

Hello students.

I'm jayada parab

And today we would be doing.

Some of the storage

devices mainly CD-Roms.

In this module. We would be

doing what is optical storage.

What is a compact disc?

The types of compact disc

And the advantages and

disadvantages of compact disc.

At the end of this module you

will be able to define what

is optical storage and list

the types of optical storage.

You will be able to list the

features of compact disc.

Describe the different types of compact disc.

And list the advantages and

disadvantages of series.

Let us begin with this module with

the definition of optical storage.

It is any storage media that holds

content in digital format and

is read using a laser assembly.

The most common types of

optical media are compact disc,

Blu Ray Disc and digital

versatile disc that is DVD.

In this module we would be

focusing on compact disc.

Let's see some of the

features of compact disc.

A compact disc is a portable storage medium.

That can be used to record,

store and playback audio or video

and any other data in digital form.

A standard compact disc has a capacity.

Of 80 minutes of audio or

650MB or 700 MB of data.

A CD works by focusing or 780

nanometer wavelength semiconductor

laser onto a single track of disk.

After disc rotates,

the laser beam measures differences

in the way light is reflected

off the polycarbonate layer

on the bottom of the disc,

converting it into sound.

They're fragile and prone to scratches.

They can be repaired,

but disc readability can be affected.

These were some of the features

of compact disc.

Let's see what are the different

types of compact discs available.

The first one, CD ROM.

What is ROM?

It means read only memory.

These are normally prerecorded

CD's that contain music.

A recording of the music is

burned into the CD by the vendor

and cannot be erased or changed.

Hence the name read only memory.

CD ROM recordings can be played

on a standard CD player and

contains 650 MB of storage.

The second type is a mini CD.

It is only 80 millimeters or about 3

inches wide and holds a maximum of 24

minutes of music or 210 MB of data.

Many CD's are compatible

with most of the CD players.

Even though their size is small.

The depression that a normal CD.

Fits into also has a smaller well.

In the middle of it that

can hold the mini CD.

The most common use of mini format

is the single song recordings.

And it can be used by businesses

for advertising purposes.

The next type of CD is Cd-R.

Here the R stands for recordable.

The Cdr allows this user to

record data or music only once.

They can be used to store a wide variety

of digital data in much the same way

the data was told on a floppy disk.

The data does not become a permanent part of

the disks until it is burnt by the CD burner.

Which is included in most of the computers.

The next type is CD +R.

Although the R stands for recordable.

It is not compatible with the Cdr.

The plus R format was developed

to increase the amount of storage

available on the compact disc.

The double layer technology in the

CD plus R allows for almost twice

as much as space as a standard Cdr.

The next type is CD RW.

The CD RW can be used as a normal CD R,

but it can also be erased and reused.

A CD burner will use its highest laser power.

To melt the recording layer to record data onto the CD.

The CD RW Burner uses its medium level

of laser power to melt the data layer

so new data can be added to the disk.

To read a CD, a CD player uses the

lowest amount of laser power and

will not change the recorded layer.

This is how the CD - RW works.

Let's see some of the advantages.

Of the CD's.

They're small and portable,

so you can easily carry

them anywhere you go.

They're very cheap to produce.

Most computers can read CDs.

If there is no CD drive or DVD drive

can also can be used to read them.

They're fairly fast to access the data.

And quicker than the magnetic tape.

CD's also have some disadvantages.

Let's see what are they?

They're fairly fragile.

Easy to snap or scratch.

And the data may be damaged

once the CD's are scratched.

They have smaller storage capacity

than a hard drive or a DVD.

And they are slower to

access than a hard disk.

So in this module we have

seen What are the different features

of CD's and which are the

different types of CD's available?

We also saw the advantages and the

disadvantages of the compact disc.

So we come to the end of this module.

Thank you.