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Notes for B.Sc part 3rd, paper
VII.

Q:- Write notes on DARWINISM?

Ans:- Darwinism is a theory of biological evolution developed by the English naturalist Charles Darwin (1809 - 1882) and others, stating that all species of organisms arise and develop through the natural selection of small, inherited variations that increase the individual's ability to compete, survive, and reproduce.

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survive, and reproduce. Also called Darwinian theory, it originally included the broad concepts of transmutation of species or of evolution which gained general scientific acceptance after Darwin published on the origin of species in 1859, including concepts which predated Darwin's theories. English biologist Thomas Henry Huxley coined the term Darwinism in April 1860.

Terminological Confusion :-

Darwinism subsequently referred to the specific concepts of natural selection, the Weismann barrier, or the central dogma of molecular biology. Though the term usually refers strictly to biological evolution, creationists have appropriated it to refer to the origin of life. It is therefore considered the belief and acceptance of Darwin

and of his predecessors work, in place of other concepts, including divine design and extraterrestrial origins.

English biologist Thomas Henry Huxley coined the term Darwinism in April 1860.

It was used to describe evolutionary concepts in general,

including earlier concepts published by English philosopher Herbert Spencer. Many of the proponents

of Darwinism at that time,

including Huxley, had reservations about the significance of natural selection, and Darwin himself gave credence to what was later called

Lamarckism. The strict neo-Darwinism of German evolutionary biolo-

-gist August Weismann gained few supporters in the late 19th century.

During the approximate period of the 1880s to about 1920,

sometimes called "the eclipse of Darwinism", scientists proposed

various alternative evolutionary mechanisms which eventually proved untenable. The development of

the modern synthesis in the early 20th century, incorporating natural selection with population genetics and Mendelian genetics. Revived Darwinism in an updated form.

While the term Darwinism has remained in use amongst the public when referring to modern evolutionary theory, it has increasingly been argued by science writers such as Olivia Judson and Eugenie Scott that it is an inappropriate term for modern evolutionary theory. For example, Darwin was unfamiliar with the work of the Moravian scientist and Augustinian friar Gregor Mendel, and as a result had only a vague and inaccurate understanding of heredity. He naturally had no inkling of later theoretical developments and, like Mendel himself, knew nothing of genetic drift, for example.

Isotonic usage :-

In evolutionary aesthetics theory, there is evidence that perceptions of beauty are determined by natural selection and therefore Darwinian that things, aspects of people and landscapes considered beautiful are typically found in situations likely to give enhanced survival of the perceiving human's genes.

see also

Darwin Awards

evidence of common descent

History of evolutionary thought

Modern evolutionary synthesis

Neural Darwinism

Pangenesis - Charles Darwin's hypothetical mechanism for heredity

speciation