

### Alexandria Higher Institute of Engineering & Technology Academic Year 2011-2012

Semester: 1<sup>st</sup> **Year:** Preparatory

Lecturers: Dr. Zeinab El-Gazayerly, Prof. Dr. Kamel Soliman **Date:** 1/10/2011 Code: CE001

**Course Title:** Introduction to Computer Systems

### MODEL ANSWER

### Sheet (1)

#### Q1. Match each term with the description that fits best:

**Hardware** the equipment that makes up a computer system.

**Microcomputer** another name of personal computer.

Midrange computer a medium-sized computer.

**Mainframe** a large computer used to process business transactions in high volume.

**Network computer** a diskless desktop computer.

**Input Device** any piece of equipment that supplies programs and data to a computer.

**Supercomputer** the most powerful type of computer.

Palmtop computer The smallest type of computer.

- Q2. For the following list of computer hardware, write the principal function of each device in the space provided. Choices include input device, output device, storage device, and processing device.
- CPU **Processing**
- **Mouse Input Device** •
- **Monitor Output Device**
- CD-ROM drive Storage Device
- **Keyboard Input Device**
- Diskette **Storage Device**
- System unit **Processing**
- Printer Output Device
- Subnotebook computer Processing

#### Q3. Match each term with the best description.

**Operating system** supervises the running of all other programs on the computer.

Word processing program helps prepare documents like letters and reports.

**Web browser** Displays resources on the internet.

**Programming Languages** allows an individual to create application programs.

## Q4. Each of the following definitions is not strictly true in some regard. In each definition, identify the flaw and correct it.

- Memory: another name for **primary** computer storage.
- **Information**: **Data** that has been processed into a meaningful form.
- **Computer System**: the CPU and all of the storage and input/output equipment that supports it.
- Processing: the conversion of **input** to **output**.
- Programmer: anyone in an organization who writes computer programs and maintain it later.

#### Q5. Identify each of the following statements as true or false:

- Logical computer operations include such things as addition, subtraction, multiplication, and division. (**False**)
- A millisecond is one one-millionth of second. (**False**)
- The computer's machine cycle consists of two parts: the I-cycle and the E-cycle.
- "Megahertz" refers to measure of computer's speed. (**True**)
- The 8 bits that represent a character in ASCII or EDCDIC are collectively referred to a Megabyte. (**False**)
- A word is a group of bits that computer systems treat as a single unit. (**True**)

#### Q6. Choose an answer to complete the following statements:

- 1. A small electronic chip a manufacturer programs for use in another product, such as a digital camera or microwave oven, is called an **b. Embedded chip.**
- 2. The usefulness of computers can be attributed to their speed, accuracy, reliability, storage, and **a. Communications capabilities**
- 3. Technologies that consist of two or more computers, devices, and software connected by means of o one or more communication media, such as telephone lines, are called **d. Networks.**
- 4. A computer component contained on a single chip, or thin piece of silicon containing electrical circuitry, and serving as the computer's central processing unit is called a **c. Microprocessor.**
- 5. Data that has been processed into a useful form is called **c. Information.**

# Q7. Match each key term on the left with the definition on the right that best describes it.

a. Web site	1.	d A type of system software that enables a computer to operate and manage its resources and activities.
b.Uniform Resource Locator (URL)	2.	a A collection of related Web pages usually belonging to an organization or individual.
c.Computer	2	
d. Operating System	3.	c A programmable, electronic device that accepts data input, performs processing operations on that data, and outputs and stores the results.
e. Hyperlink		
f. Microcomputer	4.	h The instructions, also called computer programs that are used to tell a computer what it should do.
g. Supercomputer	5.	i The largest and most well-known computer network, linking millions of computers all over the world.
h.Software		-
i. Internet	6.	<b>f</b> A type of computer based on a microprocessor and designed to be used by one person at a time; also called a personal computer or PC.
j. Hardware	_	
	7.	<b>j</b> The physical parts of a computer system, such as the keyboard, monitor, printer, and so forth.
	8.	eText or an image located on a Web page or other document that is linked to a Web page or other type of document.
	9.	gThe fastest, most expensive and most powerful type of computer.

# Q8. Circle T if the statement is true, F if the statement is false or write the best answer in the space provided.

- 1. **T** A mouse is one common input device.
- 2. **F** Software includes all the physical equipment in a computer system.
- 3. **F** A computer can run without an operating system if it has good application software.
- 4. **F** One of the most common types of home computers is the midrange server
- 5. T An example of a domain name is microsoft.com.
- 6. **Input** is the operation in which data is entered into the computer.
- 7. A **tablet** computer can come in convertible or slate form.
- 8. Web pages are connected using **Hyperlinks**, which can be either text or images.
- 9. Electronic messages sent over the Internet that can be retrieved by the recipient at his or her convenience are called **e-mail**.
- Q9. For the following list of computer hardware devices, indicate the principal function of each device by writing the appropriate letter—I (input device), O (output device), S (storage device), P (processing device), or C (communications device)—in the space provided.

```
a. CPU ---P--- d. Keyboard ---I--- g. Speakers ---O--- b. Monitor ---O--- e. Hard drive ---S--- h. DVD drive ---S--- c. Mouse ---I--- f. Modem ---C--- i. Microphone ---I---
```

#### Q10. Supply the missing words to complete the following statements.

- a. The Internet is an example of a **network**, a collection of computers and other devices connected together to share resources and communicate with each other.
- b. The starting page for a Web site is called the site's **Home Page**.
- c. For the e-mail address jsmith@cengage.com, jsmith is the **username** and cengage.com is the **domain** name.
- d. The e-mail address pronounced bill gee at microsoft dot com is written billg@microsoft.com.

Q11. What are three differences between a desktop computer and an ultra-/mobile PC (UMPC)?

Self-Study, Google it.

Q12. List two reasons why a business may choose to network its employees' computers.

Self-Study, Google it.

Q13. If a computer manufacturer called Apex created a home page for the Web, what would its URL likely be? Also, supply an appropriate e-mail address for yourself, assuming that you are employed by that company.

URL: http://www.apex.com E-mail: ahmed@aiet.edu.eg

#### Q14. Team Problem Solving

- 1. Artificial intelligent robots are likely to play a large role in our future. What are some possible new applications in this technology in the area of manufacturing, health care, and home maintenance?
- 2. Assume you are offered a free personal computer system of your choice and you are selecting the input, output, and storage devices you want. Define a list of uses for your new computer. Then research various computer systems and component advertised in magazines and on the internet. Choose a computer system that will meet your needs and write a paragraph explaining why you selected a particular personal computer system.

**Our Best Wishes**