Increasing
size

CPU

Primary
cache

Increasing
speed

Increasing
cost per bit

Secondary
cache

Main
memory

Magnetic disk, magnetic
tape secondary
memory

Fig. 5.2.1

the

we

CPU

Cache
memory

Main
memory

I/O
processor

Magnetic
tapes
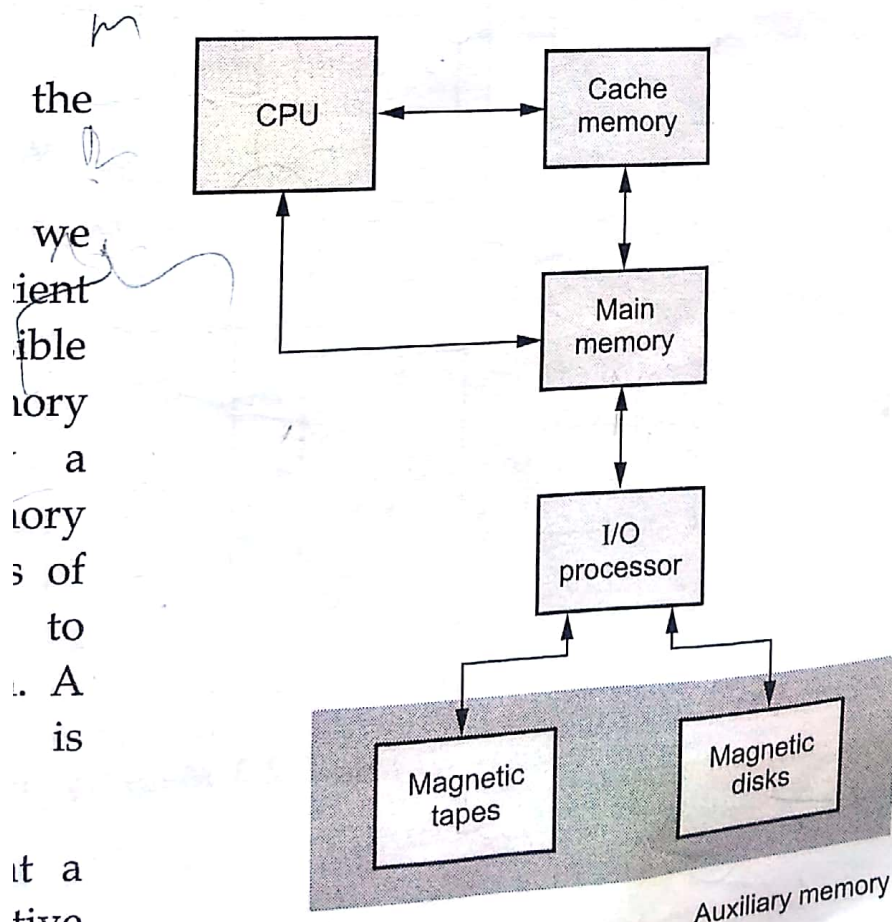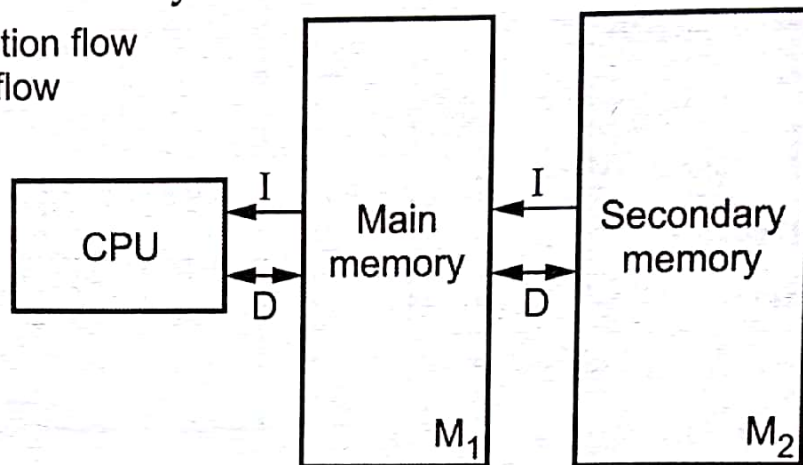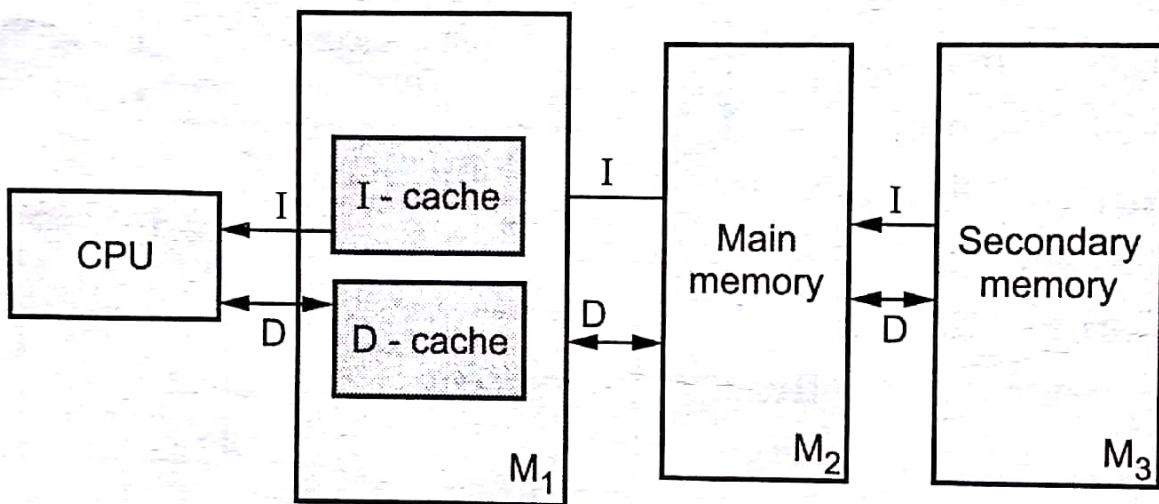
Magnetic
disks

