

**Lecture no. 5**

**Department: Information and Library Science**

**Subject: Information Storage & Retrieval**

**Name of the lecture :storage devices-2**

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## **Storage Devices**

**There are some storage devices, The following devices are used for storage operations, giving the definition and the functions of each one.**

- 1. CD plus/ enhanced CD:** it is a digital disk that is a hybrid of audio-only compact disk and multimedia CD-ROM. A CD plus can be played like any music CD in a stereo system, but it also can be used for multimedia presentation on a computer.
- 2. Compact disk-read-only memory (CD-ROM):** Optical –disk form of secondary storage that holds more data, including photographs, art, sound, and video, than diskettes and many hard disks, like music CDs, A CD-ROM is a read -only disk. CD-ROM disks will not play in a music CD player. CD-ROM disks are used in computer systems to create multimedia presentations and do research, among other things.
- 3. Compact disk-recordable (CD-R):** CD format that allows users to write data onto a specially manufactured disk that can then be read by a standard CD-ROM drive. Home users can do their own recordings in CD format.
- 4. Diskette:** Also called floppy disk; secondary storage medium removable round flexible Mylar disk that stores data as electromagnetic charges on a metal oxide film that coats the Mylar plastic. Data is represented by the presence or absence of these electromagnetic charges following standard pattern of data

representation. Such as (ASCII). It is floppy because it is flexible not rigid. Diskettes are used on all microcomputers.

- 5. DVD-ROM disk:** Five-inch optical disk that looks like a regular audio CD but can store (4.7 gigabytes ) of data on a side. It provides great storage capacity, studio-quality images, and theater like surround sound.
- 6. Flash-memory:** Circuitry on credit-card-size cards (PC cards) that can be inserted into slots in the computer that connect to the motherboard. Flash memory cards are variations on conventional computer-memory chips; however, unlike standard RAM (Random access memory) chips. Flash memory is nonvolatile, it retains data even when the power is turned off. It can be used not only to simulate main memory but also to supplement or replace hard-disk drives for permanent storage.
- 7. Hard disk:** Secondary storage medium; generally non removable disk made out of metal and covered with a magnetic recording surface. It holds in the form of magnetized spots. Hard disks are tightly sealed an enclosed unit to prevent any foreign matter from getting inside. Data may be recorded on both sides of the disk platters. Hard disks hold much more data than diskettes do. Nearly all microcomputers now use hard disks as their principal secondary storage medium.
- 8. Optical disk:** Removable disk on which data is written and read through the use of laser beams. The familiar form of optical disk is the one used in the music industry. Optical disks hold much more data than magnetic disks. Optical disks storage is expected to dramatically affect the storage capacity of microcomputers.

**9. Write once read many (WORM) :** Refers to an optical disk that can be written or recorded onto just once and cannot be erased; It can be read many times. WORM holds more data than other types of optical disks. WORM technology is useful for storing data that needs to remain unchanged, such as that used for archival purposes.