Bachelor of Science

Semester :- 5

Group theory

Group Theory

o **Groupoid or Binary Algebra Definition**
  - A non-empty set G equipped with one binary operation is called groupoid

    - i.e.   G is a Groupoid is closed for * .

    It is denated by (G,*).

    For Example :- (N,+), (Z, -), (Q, x) etc.

    Note :- Groupoid is also called Quasi Group.

o **Semi Group :- Definition**
  - An Algebraic Structure (G, *) is called a semi Group if the binary operation * satisfy associative Property

    i.e. :- [G] (a * b) * c = a * (b * c), $\forall$ a $\in$ G