

SARDAR PATEL UNIVERSITY
Programme: BSC (ZOOLOGY)
Semester: V
Syllabus with effect from: June 2013

Paper Code: US05CZOO06	Total Credit: 3
Title Of Paper: Environmental Biology	

Unit	Description in detail	Weighting (%)
1	Introduction & subdivision of Ecology Ecosystem: Introduction & definition <ul style="list-style-type: none"> • structure of typical ecosystem • Types of ecosystem Aquatic: Freshwater, Marine, Estuarine habitat Terrestrial: Land, Desert habitat	
2	Functional aspects of ecosystem: <ul style="list-style-type: none"> • Productivity • Food chain, Food web • Energy flow, Ecological pyramids • Nutrient cycling in ecology 	
3	Ecosystem degradation: Important cause of ecosystem degradation <ul style="list-style-type: none"> • Deforestation, overgrazing • Agricultural, mining & urbanization • Ganga Action Plan (GAP) Animal organization at population level & community level. Animal association: intra & inter specific animal relationships.	
4	Environmental Pollution: Definition, Types & classification of pollution. Water, Air & Land pollution Noise pollution & Radiation pollution Major anthropogenic global environment problems: <ul style="list-style-type: none"> • Acid rain, green house effect • Ozone depletion • Eutrophication • Global warming & climatic change 	

Basic Text & Reference Books:

- Ecology & Environment: P.D.Sharma
- Ecology: Mohan P. Arora
- Environmental biology: P.S.Verma & V.K.Agrawal
- Zoology for IAS: Satguru Prasad
- Fundamentals of Toxicology: Kameshwar Panday
- Environmental chemistry: B.K.Sharma
- Modern Toxicology: P.K.Gupta & Salunkhe

