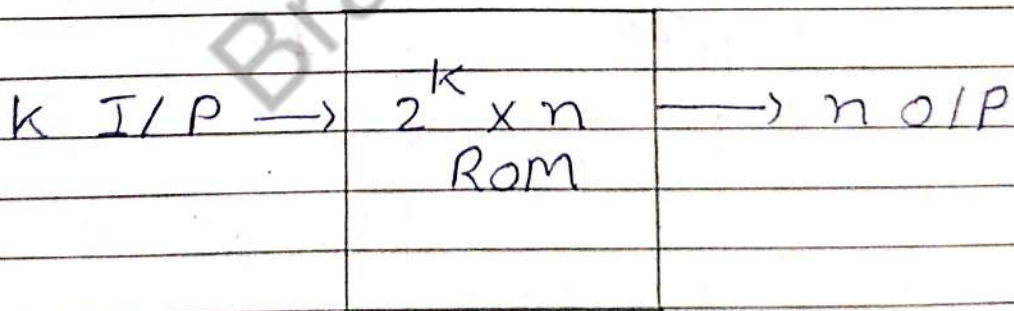


\* Explain the types of Read-Only Memory.

Read-Only Memory is the primary memory unit of any computer system.

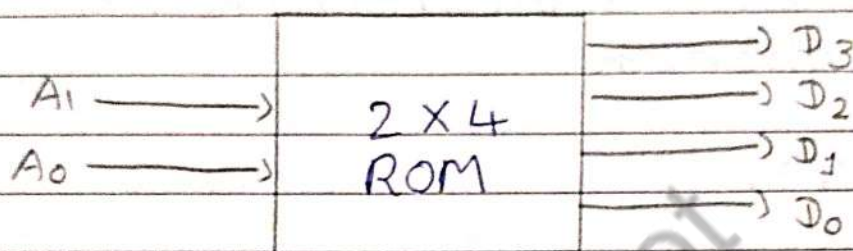
Read-Only Memory consists of  $k$  input lines and  $n$  output line.

→ Block Diagram:



IF  $2^2 \times 2$  ROM, then we have 2 Input line and 4 output line.

→  $2 \times 4$  ROM :



ROM is consist two Basic components - Decoder and OR gates.

- Types of ROM:

There are Basic Five Types of Read-Only Memory.

1 Mask ROM:

Mask ROM is manufacturer from the customer in tabular form.

They are used in network operating systems.

## 2 PROM:

It stands for Programmable Read Only Memory.

They are used for several different applications including cell phones.

## 3 EPROM:

It stands for Erasable Programmable Read - Only Memory.

They are used for some micro-controllers program store.

## 4 EEPROM:

It stands for Electrically Erasable Programmable Read - Only Memory.

They are used for storing the computer system BIOS.

## 5 Flash ROM:

Flash ROM is an enhanced version of EEPROM.

They are used for store BIOS computer system on a Flash memory chip.

### \* Difference between PLA and PAL.

	PLA	PAL
1	PLA stands for Programmable Logic Array.	PAL stands for Programmable array Logic.
2	PLA speed is lower.	PAL speed is higher.
3	Complexity of PLA is high.	Complexity of PAL is less.
4	Cost of PLA is high.	Cost of PAL is less.
5	PLA is less available.	PAL is more available compare to PLA.
6	It is less used than PAL.	It is more used than PLA.