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SUBJECT:- PHYSICS

CLASS:- XTH

DATE:15/04/XXI

SUBJECT TEACHER:- MR. NEEL NIRANJAN

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

**Q1.** What does an electric circuit mean?

**Ans.** A continuous conducting path consisting of wires and other resistances and a switch between the two terminals of a cell or a battery along which an electric current flow is called a circuit.

**Q2.** Define the unit of current.

**Ans.** The unit of current is Ampere. 1 Ampere is said to be when 1 coulomb of charge flow through any cross section of a conductor in 1 second.

**Q3.** Calculate the number of electrons constituting one coulomb of charge.

**Ans.**  $1C = 6 \times 10^{18}$  electrons.

**Q4.** Name a device that helps to maintain a potential difference across a conductor.

**Ans.** A battery of many cells or a single cell can maintain potential difference.

**Q5.** What is meant by saying that the potential difference between two points is 1 V?

**Ans.** The potential difference between two points is said to be 1 V if 1 Joule of work is done in moving 1 Coulomb of charge from one point to another point.

**Q6.** What determines the rate at which energy is delivered by a current?

**Ans.** electrical power determines the rate at which the energy is delivered by a current.