

|                     |                        |
|---------------------|------------------------|
| <b>Name:</b> _____  | <b>ID No.</b> _____    |
| <b>Date :</b> _____ | <b>Section :</b> _____ |

### Solution Key to Problem Set 4

#### 1. MULTIPLE CHOICES (MCOs)

1)

The \_\_\_\_\_ makes it easy to enter numbers quickly.

- Windows key
- space bar
- numeric keypad
- Shift key

2)

Stylus is one type of \_\_\_\_\_ .

- scanners
- electronic pens
- printers
- display devices

3)

Which of the following is used in conjunction with exam forms, voting ballots, and other documents in which the preferred selection is indicated on the sheet by filling in ovals or circles with a pencil or special colored pen?

- Luggage Scanner
- OCR
- MICR
- OMR

4)

A(n) \_\_\_\_\_ mouse tracks movements with light instead of a ball.

- optical
- mechanical
- trackball
- pointing stick

5)

\_\_\_\_\_ is the most common type of bar code for groceries, pharmacies and other retail products.

- Universal Product Code
- Magnitic Ink Character
- biometric input data
- Optical characters

6)

A voice input system requires software and a(n) \_\_\_\_\_ in order to input voice data or commands into a PC.

- Keyboard
- mouse
- microphone
- printer

7)

The \_\_\_\_\_ key toggles between the numbers and the arrows located on the numeric keypad.

- "Enter"
- "Caps Lock"
- "Num Lock"
- "Tab"

8)

The \_\_\_\_\_ key deletes the character to the right of the insertion point.

- "Delete"
- "Backspace"
- "Shift"
- "Ctrl"

9)

Dots per inch (dpi) is a measurement of

- printer speed.
- printer quality.
- printer expense.
- non of the above.

10)

Electronic pens are Commonly used with:

- graphics tablets.
- digital portfolios and digital pens.
- signature capture devices.
- all of the above.

11)

For printouts that are too big for standard ink-jet printers, \_\_\_\_\_ are used.

- photo printers
- bar code printers
- portable printers
- wide-format printers

12)

A \_\_\_\_\_ offers some combination of printing, copying, scanning and faxing.

- data projector
- smart display
- wide-format ink-jet printer
- multifunction device

## 2. TRUE OR FALSE (T / F)

1)

A device that identifies an individual based on their fingerprint would be a biometric input device.

True

False

2)  
The screen size is measured diagonally.

True

False

3)  
Liquid crystal display (LCD) and cathode-ray tube (CRT) display are two common types of flat-panel displays.

True

False

4)  
Laser printer prints one line at a time while ink-jet printer prints one page at a time.

True

False

### 3. QUESTIONS

(a) **What are Biometric Input Devices? Give examples of biometric data.**

Biometric data input devices (readers) are used to input biometric data into computers; biometric data are measurable biological characteristics about a person. Such data is based on unique physical characteristics (e.g. hand geometry, face, or iris of the eye etc.) or personal traits (e.g. voice or signature). A biometric reader can be stand alone or built into another piece of hardware, such as a keyboard or mouse. Some handheld computers, notebook PCs, and storage devices (such as external hard drives and USB flash drivers) today have built-in fingerprint readers to allow only authorized users to access to the PC or data stored on the device. Biometric readers can be used for access facilities and for verifying such transactions as credit card payments.

**(b) Compare between Laser Printer and Ink-Jet Printer.**

| <b>Laser Printers</b>   | <b>Ink-Jet Printers</b>   |
|---|---|
| <p>Laser Printers are the standard for business documents and come in both personal and network styles.</p> <p>To print a document, the laser printer first uses a laser beam to charge the appropriate locations on a drum to form the page's image, and the toner powder (powdered ink) is released from a toner cartridge and sticks to the drum. The toner is then transferred to a piece of paper when the paper is rolled over the drum, and a heating unit fuses the toner powder to the paper to permanently form the image.</p> <p>Laser Printers are usually black and white, though color laser printers are available, print one entire page at a time and are typically faster very fast, printing 15-30 ppm and have better quality (resolution ranges between 600 dpi-2400dpi) output than ink-jet printers.</p> | <p>Ink-jet printers form images by spraying tiny drops of liquid ink onto the page, one printed line at a time. Some printers print with one single-size ink droplet: other print using different-size ink droplets and using multiple nozzles or varying electrical charges for more precise printing. Because they are relatively inexpensive, have good-quality output, and can print in color paper, photo-quality ink-jet printers can also print photograph-quality digital photo and are the standard for a simple home printer.</p> <p>While the print heads for most ink-jet printers travel back and forth across the page (which is one reason they are slower than laser printers), an emerging type of ink-jet printer uses a print heads that is the full width of the paper so it can remain stationary while the paper feeds past it and thus are very fast, printing up to 60 ppm for letter-sized paper. In addition to being used in computer printers, inkjet technology is also being used in the development of a number of emerging applications, such as dispensing liquid metals, aromas, computer chips and other circuitry, and even "printing" human tissue and other organic materials for medical purposes.</p> |

**4. BONUS QUESTION**

After studying about the system unit, processing, memory, storage, and input and output devices, you are now equipped with the necessary knowledge to make an informed decision on buying a computer to fit your needs. Read "A Guide To Buying A PC," at the end of your Textbook, and prepare 1 page list of all the **desired specifications** of the PC you may consider and its **total cost**.

Left to students