

General Organisation of Primates (Part II)

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Continued from Part I

Organisational characteristics of suborder

Tarsioidea of order Primate -

- (i) Arboreal, nocturnal, insectivorous and solitary in habit.
- (ii) Head with shorter snout.
- (iii) Eyes large, forward with good vision.
- (iv) Orbits communicate with temporal fossae by a wide fissure.
- (v) Tail is longer with a tuft at the tip and non-prehensile.
- (vi) Limbs are extremely long, hindlimbs longer than the forelimbs.
- (vii) Digits have adhesive pads and flat nail except the second and third toes which have claws.
- (viii) Cerebellum not covered by cerebrum.
- (ix) Bicornuate uterus, clitoris transverse urethra.
- (x) Placenta deciduate, metadidymous.

Dental formula $\frac{2.1.3.3}{1.1.3.3} = 34$.

Includes a single genus with 3 species (Tarsius spectrum).

The members of this genus are mostly found in East India and occupy an intermediate position between lemurs and anthropoids. Tarsius spectrum is 6 inches (15.0 cm) long and head is monkey-like but with minute nose, long pinnae and enormous protruding eyes directed forwards, looking like spectacles and have binocular vision. Tarsier can completely turn its head around without moving the body. Limbs are long, the hindlimbs being longer with elongated tarsals, hence the name. They have five digits with small adhesive pads and flat nails, except the second and third digits of the foot which have retained the ancestral claws. Tail is long with a bushy tuft at the tip. Venter of the tail is scaly. It is nocturnal, insectivorous and arboreal living in pairs in hollows of trees. It also feeds on small amphibians and reptiles.

Organisational characteristics of animals belonging to suborder III - Anthropoidea of order Primata →

- (i) They are terrestrial or arboreal in habit. They are diurnal and gregarious.
- (ii) Head with short face.
- (iii) Eyes forward with fine vision.

- (iv) Orbits are separated from temporal fossae by a bony partition.
- (v) Tail whorls present, prehensile.
- (vi) Hands and feet are prehensile, except in man.
- (vii) Fingers and toes have flat nails, except in few forms.
- (viii) Cerebral hemispheres are more highly developed and covers the cerebellum.
- (ix) Uterus simplex, clitoris not transversed by urethra.
- (x) Placental deciduate, metadiscoidal.
- (xi) Dental formulae $\frac{2.1.2.3}{2.1.2.3} = 32$.

Species belonging of this kind of primates are old world and New world Monkeys, Apes, Man.

Ateles commonly called Spider monkey are found in Madagascar. There are like lemurs in any ways. There is one incisor on each side in each jaw continually growing as in rodents and used for gnawing. It has a very long and very middle finger for impaling insect grubs.

Alouatta, Howling Monkey, is known for its loud howling due to an ossified bag-like outgrowth of the larynx which a resonator and a much bell-shaped hyoid being

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pharyngeal air- sacs. In howling, the throat is inflated. Howling is to assert the territorial rights of the clan. There are the largest of the nine world monkeys with a ugly look and protruding throat, naked face, hairs on the forehead.

Gorilla, has a single species restricted to tropical Africa's forests. It is about 5 and a half feet (165 cm) high and has a massive build weighing upto 600 lbs (270 kg). The skin and coarse hair are black and chest is broad.

Powerful legs arms reach the middle of the legs is standing. Skull has a heavy sagittal crest for very powerful neck muscles. Brow ridges are prominent, jaws are heavy and project forwards, canines are large. It is a very intelligent and fierce Ape. On ground, locomotion is bipedal and plantigrade. It is transitional between an arboreal and terrestrial life. It builds nests in trees and on frugivorous.

Hence, primates are a group of mammals with characteristic plantigrade of organisation and opposable thumb. It includes arboreal, aerial also terrestrial as well as aquatic mammals. Some of their species may bear primitive mammalian characters, while some of them bears most advanced mammalian characters.