

B.Sc ZOOLOGY SYLLABUS UNDER CBCS

III ..SEMISTER

CORE PAPER..III

ECOLOGY, ZOOGEOGRAPHY AND DEVELOPMENTAL BIOLOGY

BLOCK – I ECOLOGY

Unit –1 : Ecosystem structure and functions, Types of Ecosystems –Aquatic and Terrestrial.

Unit –2 :Biogeochemical cycles - Nitrogen, Carbon, Phosphorus and Water.

Unit –3 :Energy Flow in Ecosystem, Tropic levels, Food chains, Food web and Ecological Pyramids

Unit –4 :Animal Associations - Mutualism, commensalism, parasitism, competition, predation. Community Structure and dynamics and Ecological Succession.

Unit –5 :Ecological Adaptations

Unit- 6 :Wildlife conservation - National parks and Sanctuaries of India, Endangered species. Biodiversity and hotspots of Biodiversity in India.

BLCOK – II ZOOGEOGRAPHY

Unit –7 :Zoogeographical regions – Palaearctic, Nearctic, Neotropical, Oriental, Australian and Ethiopian regions - their Climatic and faunal peculiarities

Unit –8 :Wallace line and Discontinuous distribution. Continental drift

BLOCK – III DEVELOPMENTAL BIOLOGY

Unit –9 : Types of Eggs, Fertilization and Development upto Gastrulation

Unit –10 : Organogenesis

Unit –11 : Foetal Membranes in Chick

Unit –12 : Placentation in Mammals

B.Sc PRACTICAL SYLLABUS FOR II SEMISTER

ZOOLOGY- CORE PAPER..III

ECOLOGY, ZOOGEOGRAPHY AND DEVELOPMENTAL BIOLOGY

LABORATORY MANUAL & RECORD

Unit – I: Determination of pH of Soil and Water

Unit –2: Estimation of salinity (chlorides) of water in given samples.

Unit – 3: Estimation of Carbonates in the given water samples.

Unit- 4 : Estimation of Bicarbonates in the given water samples.

Unit – 5: Estimation of dissolved oxygen of pond water, sewage water and effluents.

Unit – 6: Identification of Zooplankton from a nearby water body.

Unit – 7: Study of Pond Ecosystem / local polluted site - Report submission

Unit – 8: Study of at least 3 endangered or threatened wild animals of India through photographs / specimens / models

Unit – 9: Field visit to Zoo Park to study the management, behavior and enumeration of wild animals.

Unit – 10: Identification of Zoogeographical realms from the Map and identify specific fauna of respective regions.

Unit – I1: Observe the response of invertebrates in different lightening conditions.

Computer aided techniques should be adopted as per UGC guide lines.
