

* Operation code :- It is also called op code.

ii) It signifies the task to be performed.

* Operand :- The data to be operated on is called operand.

* Instruction :- An instruction is a binary pattern design inside a micro-processor to perform a specific function.

It consist of operation code and operand.

Instruction set :- The entire group of instruction are called instruction set.

They are classified into five categories

- i) Data Transfer
- ii) Arithmetic
- iii) Logical operation
- iv) Branching operation
- v) machine control operation.

1. Data Transfer operation :- It copies data from location called "source" to another location called destination without modifying the content of source.

Various type of data transfer are listed below

a) Between registers b) Between a memory location and a register (c) Between the I/O device and accumulator.

ii) Arithmetic operation: It performs arithmetic operation such as addition, subtraction, and multiplication.

iii) Logical operation: These instructions perform various logical operation with the contents of accumulator.

a) AND, OR, EX-OR: - Any 8-bit number or the contents of register or contents of memory location can be logically ANDed, Ored, Ex-Ored with the contents of accumulator. The results are also stored in accumulator.

b) Rotate: Each bit of in the accumulator can be shifted either left or right to the next position.

c) Compare: Any 8-bit number or the contents of register or the contents of memory location can be compared for $>$, $<$, $=$ with the contents of accumulator.