

Temperature :- Temperature is the degree of hotness or coldness of a substance. Temp<sup>r</sup>. at the Earth's surface vary from place to place, from night to day, and from summer to winter. It is directly related to the duration and intensity of solar radiation. The factors which influence variation in temperatures on the Earth include latitude, altitude, topography, vegetation and others.

Temp<sup>r</sup>. has a significant effect on the climatic conditions, growth response and activities of organisms. Temp<sup>r</sup>. is one of the three major influences on global patterns of plant growth. Along with available sunlight and H<sub>2</sub>O, temp<sup>r</sup>. determines whether the land will support dense forests, grassland or nearly barren desert. On the basis of temp<sup>r</sup>. conditions, world's vegetation is divided into various classes as - megatherms (where high temp<sup>r</sup>. prevail throughout the year and dominant vegetation is tropical rain forest), Mesotherms (with high temp<sup>r</sup>. alternating with low temp<sup>r</sup>. and dominant vegetation is tropical deciduous forest) and microtherms (where low temp<sup>r</sup>. prevail and vegetation is of mixed coniferous forest-type) and heliotherms (with very low temp<sup>r</sup>. and alpine vegetation being dominant).

Adaptation to the physical environment :-

Every organism requires specific environmental conditions for its normal growth and development. Organisms are adapted to some environmental conditions which are necessary for them to remain alive. Adaptations are a product of natural selection. It involves the acquisition of genetic traits that enable an organism to survive, grow and reproduce under the prevailing environmental conditions.