

SARDAR PATEL UNIVERSITY
Programme: B.Sc
Semester: IV
Syllabus with effect from: November - 2012

Paper Code: US04CENV01	Total Credit: 3
Title of Paper: Components of Ecology	

Unit	Description in detail	Weightage (%)
I	Ecological adaptation: Ecological adaptations (Morphological and Anatomical) of Hydrophytes, Xerophytes, Halophytes, Ecological adaptation (Morphological and Anatomical) of animals (Mesocoles, Xerocoles)	25%
II	Biogeochemical cycles and nutrient cycling : Illustrated account of Carbon cycle, Oxygen cycle, Nitrogen cycle, Phosphorus cycle. Sulphur cycle, Mineral cycle	25%
III	Biotic Interaction : Relationship among organisms, positive interactions (Symbiosis, protocooperation, commensalisms), & negative interactions (Parasitism, antibiosis, competition, predation). Leibigs Laws of minimum, Shelford's law of tolerance, Biological clock.	25%
IV	Phytogeography: Definition, Major plant communities of the world, Phytogeographical regions of the world, soil, climate, Floristic regions of India. Zoogeography: Definition, factors determining distribution of animals with space, Zoogeographical regions of the world: Diverse fauna of India, Biodiversity in India.	25%

Basic Text & Reference Books :-

- Fundamentals of Ecology - E.P.Odum (1997) Natraj Publishers, Dehradun
- Fundamentals of Ecology - M.C.Dash (1993) Tata Mc. Graw Hill Pub.
- Ecology and Environment - P.D.Sharma
- The way the world works - Environmental sciences - Nebel & Wright (1996) Prentice Hall Publication.
- Plant Ecology - Weaner & Clements (1938) Mc Graw Hill.
- The nature of Life - Hopson (1995) Mc.Graw Hill.

