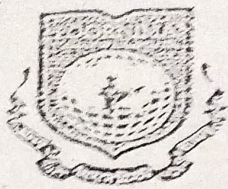# Binary Microprogram:-

- Symbolic microprogram is convenient for writing.

- But they can't be stored in memory.

- They should be translated to binary either by mean of assembler program or by user

- The binary microprogram listed in the word content of the control memory. When a ROM is used for control memory, the microprogram binary list provides the truth table for fabricating the units

Design of Control Unit:-

- Control Unit is a part of CPU, which direct the operation of the processor.

- It fetches internal instructions of the program from main memory to the processor instruction Register.

- Based on Register content, CU generates control signal that supervise the execution of these instruction.

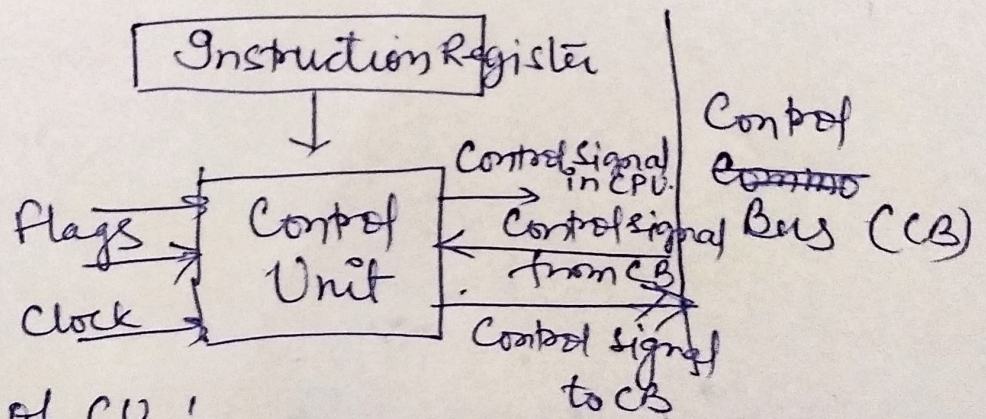- CU works by receiving i/p info - which convert into control signal, which all sent to the central processor.

- Computer processor tells to attached H/W what to perform.
- func that a control unit perform depend on the type of CPU.
  - Different type of CPU are

$$\hookrightarrow \text{CPUs}$$
$$\hookrightarrow \text{GPU}$$

functions of CU :-

① Coordinates seq. of data movements into, out of and b/w processor's many sub-units

② Interpret Instruction

③ Control data flow inside the processor.

④ Receive external instruction or command to which it converts to seq; of control signals.

⑤ Control - ALU, Data buffer, Reg (within CPU)

⑥ Handle multiple task — fetching, decoding, storing.