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**SUBJECT:- PHYSICS**

**CLASS:- XTH**

**DATE:07/04/XXI**

**SUBJECT TEACHER:- MR. NEEL NIRANJAN**

**CHAPTER 1. (ELECTRICITY) (BASED ON NCERT PATTERN)**

**Current:-** The rate of flow of charge is known as current.

$$I = Q/t, \text{ Where } I = \text{Current}$$

Q = Net charge flowing.

t = time

- Unit: The unit of current is Ampere.

Q = Coulomb(C)

I = Ampere(A)

t = Second(s) 1 A = 1C/1s

**➤ Potential Difference:**

The potential difference between two separate points is defined as the work done to move a unit positive charge from one point to another.

$$V = W/Q$$

- Unit:

The unit of potential difference is Volt

1 Volt = 1 Joule/ 1 Coulomb

**Ohm's Law:**

Current  $\propto$  potential difference

$$V \propto I$$

**V = I R** where, R = Resistance

- Unit R =  $\Omega$ (Ohm)

$$1\Omega = 1V / 1 A$$