Compared as regards the fossil primates of



Compared to the other parts of body, teeth and fragments of jaw are relatively well preserve Teeth give several clues for reconstruction of the animal. For example, the size of the animal man is deduced on the basis of teeth. Teeth give indication of the type of food the animal consumed.

Studying teeth the climate and environmental conditions of the period when the animal lived could also be suggested, if the geological structure in which the teeth were found is known. Physical anthropologists do not study fossil forms of primate only, but also they are equal interested in the study of living primates for various reasons, including comparative anatomy. A study of fossil parts in comparison to that part of living primates helps to understand the relationship between the two, namely, the living and the extinct types. Fossil Primates: As regards the fossil primates of the Tertiary period, they are mostly represented only by teeth and fragments of jaw and in some cases parts of skull. In very rare case other skeletal parts were discovered these fossil remains were studied by various anthropologists and paleontologists, and threw light on the understanding of the origin and evolution of primates. In proceeding section we shall deal with some of the important fossil types of the different epochs of Tertiary period to have some idea about primate evolution. The search for fossil remains is going on in different parts of the globe and thereby new information is being added day by day.

In future the new findings may throw new light on the subject. Line of Evolution: The living primates of modern time may be graded in this way Providian, Monkey, Ape and Man. These four grades suggest the line of evolution. Therefore, a comparative study of the physical features of the

living primates and the extinct types of the different grades and times helps in outlining the origin and development of the primate groups.

Primates and Mammals: The modes of reproduction and development may be considered as chief features for distinguishing mammals from reptiles. In fossil remains, however, differentiation of the teeth into incisors, canines, premolars and molars, simplification of the lower jaw to a single bone, changes in the number of bones of the skull and their characteristics are some of the distinguishing features of mammals. But it is very difficult to distinguish the first primates from other early mammals. Because the bones of the early primates, until they acquired the distinctive primate characters, do not suggest their special adaptive patterns. Earliest Primates: It can be said that the earliest primates of the Paleocene epoch were small Positions.

They resembled modern tree shrews or lemurs. During the Eocene epoch lemurs and tarsus of various kinds were distributed across North America, parts of Europe and Asia. But gradually their number decreased.

By the end of Eocene epoch they became almost extinct in Europe and America. This was because of onslaught of other competing mammals like rodent and carnivore. In the old world they had to compete with higher primates which evolved from Providian forms. Therefore, though in Enshrine time there were as many as 20 fossil types of triode, at present there is only one living genus, 'known as tarsus with three living species. At present lemurs are confined to Africa, Madagascar, Indonesia and Philippines only. In the later period, the platy Rhine monkeys evolved from Position forms in the

New World, while in the old world catarrh monkeys, apes and man emerged from same promising.