

study time

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MON TUE WED THU FRI SAT SUN

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for B.Sc part 3rd, paper. V.U.

Q:- Write note on Fossil History
of man?

Ans:- Human evolution :-

Human evolution
is the evolutionary process that
led to the emergence of
anatomically modern humans, beginning
with the evolutionary history
of primates - in particular gorilla
- and leading to the emer-
gence of homo sapiens as a
distinct species of the hominid
family, the great apes. This pro-
-cess involved the gradual develo-
-pment of traits such as human
bipedalism and language, as well
as interbreeding with other homi-
-ns, which indicate that human
evolution was not linear but
a web.

The study of human
evolution involves several scientific

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disciplines, including physical anthropology, primatology, archaeology, paleontology, neurobiology, ethology, linguistics, evolutionary psychology, embryology and genetic studies show that primates diverged from other mammals about 85 million years ago, in the late cretaceous period, and the earliest fossils appear in the Paleocene, around 55 million years ago.

Within the superfamily Hominoidea, the family Hominidae diverged from the family Hylobatidae some 15-20 million years ago; subfamily Homininae (African apes) diverged from ponginae (orangutans) about 14 million years ago; the tribe Hominini (including humans, Australopithecus, and chimpanzees) parted from the tribe Gorillini (gorillas) between 8-9 million years ago and, in turn, the

- maturely
age 5.6 million years

Encephalization :-

The human species eventually developed a much larger brain than that of other primates - typically 1,330 cm³ (81 cu in) in modern humans, nearly three times the size of a chimpanzee or gorilla brain. After a period of speciation with Australopithecus africanus and Ardipithecus species which had smaller brains as a result of their bipedal locomotion, the pattern of encephalization started with Homo habilis, whose 600 cm³ (37 cu in) brain was slightly larger than that of chimpanzees. This evolution continued in Homo erectus with 800 - 1,100 cm³ (49 - 64 cu in), and

the subtribes Hominina
(humans and extinct biped
ancestors) and maina (Chimpan-
zees) separated 4-7 million years
ago.

Bipedalism :-

Bipedalism is the
basic adaptation of the homi-
nid and is considered the
main cause behind a suite of
skeletal changes shared by all
bipedal hominids. The earliest
hominin, of presumably primi-
tive bipedalism, is considered
to be either Sahelanthropus or
Orrorin, both of which arose
some 6 to 7 million years
ago. The non-bipedal knu-
-like-walkers, the gorillas and
chimpanzees, diverged from the
hominini line over a period
covering the same time, so
either Sahelanthropus or Orror-
-in may be our last
shared ancestor. Ardipithecus
a full biped, arose approxi-

Reached a maximum in Neanderthals with 1,200 - 1,400 cm³ (73 - 116 cu in), larger even than modern Homo sapiens. This brain increase manifested during postnatal brain growth, far exceeding that of other apes (heterochrony).

See also :-

- Adaptive evolution in the human genome
- Amity - enmity complex
- The Ancestor's Tale
- Archaeogenetics
- Dawn of Humanity (PBS doc)
- Dual inheritance theory
- Dysgenics
- evolution of hair
- evolution of human intelligence
- evolution of morality
- evolutionary medicine
- evolutionary neuroscience
- evolutionary origin of religions
- The Fate of the Earth
- Human behavioral ecology
- Human evolution (origins of society)
- Human origins
- Human vestigiality