

## **Darwinism**

### **Darwin's voyage?**

Charles Darwin began the voyage when he was just 22 in the ship HMS Beagle. The Theory of Natural Selection was put forward by him as a result of the voyage that started in the year 1831 which lasted till 1836. The epoch making book written by Charles Darwin is "Origin of Species by Means of Natural Selection."

**Which organism caught the attention of Charles Darwin during his voyage?**

The finches in Galapagos island.

- **Which peculiarity of the finches attracted Darwin?**  
The differences in their beaks attracted Darwin.
- **How do these peculiarities help finches in their survival?**

There occurred an increase in the number of finches. This led to scarcity of food. To overcome this, changes occurred to the beaks. Thus the finches were able to feed on different types of food for their survival.

**How did Malthusian ideas influence Charles Darwin?**

Malthus pointed out that the rate of food production is not proportionate to the growth of human population. Scarcity of food will lead to diseases, starvation and struggle for existence. Darwin incorporated the ideas of Malthus and propounded the theory of Natural selection.

### **What is Neo Darwinism?**

Darwin was unable to explain the reasons behind variation. The growth of genetics led to the finding that mutations are the causes of variation. Darwinism was revised in the light of new information from the branches of genetics, cytology, geology and paleontology. This modified version of Darwinism is known as Neo Darwinism.

### **What is mutation theory? Name the scientist who formulated it.**

Sudden changes that occur in the genes are called mutation. Mutation theory explains that new species are formed by the inheritance of such changes. This theory was formulated by Hugo deVries.

### **List out the evidences in support of evolution.**

Fossil study, comparative morphological studies, biochemistry and physiology, molecular biology.