

Name: _____	ID No. _____
Date : _____	Section : _____

Problem Set 1

1. BASIC COMPUTER OPERATIONS

Computers perform a variety of operations on data. What are these operations? For each operation, give example(s) of the relevant hardware devices.

2. CATEGORIES OF COMPUTERS

There is a variety of computers that meet the range of computing needs today. List these types, give an example of each type of computer and state what that computer might be used for.

3. GENERATIONS OF COMPUTERS

The evolution of computers is divided into generations, each characterized by a technological development. What are these generations and the relevant technological developments?

4. COMPUTER BENEFITS AND RISKS

Write a short opinion (a half page) about benefits and risks brought about by the prevalence of computers in society.

5. MATCHING:

Select the statement that best matches the Key word and write the corresponding number in the in the blank cell at the right of each statement.

1	Computer	A bar that includes a set of options that can be displayed on the screen to enable the user to issue commands to the computer.	
2	Computer network	A business or other organization that provides Internet access to others, typically for a fee.	
3	Data	A collection of computers and other hardware devices that are connected together to share hardware, software, and data, as well as to communicate electronically with one another.	
4	Hardware	A computer used in large organizations (such as hospitals, large businesses, and colleges) that need to manage large amounts of centralized data and run multiple programs simultaneously.	
5	Information	A form of private chat set up to allow users to easily and quickly exchange real-time typed messages with the individuals they specify.	
6	Internet	A graphically based interface that allows a user to communicate instructions to the computer easily.	
7	Mainframe computer	A medium-sized computer used to host programs and data for a small network.	
8	Midrange server	A numeric Internet address used to uniquely identify a computer on the Internet.	
9	Output	A person whose primary job responsibility is to write, maintain, and test computer programs.	
10	Processing	A programmable, electronic device that accepts data input, performs operations on that data, and presents and stores the results.	
11	Programmer	A text-based Internet address used to uniquely identify a computer on the Internet.	
12	Software	An Internet address consisting of a user name and computer domain name that uniquely identifies a person on the Internet.	
13	Supercomputer	Data that has been processed into a meaningful form.	
14	System software	Performing operations on data that has been input into a computer to convert that input to output.	
15	Thin client	Programs, such as the operating system, that control the operation of a computer and its devices, as well as enable application software to run on the PC.	
16	Domain name	Raw, unorganized facts.	

17	E-mail address	Computers built from multiple less powerful computers and when jointly work become the fastest and most powerful type of computers.	
18	Graphical user interface (GUI)	The instructions, also called computer programs that are used to tell a computer what it should do.	
19	Instant messaging (IM)	The largest and most well-known computer network, linking millions of computers all over the world.	
20	Internet address	The physical parts of a computer system, such as the keyboard, monitor, printer, and so forth.	
21	Internet service provider (ISP)	The process of placing telephone calls over the Internet.	
22	Internet telephony	The process of presenting the results of processing; can also refer to the results themselves.	
23	IP address	What identifies a computer, person, or Web page on the Internet, such as an IP address, domain name, or e-mail address.	
24	Menu Bar	A PC designed to access a network for processing and data storage, instead of performing those tasks locally. It is sometimes called network computer (NC).	

BONUS QUESTIONS

6. HISTORY TIMELINE OF COMPUTING

The history of Computing extends from the abacus to the quantum computer. Read the Computer History Timeline at the end of your book and answer the following questions:

1. When was the first version of Microsoft Windows, a graphical User Interface environment, released?
2. When was the first version of USB flash drives released?
3. When the World Wide Web (WWW) was invented? By whom?
4. Select any event in the timeline you consider most important. Briefly Comment why you consider it so.

7. NETWORKING

Suppose you were in end of the second half of the 1980s, and early 1990s when North American Continent (namely the USA) had the largest computer network in the world while other continents had such emerging computer networks. You were given the responsibility of linking the continents of the world into a single global network-- **the Internet**. How would you choose to design the network: ring, star or mesh design? Explain your preferred choice.