - b. DOS
   - c. FAT32
   - d. HPFS
   - e. NTFS
5. What is the purpose of the Microsoft Hardware Compatibility List?
   - a. It lists all the hardware that runs Microsoft Office software.
   - b. It lists the Microsoft software that runs on the listed hardware.
   - c. It lists hardware that is supported by a Microsoft operating system.
   - d. It lists hardware that works together.
6. What should be done before upgrading from Windows 2000 to Windows XP?
   - a. Back up all the data files.
   - b. Update all the device drivers.
   - c. Detach all the peripheral devices.
   - d. Download a legitimate XP authentication key.
7. Which key or key sequence will enable a user to start Windows XP in Safe Mode?
   - a. Alt+B
   - b. Alt+X
   - c. Alt+Z
   - d. F1
   - e. F8
   - f. The Windows key
8. What is a good example of an open-ended question that a technician can ask the user to learn more about conditions before the failure?
   - a. What software has been installed recently on the computer?
   - b. Does the computer boot into the operating system?
   - c. Are there any beeps when the computer boots?
   - d. Has anybody else used the computer recently?
   - e. How many users were logged on to the network when the failure occurred?

9. What is a common cause of the error message "Invalid system disk"?
   - a. The Delete key was pressed during the system boot.
   - b. There is a nonbootable floppy disk or CD in the drive.
   - c. There is no floppy disk or CD in the drive.
   - d. The BIOS has been changed to boot from the hard drive first.

Chapter 1 Introduction to personal computer

1. E
2. A
3. B
4. B
5. D
6. B
7. C
8. B

Chapter 2 safe lab procedure

1. C
2. B
3. A
4. C
5. B
6. B, F
7. B
8. C
9. A, B, D
10. C

Chapter 3 assembly

1. C
2. D
3. D
4. B
5. B
6. A
7. D
8. D, E

Chapter 4 troubleshooting

1. B, C, D
2. C, E
3. B
4. B
5. E

Chapter 5 Os

1. A
2. C
3. B
4. E
5. C
6. A
7. E
8. A
9. B