1.2 EVOLUTION OF HUMAN BEING

Man is clearly an animal. His heart, intestine, liver, lungs differ little from the corresponding organs of cat, a dog or a monkey. His respiration, digestion, reproduction muscle contraction, nerve or endocrine co-ordination fine the same general processes and same general chemical and physical relations that one finds in animals. If subjected to classification there is no difficulty in recognizing that man is a vertebrate and hence belongs to the phyllum chordata. Among the vertebrates he obviously belong with the class of mammals. He is bipedal using only his hand legs for locomotion but this is also true of Kangaroos. Men, monkeys and apes are very similar to the anatomy. Ecologist concerned with the study of various eco-systems regard man chiefly as a disturbing element in it, and it is this growing attitude on the growing reality of man's disturbing tendency that has given rise to the academic interest in man-nature relations.

When Darwin published the Descant of Man (1871) he did not know of any human fossils. He built his case for human evolution entirely on evidence from living men and living primates, and he thought the great break in the Organic chain between apes and man might never be bridged because of the imperfect nature of the fossil record.

In late 1920s and early 1930s a series of man-like fossils were found in a cave deposit near Choukoution in China, 42 miles from Peking (Bejing). These very the remains of what came to be called as the Peking man or Sinanthropus. In subsequent years a variety of homonid fossils were discovered mostly in Africa. These do not form a neat chin of links leading from ancient ape to modern man. They cannot be arranged in a single sequence and it appears that a considerable variety of man-like animals lived a different times and places in the pleistocene.

The Pleistocene was short as geological periods go, and it was also peculiar in having great four waves of glaciation around their way much across North America and Europe, and particular events are dated with reference to these glacial and interglacial periods, although absolute time range remains uncertain.

1.3 ECOLOGY

The word ecology derived from the Greek word 'Oikos meaning habitation, and logos meaning discourse or study, implies a study of the habitations of organisms. Ecology was first described as a sepearate field of knowledge in 1866 by the German Zoologist Ernst Haeckel, who invented the word Ecology for 'the relation of the animal to its organic as well as its inorganic environment,

particularly its friendly or hoslite relations to those animals or plants with which it comes in contact.

Ecology has been variously defined by other investigators as "Scientific natural history", "the study of biotic communities, or "the science of community population", probably the most comprehensive definition is the simple one most offers given' a study of animal and plants in their relations to eachother and to their environment.

Ecology may be studied with particular reference to animals or to plants, hence animal ecology an plant ecology. Animal ecology, however, cannot be adequately understood except against a considerable background of plant ecology. What animal and plants are given equal emphasis, the term bioecology is often used. Causes is plant ecology usually dismiss animals as but one of many factors in the environment. Synecology is the study of communities, and autecology the study of species. There is some confusion in these terms since Europeans commonly use 'ecology' in manover sense - meaning the environmental relations of organisms or of communities. The broader study of communities, including species interrelations and community structure and function as well as environmental relations (Synecology), is generally ermed “bioecology” or "biosociology" by Europeans.

1.5 ENVIRONMENT

Its meaning and significance

History reveals that human race was once afraid of nature and the natural forces. Human beings worshiped nature and considered nature as superior to human race. Enormous increase in human population raised the demand for development and increased the consumption of variousnatural resources resulting in environmental deterioration.

The term environment describes the sum total of physical and biotic conditions influencing the responses organisms. More specifically, the sum of those portions of the hydrosphere, lithosphere, and atmosphere into which life penetrates is the biosphere. There are no characterstics of permanent inhabitants of the atmosphere, although the air is traversed by manly kinds of animals and plant propagules. Of the hydrosphere, there are two major bicycles, marine and fresh water, of the tithosphere there is one land.

A-habitat is a specific set of physical and chemical conditions (for example, space, substratum, climate) that surrounds a single species, a group of species or a large community. The ultimate division of the biosphere is microhabitat, the most intimately local and immediately set of conditions surrounding an organism, the burrow of a rodent, for instance, or a decaying log. Other individuals