

FOCUS POINT

THE PATHS TRAVERSED BY LIFE

CHEMICAL EVOLUTION THEORY:-

Proponents are A.I. Oparin (Russia) and J.B.S. Haldane (Britain).

The theory states that life originated as a result of the changes that occurred in the chemical substances in sea water, under specific conditions in the primitive earth.

CHEMICAL REACTIONS LEADS TO ORIGIN OF CELL

- Atmosphere of primitive earth contain gases like hydrogen ,nitrogen , carbon dioxide, methane, ammonia, water vapour, hydrogen sulphide etc.
- No free oxygen.
- Condensation of water vapour present in the atmosphere resulting the incessant rain led to the formation of ocean.
- Within the ocean by a series of chemical reaction simple organic molecules like amino acids, monosaccharide, nitrogen bases, fatty acids etc are formed using the energy sources like thundering and lightning, UV radiations, and volcanic eruptions.
- By further reactions complex molecules like protein, polysaccharide, nucleotides, lipids etc are formed.
- In the ocean nucleic acids and lipid layer form the primitive cell.

DARWINISM OR THEORY OF NATURAL SELECTION:-

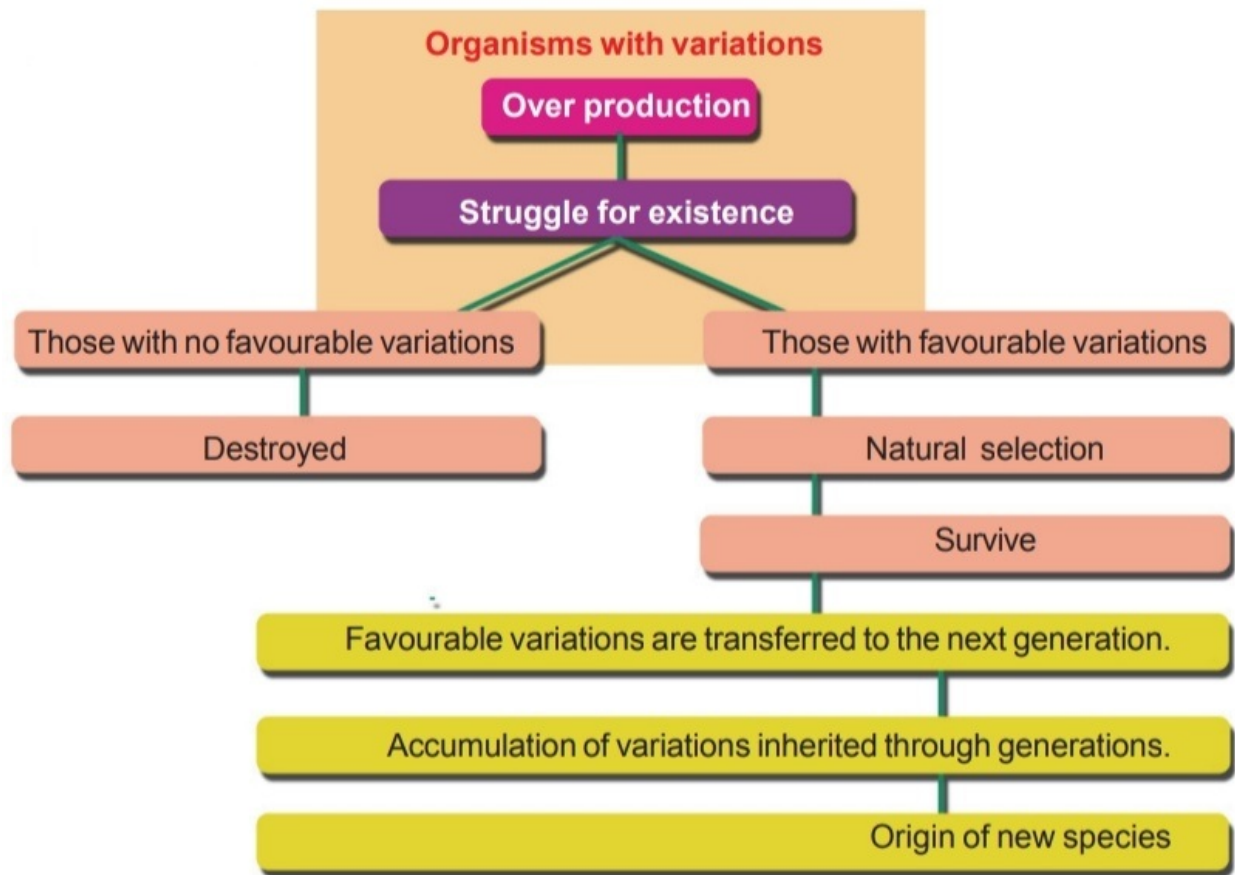
Proposed by Charles Robert Darwin, an English naturalist.

Variations develop in each species, only organisms with favorable variations to the nature, survive and those which are unfavorable get eliminated.

According to Darwin, organisms of one kind, when produced in large numbers (Over production), compete for food, space, mate and other limited resources (Struggle for existence).

In this struggle, only organisms with favorable variations survive in that nature (Natural selection).

Over a long period, the favorable variations accumulate, resulting the formation of new species.



PREPARED BY
ANEESH.M
HSA BIOLOGY
KARIMBIL HS KUMBALAPPALLY