## ZOOGEOGRAPHY : INTRODUCTION Dr Poonam kumari Dept Of Zoology (BSc PART III Paper VI)

Zoogeography, the branch of the science of biogeography that is concerned with the geographic distribution of animal species. Zoogeography studies distribution patterns of animal species and processes. It begins by examining some of the most intriguing zoogeographical patterns concerning animal body size, for which Bergmann and Allen formulated two famous "ecogeographical rules" which, despite being heavily criticized, are now being re-evaluated; and also cover Rapoport's rule, stating that species' latitudinal ranges are generally smaller at lower than at higher latitudes. It then highlights that understanding the observed distribution of animal species is a key task for zoogeographers. The vertebrates have characteristic patterns of distribution on the land masses.

Zoogeography is helpful in understanding the evolution The increase in number of animals by reproduction makes them distribute in all directions. Dispersal continues until barrier is reached. The reason for such discontinuous distribution of related groups is due to the development of the barriers or due to the extinction of forms In the intermediate area.

The idea of Zoogeography was originally contributed by P.L Sciater. He studied the geographical distribution of birds in his paper 'Schema distributions avium geographicae'.

He divided the continents into six Geographical regions. Huxley grouped four regions that cover Africa, Eurasia, and North America are called the unit as 'Arctogaea'. He included South America and Australia under Notogaea'. Blanford divided the land masses into three main divisions

- 1) Arctogaea; Eurasia; North America and Africa.
- 2) South American region
- 3) Australian region.

According to Darlington the continents of the whole world can be divided into.

- 1.Nearctic region
- 2.Palaearctic region
- 3. Neotropical region
- 4. Ethiopian region
- 5. Oriental region
- 6. Australian regions.

## What Is Ecological Zoogeography

Biogeography studies the patterns of distribution of biological systems, processes or characteristics at several spatial and temporal scales. Spatial scales under analysis span over a wide range, including genes, organisms or groups of organisms and ecosystems or biomes.