Auxiliary memory

**Fig. 5.2.2 Memory hierarchy in a computer
system**

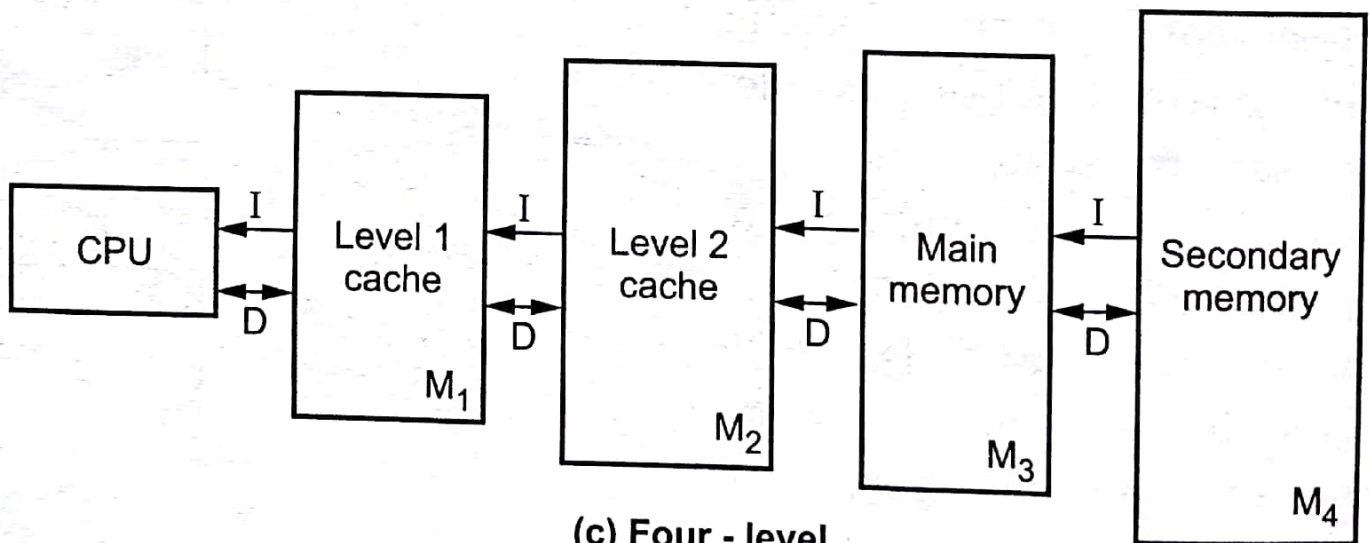3 shows common memory hierarchies with two, three and four levels

I : Instruction flow
D : Data flow

(a) Two - level

(b) Three - level

(c) Four - level

Fig. 5.2.3 Memory hierarchy