Dept. Of Anthropology Study Material BSc General (CBCS) Paper - DSC-2 (C2T)

Q. Classification and features of anthropoid apes.

Classification of Primates



Classification of primates is primarily based on the similarities and dissimilarities of external morphology, although phylogenetic classifications have also been done. Primates consist of two suborders: Strepsirrhini and Haplorrhini.

Platyrrhini (New World Monkeys)

- Flat nose with nostrils projecting sideways separated by a wide septum.
- Dental formula 2132 or 2133.
- Seen only in tropical forests of southern Mexico, central and south America.
- Exclusively arboreal and herbivore.
- Many members have a tail as a third hand.
- Includes 2 families: Cebidae and Callitricidae comprising 53 species
- Cebidae includes squirrel and Capuchin monkey, night and titi monkeys, Howler and spider monkeys, Uakaris and sakis.
- Callitricidae consist of Marmosets and tamarins.

Catarrhini (Old World monkeys, Apes and Human)

- Downward projecting nostrils with small narrow septum separating them.
- Inhabitants of south and east Asia, the Middle East and Africa.
- Comprises 7 species in two families, namely Cercopithecinae and Colobinae.

- Cercopithecines includes baboons, Mangabeys, Mandrills, guenons, patas monkeys and Macaques.
- Macaques are most successful by spreading all over the world and are mostly used for clinical research purposes.
- Colobines are also called as leaf-eating monkeys.
- They have sacculated stomach for better digestion of plant materials.

Apes and Humans:

- Both are members of Superfamily Hominoidae and further divided into two families viz., Hylobatidae (Gibbons) and Hominidae (Orangutans, African apes {gorilla and chimpanzee} and Human).
- Gibbons:
 - Also called lesser apes.
 - They are excellent brachiators (suspensory climbing) and are monogamous.
- Orangutans:
 - Largest and rarest Asian apes.
 - Usually walks by quadrupedal.
 - Facing the danger of extinction.
- African Apes:
 - Gorilla Largest Apes.
 - Possessing "quadrupedal knuckle walkers".
 - As of 2011, only 786 gorillas in the world.
 - Chimpanzees More closely resemble humans than a gorilla.
 - Quadrupedal knuckle walkers as a gorilla
 - Intelligent animals with generally pleasant personalities.
 - Their interactions can be quite noisy, violent, and sometimes fatal.
- Bonobos:
 - Close relatives of chimpanzees.
 - Sometimes referred to as pygmy chimpanzees.
- Humans:
 - Only living species Homo sapiens.
 - Shows sexual dimorphism similar to that of other apes.
 - Humans and African apes have the same internal organs, same bones and some blood groups in common.
 - Erect posture and bipedalism due to modified pelvic bone sand spinal column.
 - Humans and chimpanzees share 96% similarities in DNA base-pair sequences.
 - This shows that the two species had a common ancestor and got evolved into separated species 6-7 million years ago.