Quess:- Explain the energy level in;

(i) Conductor,

(ii) Insulator,

(iii) Semi Conductor,

Ans:- (i) Conductor:- The electronic band structure is an energy schema to describe the conductivity of conductors, insulators, semicondu The schema consists of two energy bands and the band gap. Between the two energy bands there is the band gap, its width effect the conductivity of materials

(ii) Semi Conductors :- They are sites in an atom or a crystal that an electron can reside in. In a semiconductors, these sites are found in the valance band and in the conduction band and vary from semiconductor to semi conductor. They are like a bookshelf, with shelves at certain heights.

(iii) Insulators :- It is that material in which current does not flows easily e.g: wood; paper, plastic, oil, mica etc. The reason for insulation is the wide gape b/w the valance band and conduction band. A large Amount of energy is required to shift electrons from the valance band in the conduction band.