

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

Paper Code: US05CBOT04	Total Credit: 3
Title Of Paper: Ecology of Plants	

Unit	Description in detail	Weighting (%)
1	Introduction Basic concepts of ecology Terminology of ecology Approaches of ecology Interaction of ecological factors Ecology- its relation to other science and its relevance to human civilization. The sub divisions of ecology	
2	Factors affecting the life of plants Biological clock Autecology - morphology & geographic distribution Libig's law of minimum Shelford's law of tolerance Combined concepts of limiting factors Ecosystem levels Ecological indicators	
3	Concepts of resources Types of resources Water resources, sources of water, water quality. Forest resources- deforestation, desertification, forest conservation through law Concept of soil Formation of soil (origin) Factors involved in soil formation- soil profile, soil conservation, soil degradation	
4	Community: structure and classification Characteristics of a community Characters used in community structure Methods of study of community Main concept in classification of community Freshwater ecology. Marine ecology.	

Basic Text & Reference Books:

- Ecology and Environment - By P. D. Sharma
- College botany- volume I - By Gangulee, Das & Datta
- Fundamentals of ecology - By Eugene P. Odum (Third edition)
- Ecology - by E. Odum, E (2008) oxford and IBH publisher
- Sharma, P. D (2010) Ecology & Environment (8th ed.), Rastogi publication.

