

KAKATIYA UNIVERSITY

Under Graduate Courses (Under CBCS 2019 - 2022)

B.Sc. ZOOLOGY III Year

SEMESTER – VI

ECOLOGY, ZOOGEOGRAPHY AND EVOLUTION

Theory
Practical

4 Hours/Week 4 Credit
3 Hours/Week 1 Credit

Internal marks = 20
External Marks = 80

UNIT – I

1.1 Ecology- I

- 1.1.1 Ecosystem Structure and Functions; Types of Ecosystems – Aquatic and Terrestrial
- 1.1.2 Bio-geo chemical nutrient cycles - Nitrogen, Carbon, Phosphorus and Water
- 1.1.3 Energy flow in ecosystem
- 1.1.4 Food chain, food web and ecological pyramids
- 1.1.5 Animal Associations-Mutualism; Commensalism;Parasitism; Competition, Predation

UNIT – II

2.1 Ecology – II

- 2.1.1 Concept of Species, Population dynamics and Growth curves
- 2.1.2 Community Structure and dynamics and Ecological Succession
- 2.1.3 Ecological Adaptations
- 2.1.4 Environmental Pollution- Sources, Effect and Control measures of Air, Water, Soil and Noise Pollution
- 2.1.5 Wildlife conservation - National Parks and Sanctuaries of India, Endangered species; Biodiversity and Hotspots of Biodiversity in India.

UNIT – III

3.1 Zoogeography

- 3.1.1 Zoogeographical regions
- 3.1.2 Climatic and faunal peculiarities of Palaearctic, Nearctic, Neotropical, Oriental, Australian and Ethiopian regions
- 3.1.3 Wallace line, Discontinuous distribution
- 3.1.4 Continental Drift

Unit – IV

4.1. Evolution

- 4.1.1 Theories of Evolution – Lamarckism, Neo-Lamarckism, Darwinism, Neo-Darwinism, Modern synthetic theory, Evidences of Evolution.
- 4.1.2 Forces of Evolution–Natural Selection, Genetic drift, Gene flow, Genetic load, Organic variations,Hardy Weinberg Equilibrium.
- 4.1.3. Isolation –Premating and post mating isolating mechanisms.
- 4.1.4 Speciation: Methods of Speciation - Allopatric and Sympatric; Causes and Role of Extinction in Evolution.


HEAD
Department Of Zoology
University College
Kakatiya University,
WARANGAL.-506009(T.S)


Dr. G. SHAMITHA
Chairperson
Board of Studies
Department of Zoology & Sericulture Unit
KAKATIYA UNIVERSITY - WGL-506009 (T.S)