TVL – COMPUTER SYSTEMS SERVICING 11

Name: _____ Date: _____

Grade: _____ Section: _____

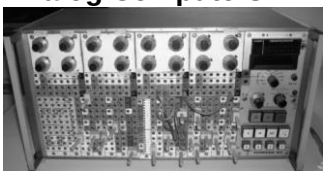
Quarter: 1 Week: 2 SSLM No. 2 ELC(s): Identify materials necessary to complete the work in accordance with established procedures and check against system requirements

- **Objective:**
  A. Identify the different types of computers.
- **Topic:** Different Types of Computers

Let Us Discover

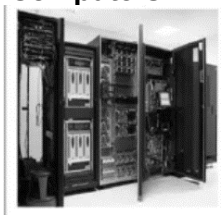
Different Types of Computers

Based on the operational principle of computers, they are categorized as analog, digital and hybrid computers.

Types	Description
1. Analog Computers 	These are almost extinct today. These are different from a digital computer because an analog computer can perform several mathematical operations simultaneously. It uses continuous variables for mathematical operations and utilizes mechanical or electrical energy.
2. Digital Computers 	They use digital circuits and are designed to operate on two states, namely bits 0 and 1. They are analogous to states ON and OFF. Data on these computers is represented as a series of 0s and 1s. Digital computers are suitable for complex computation and have higher processing speeds.
3. Hybrid Computers 	These computers are a combination of both digital and analog computers. In this type of computers, the digital segments perform process control by conversion of analog signals to digital ones.

Classification of Computers

The following are the classification of the different types of computers based on their sizes and functionalities:

Classifications	Sizes and Functionalities
1. Mainframe Computers 	Large organizations use mainframes for highly critical applications such as bulk data processing and ERP. Most of the mainframe computers have the capacities to host multiple operating systems and operate as a number of virtual machines and can substitute for several small servers.
2. Minicomputers 	In terms of size and processing capacity, minicomputers lie in between mainframes and microcomputers. Minicomputers are also called mid-range systems or workstations. The term minicomputer was popularly used in the 1960s to refer to relatively smaller third generation computers.
3. Servers 	They are computers designed to provide services to client machines in a computer network. They have larger storage capacities and powerful processors. Running on them are programs that serve client requests and allocate resources like memory and time to client machines. Usually they are very large in size, as they have large processors and many hard drives.
4. Supercomputers 	The highly calculation-intensive tasks can be effectively performed by means of supercomputers. Quantum physics, mechanics, weather forecasting and molecular theory are best studied by means of supercomputers. Their ability of parallel processing and their well-designed memory hierarchy give the supercomputers, large transaction processing powers.
5. Microcomputers 	A computer with a microprocessor and its central processing unit is known as a microcomputer. They do not occupy space as much as mainframes do. When supplemented with a keyboard and a mouse, microcomputers can be called personal computers. A monitor, a keyboard and other similar input output devices, computer memory in the form of RAM and a power supply unit come packaged in a microcomputer.

Personal computers come in different forms such as desktops, laptops and personal digital assistants (refer to Figure 2). Let us look at each of these types of personal computers.

1. **Desktops:** A desktop is intended to be used on a single location. The spare parts of a desktop computer are readily available at relatively lower costs. Desktops are widely popular for daily use in the workplace and households.
2. **Laptops:** Similar in operation to desktops. Laptop computers are miniaturized and optimized for mobile use. Laptops run on a single battery or an external adapter that charges the computer batteries.

3. **Netbooks:** They fall in the category of laptops, but are inexpensive and relatively smaller in size. They had a smaller feature set and lesser capacities compared to regular laptops, at the time they came into the market.

Figure 2. Types of Personal Computer

4. **Personal Digital Assistants** (PDAs): It is a handheld computer and popularly known as a palmtop. It has a touch screen and a memory card for storage of data. PDAs can also be used as portable audio players, web browsers and smart phones. Most of them can access the Internet by means of Bluetooth or Wi-Fi communication.
5. **Tablet Computers**: Tablets are mobile computers that are very handy to use. They use the touch screen technology. Tablets come with an onscreen keyboard or use a stylus or a digital pen. Apple's iPod redefined the class of tablet computers.
6. **Wearable Computers:** A record-setting step in the evolution of computers was the creation of wearable computers. These computers can be worn on the body and are often used in the study of behavior modeling and human health. When the users' hands and sensory organs are engaged in other activities, wearable computers are of great help in tracking human actions.

Let Us Apply

Activity 3. Think It!

Now it’s time to apply your knowledge in real-life situations. Answer the following questions.

1. What is the importance of computer in your life as a student?

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2. Why is it important to learn about the different types of computers?

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Rubrics

Criteria for the Activity 3

Performance of the learner will be rated based on the following criteria:			
Contents	**Excellent (3)**	**Very Satisfactory (2)**	**Satisfactory (1)**
Content Knowledge	Substantial, specific and/or illustrative content demonstrating strong development and sophisticated ideas.	Sufficiently developed content with adequate elaboration or explanation.	Limited content with inadequate elaboration or explanation..
Spelling	No misspelled word.	1-3 misspelled Words.	4 or more misspelled Words.
Capitalization	Follows correct capitalization (pronouns, sentences)	1-3 capitalization errors.	4 or more capitalization errors.
Punctuation	Applies punctuations correctly.	1-3 incorrect use of punctuations.	4 or more incorrect use of punctuations.
Handwriting	Legible.	1-3 words can't be clearly read.	4 or more words can't be clearly read.