**PRACTICAL**

**GIBBON**

 **TAXONOMIC CLASSIFICATION**

**Order: Primate; Sub-order: Haplorrhine; Infraorder: Anthropoidea**

**Series: Catarrhine; Superfamily: Hominoidea; Family: Hylobatidae**

Gibbon belongs to the family Hylobatidae.. They are also called as lesser apes because they are the smallest of all the apes. Gibbons are found in the tropical and sub-tropical rain forests of Asia, from eastern Bangladesh and northeast India to southern China and Indonesia, Sumatra, Borneo, and Java. Some of the important characteristics are:

1. Skull has a short snout with globular braincase.
2. The average cranial capacity is estimated as 98cc.
3. Orbits are large with relatively wide inter-orbital distance.
4. The supra orbital ridges are prominent.
5. Their dental formula is 2.1.2.3/2.1.2.3.
6. The dental arcade is U shaped
7. The mandible is shallow with broad ascending ramus.
8. They have relatively simple molar teeth with low, rounded cusps, sectorial front teeth and long, dagger like canines in both sexes.
9. Sexual dimorphism is absent in dentition.
10. The position of foramen magnum is placed far backwards.
11. The nuchal region is rough.
12. Chin is absent

 **ORANG UTAN**

 **TAXONOMIC CLASSIFICATION**

**Order: Primate; Sub-order: Haplorrhine; Infraorder: Anthropoidea**

**Series: Catarrhine; Superfamily: Hominoidea; Family: Pongidae;**

**Genus: Pongo**

The orangutans are the other Asian apes found only in the rainforests of Borneo and Sumatra. They are classified under one genus *Pongo*, with two species, [Bornean orangutan](https://en.wikipedia.org/wiki/Bornean_orangutan) (*P. pygmaeus*) and the [Sumatran orangutan](https://en.wikipedia.org/wiki/Sumatran_orangutan) (*P.abelii*). Some of the characteristics are:

1. The orangutan has a large head with a massive mouth.
2. The cranium of the gorilla is smaller compared to the face.
3. The forehead is less developed and slopes backward.
4. The orbits are more or less rounded.
5. The supra-orbital ridges are prominent but continuous.
6. The sagittal crest is most commonly seen.
7. The average cranial capacity is estimated as 416 cc
8. .The nasal bones are long and flat.
9. Their dental formula is 2.1.2.3.
10. They have sharp, pronounced canines in the upper jaw
11. The dental arcade is **U** shaped.
12. **Diastema is present** between the upper incisors and canines.
13. The position of foramen magnum is placed far backwards.
14. The nuchal region is rough.
15. Chin is absent.

**Chimpanzee**

 **TAXONOMIC CLASSIFICATION**

**Order: Primate ; Sub-order: Haplorrhine; Infraorder: Anthropoidea**

**Series: Catarrhine; Superfamily: Hominoidea; Family: Pongidae;**

**Genus: Pan**

Chimpanzees are one of the two great apes found in Africa. It belongs to the family Pongidae with only one genus Pan. The genus Pan has two extant species: the *Common Chimpanzee* (*Pan troglodytes*) and the *Bonobo (Pan paniscus).* The Common Chimpanzees are foundin the West and Central Equatorial Africa (north of the Congo River) and the *Bonobo*, also called as pygmy chimpanzee or dwarf chimpanzee live in the south of the Congo River and north of Kasai River in the Democratic Republic of Congo (Central Africa). Some of the characteristics are:

1. The chimpanzee head is round with a prominent prognathous face.
2. Forehead is smaller with a enormous face.
3. The average cranial capacity of the chimpanzee is estimated as 400 cc
4. The supra-orbital ridges is prominent but separated. .
5. The orbits are more or less elliptical.
6. The forehead is receding with a flat nose.
7. The nasal bones are short and flat.
8. Their dental formula is 2.1.2.3.
9. They have sharp, pronounced canines in the upper jaw
10. The dental arcade is **U** shaped.
11. **Diastema is present** between the upper incisors and canines.
12. The position of foramen magnum is placed far backwards.
13. The nuchal region is rough.
14. Chin is absent.

**Gorilla**

 TAXONOMIC CLASSIFICATION

**Order: Primate ; Sub-order: Haplorrhine; Infraorder: Anthropoidea**

**Series: Catarrhine; Superfamily: Hominoidea; Family: Pongidae;**

**Genus: Gorilla**

Gorillas are the largest living genus of the family Pongidae. They are found in the forests of central Africa. The genus *Gorilla* has two species: the *Eastern Gorillas* (Gorilla beringei) and *the Western Gorillas* (Gorilla gorilla). Some of the characteristics of the skull of the Gorilla are:

1. The skull is large with a smaller cranium and a long projecting face.
2. The average cranial capacity is estimated as 500 cc.
3. The supra-orbital ridges are massive and fused.
4. The nasal bones are long and wide.
5. The sagittal crest is most commonly seen in adult male gorillas.
6. They have four types of teeth (incisor, canine, premolar and molar) and the dental formula is 2.1.2.3 / 2.1.2.3 .
7. The canines and incisors are large and sexually dimorphic.
8. The dental arcade is **U** shaped.
9. **Diastema is present** between the upper incisors and canines.
10. The lower jaw or mandible in apes is large and massive, for which the temporal area where temporal muscles get attached to hold the jaw is also large.
11. In apes, the nose is flat, nasal bridge and the root of nose does not show any elevation and the tip of the nose is absent.
12. The position of foramen magnum is placed far backwards.
13. The nuchal region is rough.
14. Chin is absent.