

UNIT-ELECTROSTATICS

COULOMB'S LAW

#ELECTRIC CHARGE= Electric charge is the property associated with the matter due to which it produces or experiences the electrical and magnetic effects. Electric charges are of two types i.e. positive and negative. These names were given to the charges by Benjamin Franklin in 1750. He also found experimentally that “like charges repel each other and unlike charges attract each other.”

#ELECTRON THEORY OF ELECTRIFICATION= The modern explanation of electrification of material is based on the atomic model. According to this model, every material is made up of very small particles called atoms. Each atom consist of extremely small central heavy portion called Nucleus. It consist of two types of particles called proton and neutron in which proton is positively charged and nucleus is chargeless. A third kind of particles revolve around the nucleus in different orbits called electrons. Each electron has equal amount of negative charge as of proton. In an atom number of electron is equal to number of protons in nucleus. So, as a whole the atom is neutral. When somehow one or more electrons are extracted from an atom it become positively charged body has deficiency of electrons in its atoms. Conversely, if one or more electrons