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**Depreciation :**

Each disk platter has a flat circular shape. Its two surfaces are covered with a magnetic material and information is recorded on the surfaces. The platter of hard disks are made from rigid metal or glass, while floppy disks are made from flexible material.

The disk surface is logically divided into tracks, which are subdivided into sectors. A sector (varying from 32 bytes to 4096 bytes, usually 512 bytes) is the smallest unit of information that can be read from or written to disk. There are 4-32 sectors per track and 20-1500 tracks per disk surface. The arm can be positioned over any one of the tracks.

The platter is spun at high speed.To read information, the arm is positioned over the correct track.

When the data to be accessed passes under the head, the read or write operation is performed .A disk typically contains multiple platters (see Figure 10.2). The read-write heads of all the tracks are mounted on a single assembly called a disk arm, and move together .Multiple disk arms are moved as a unit by the actuator.Each arm has two heads, to read disks above and below it. The set of tracks over which the heads are located forms a cylinder. This cylinder holds that data that is accessible within the disk latency time. It is clearly sensible to store related data in the same or adjacent cylinders.Disk platters range from 1.8" to 14" in diameter, and 5"1/4 and 3"1/2 disks dominate due to the lower cost and faster seek time than do larger disks, yet they provide high storage capacity.A disk controller interfaces between the computer system and the actual hardware of the disk drive. It accepts commands to r/w a sector, and initiate actions. Disk controllers also attach checksums to each sector to check read error.