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 - 206001 (B.U.A.). Notes for B.Sc
 part 3rd, paper VII.

Q:- Write Notes on ZOOGEOGRAPHICAL REALM OF THE WORLD.

Ans:- Zoogeography:-

Zoogeography is the science of biogeography that is concerned with geographic distribution (present and past) of animal species.

As a multifaceted field of study, zoogeography incorporates methods of molecular biology, genetics, morphology, phylogenetics, and geographic information systems (GIS) to delineate evolutionary events within defined regions of study around the globe. Once proposed by Alfred Russel Wallace, known to be the father of zoogeography, phylogenetic affi-

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ties can be quantified among zoogeographic regions, further elucidating the phenomena surrounding geographic distributions of organisms and explaining evolutionary relationships of taxa.

Advancements in molecular biology and theory of evolution within zoogeographical research has unraveled questions concerning speciation events and has unraveled questions concerning speciation events and has expanded phylogenetic relationships among taxa. Integration of phylogenetics with GIS provides a means for communicating evolutionary origins through cartographic design. Related research linking phylogenetic and GIS has been conducted in areas of the southern Atlantic, Mediterranean, and Pacific Oceans. Recent innovations in DNA



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both - coding, for example, have allocated for explanations of phylogenetic relationships within two families of marine venomous fishes, Scorpaenidae and Tetraodontidae, residing in the Andaman Sea. Continued efforts to understand species evolutionary divergence articulated in the geological time scale based on fossil records for killifish (Aphanius and Aphanius-lebias) in locales of the Mediterranean and Paratethys areas revealed climatological influence during the Miocene.

Zoogeographic Regions :-

Schrenck (1853) proposed 27 regions, while Woodward proposed 18 marine, Munnay (1866) proposed 4, Blyth (1871) proposed 6, Newton (1892) proposed 6, Gaston (1893) proposed 4.

Philip Sclater (1858) and

Alfred Wallace (1876) identified the main zoogeographic regions of the world (used today): Palearctic, Ethiopian (today Afrotropic), India (today Indomalayan), Australasian, Nearctic and Neotropical.

Marine regionalization began with Ostmann (1896).

Schler (1858) :-

Ornithio palaeogeana

- I. Regio Palearctica
- II. Regio Aethiopica
- III. Regio Indica
- IV. Regio Australiana

Ornithio Neogeana

- V. Regio Nearctica
- VI. Regio Neotropica

Huxley (1868) :-

Huxley (1868) Scheme.

- Arctogea

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Neartic Province

Palaearctic province

Ethiopian province

Indiam Province

Notogeo

o Austro-columbic province (= Neotropical - col)

o Australasia province (= Australian & eastern palaentropical)

Wallace (1876) :-

- Palaearctic region
- Ethiopian region
- Oriental region
- Australian region
- Neotropical region
- Neartic region

see also :-

- Animal geographies
- Fauna
- Animals
- zoology
- Leon craizat



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