Computers are your future

Chapter 3

input/output & storage

# Answers to End-of-Chapter Questions

Matching

 \_\_**o**\_\_ 1. plotter “Printers”

 \_\_**b**\_\_ 2. access time “Hard Disk Drives”

 \_\_**n**\_\_ 3. laser printer “Printers”

 \_\_**j**\_\_\_4. virtual laser keyboard “Hard Disk Drives”

\_\_**e**\_\_ 5. FAT “Hard Disk Drives”

 \_\_**a**\_\_ 6. resolution “Monitors”

 \_\_**l**\_\_\_7. seek time “Hard Disk Drives”

 \_\_**m**\_\_8. NTFS “Hard Disk Drives”

 \_\_**c**\_\_\_ 9. trackball “The Mouse and Other Pointing Devices”

 \_\_**h\_**\_\_ 10. hybrid hard drive “Hard Disk Drives”

 \_\_**g**\_\_ \_11. inkjet printer “Printers”

 \_\_**i\_**\_\_ 12. stylus “The Mouse and Other Pointing Devices”

 \_\_**k\_**\_ \_13. touch pad “The Mouse and Other Pointing Devices”

 \_\_**d**\_\_\_ 14. soft keyboard “Keyboards”

 \_\_**f\_**\_ \_ 15. transfer performance “Hard Disk Drives”

Multiple Choice

1. Which storage media uses laser beams to create three-dimensioned storage images?

1. CD
2. flash
3. DVD
4. **holographic “Storage Horizons”**

2. Which of the following is an output device?

1. **speaker “Additional Output Devices”**
2. microphone
3. Internet hard drive
4. smart card

3. A flash drive is an example of \_\_\_\_\_\_\_\_\_\_\_\_\_ storage.

1. optical
2. magnetic
3. **solid-state “Flash Drives and Storage”**
4. cache

4. Which is *not* an action performed using a pointing device?

1. selecting
2. **tagging “The Mouse and Other Pointing Devices”**
3. clicking
4. double-clicking

5. What is a unit of memory on a flash drive called?

1. platter
2. cluster
3. **block** “Flash Drives and Storage”
4. sector

6. Which term describes what you create to compartmentalize a hard drive so that it is capable of storing two operating systems and allowing you to select one at start-up?

1. sector
2. tag
3. cluster
4. **partition** “Hard Disk Drives”

 7. What is the name of the grid of circuits located under the keys of a keyboard?

1. express grid
2. soft keyboard
3. **key matrix** “Keyboards”
4. character map

8. In a hard disk drive, the two or more rapidly rotating disks used as storage media are called \_\_\_\_\_\_\_\_.

1. **platters** “Hard Disk Drives”
2. cache
3. sectors
4. FATs

 9. Which is *not* an example of secondary storage?

1. USB drive
2. **RAM** “Storage: Holding Data for Future Use”
3. DVD-ROM
4. hard drive

 10. Which of the following statements about flash storage is true?

1. Flash storage is not portable.
2. **Flash storage does not require an installed device driver.** “Flash Drives and Storage”
3. The largest flash storage device is 8 gigabytes.
4. Flash storage is also called Internet storage.

Fill-In

1. Making an exact copy of programs and data transferred from one storage device to another is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 **backup** “Hard Disk Drives”

2. Keys like Ctrl or Shift that changes the meaning of the next key pressed are called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ keys.

 **modifier** “Keyboards”

3. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an output device that projects a computer’s monitor display on a screen by using millions of microscopic mirrors.

 **DLP** “Additional Output Devices”

4. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ device often combines a printer, scanner, and copier.

 **multifunctional** “Additional Output Devices”

5. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an output device that comes with OCR software installed.

 **scanner** “Additional Input Devices”

6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is the conversion of spoken words to computer text.

  **Speech recognition** “Additional Input Devices”

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a form of optical storage media that holds up to 17 GB of information and can be written on, read from, and erased many times.

 **DVD-RW** “Additional Input Devices”

8. Hard disks are a form of \_\_\_\_\_\_\_\_\_\_\_\_ storage media.

 **magnetic** “Hard Disk Drives”

9. An input device found at ATMs and airport check-ins is a(n) \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 **touch screen** “The Mouse and Other Pointing Devices”

10. Optical storage devices use laser beams to read data patterns formed by indented \_\_\_\_\_\_\_\_\_\_ and flat \_\_\_\_\_\_\_\_\_\_\_.

 **pits, lands** “CD and DVD Technologies”

 11. \_\_\_\_\_\_\_\_\_\_\_ is memory that uses the spin of electrons to store information.

  **Racetrack memory**  “Storage Horizons”

 12. Remove a USB drive by using the Remove Hardware icon located in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 **system tray** “Flash Drives and Storage”

 13. Trackballs, joysticks, and scanners are all examples of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ devices.

 **input** “Additional Input Devices”

 14. Flash, jump, and thumb drives connect to a computer system through \_\_\_\_\_\_\_\_\_\_\_\_ ports.

 **USB** “Flash Drives and Storage”

 15. The keys located at the top of the keyboard and labelled F1 through F12 are called \_\_\_\_\_\_\_\_\_\_.

 **function keys** “Keyboards”

Short Answer

1. Today there are the three types of optical storage devices. State the name of each and specify the amount and type of data each can hold.

**The three types of optical storage are CDs, DVDs, and Blu-ray disc (BD). Whereas CDs are capable of storing up to 700 MB of data, DVDs can store up to 17 GB of data. If the CD or DVD is rewriteable, data (backup files, music, photographs, documents) can be written to it, erased, and then new data added. The newest type of optical storage is the Blu-ray disc (BD) format. BDs can store up to 25 GB of data on single-layer discs and 50 GB on dual-layer discs.**

1. Define *remote storage* and cite three reasons for using remote storage to back up your programs and data.

**Remote storage, also referred to as an** Internet hard drive**, is storage space on a server accessed from the Internet. Some reasons for using remote backup include:**

* **The ability for data to be accessible from anywhere that you have an Internet connection**
* **The storage capacity that you have access to is not finite as it is for all other devices**
* **The ability to grant coworkers, friends, or family access to your data**
1. Define the term *solid state* and give three examples of solid-state storage devices.

**The term *solid state* indicates that these devices have no moving parts; they consist only of semiconductors. They are often small, lightweight, highly reliable, and portable. Solid-state devices include ExpressCards, PC cards, and flash memory cards.**

1. Name the two most common types of printers and briefly explain how they operate.

**Inkjet printers and laser printers are the two common and popular types of printers. Both inkjet and laser printers are nonimpact printers.**

**Inkjet printers spray ionized ink from a series of small jets onto a sheet of paper. Inkjet printers are typically slower than laser printers, but their initial cost is less.**

**Laser printers are typically higher-resolution but also more expensive than inkjet printers. Laser printers use electrostatic reproductive technology. A laser beam creates electrical charges on a rotating print drum that attract toner. The toner is then transferred to the paper and fused to the surface by a heat process.**

1. What are three things that a user can do to keep data from being damaged on a CD or DVD?
* **Do not expose discs to excessive heat or sunlight.**
* **Hold discs by the edge and do not touch the underside.**
* **Do not write on the label side of discs with a hard instrument.**
* **To avoid scratches, do not stack discs. Store them in jewel cases or paper-like sleeves.**