

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

Paper Code: US04CENV02	Total Credit: 3
Title of Paper: Environmental Pollution, Wild Life & Biodiversity	

Unit	Description in detail	Weightage (%)
I	Air Pollution: Causes of air pollution, Some important pollutants of air (CO _x , SO _x , NO _x , HC and Particulates) - their sources and effects on living and non-living. Photochemical Smog: Definition, formation and types.	25%
II	Water Pollution: Sources of pollution of surface and ground water, Water pollution parameters - physical, chemical and biological; Types of water pollutants. Effects of water pollution on water bodies and aquatic life, vegetation and human health	25%
III	Wildlife and Biodiversity: Wildlife of India, Endangered flora and fauna of India, Wildlife management in India, Biodiversity : Concept, Types of diversity: Local, Regional, α and β diversity, Protected Areas Network, Biosphere reserves, National parks, Wildlife Sanctuaries, Sacred groves.	25%
IV	Environmental Priorities and Strategies: Indian Environmental Problems: Population stabilization, Integrated land use planning, Healthy cropland and grassland, Woodland and revegetation of marginal lands, Conservation of Biological Diversity, Renewable Energy systems, Recycling of wastes and residues, Human settlements, Environmental education, Environmental legislation.	25%

Basic Text & Reference Books :-

- Environmental chemistry - A.K.De (1995) Eastern Wiley.
- Environmental chemistry - Stanely E. Manahan, Lewis Publishers
- Handbook of National parks, sanctuaries and Biosphere reserves in India - S.S.Negi (1995) Indus Pub.
- Environmental concerns and strategies - T.N.Khoshoo (1991) Ashish Pub. House New Delhi.
- Principles of Geomorphology - William D. Thornbury, New Age International Pub.
- A text book of Geology - P.K. Mukherjee, (2000) The world press pvt ltd.
- Physical geography - Savindra Singh, Prayag Pustak bhawan.
- The Nature and Properties of Soils - Nyle C. Brady. Prentice Hall Pub.

