ENS 502 LAND, WATER AND BIODIVERSITY RESOURCES

(Credits 04)

OBJECTIVE

To familiarize the learners about land, water and biological resources; their extent, importance and cause of degradation; and measures for their conservation and sustainable use

SYLLABUS

Land Resources: Characteristics; Landuse pattern and land utilization; Wetlands; Landcover

changes; Land degradation and wastelands; Soil amelioration and conservation of wastelands; Land-related hazards and mitigation; Assessment of landuses

Water Resources: Forms and status; Characteristics and utilization; Major threats to water

resources; Development and conservation of water resources

Biodiversity Resources: Concept, status, types and importance; Biodiversity measurement; Loss of

biodiversity; Conservation and sustainable use of biodiversity

SUGGESTED READINGS

Environmental Studies: Crisis to Cure- R. Rajagopalan, Oxford University Press, New Delhi.

Energy, Environment and Resource Conservation- J.S. Singh, S.P. Singh and S.R. Gupta, Anamaya Publishers, New Delhi.

Biodiversity and Global Change- O.T. Solbring, H.M. Van Emden and P.G.W.T. Van Oordt (eds.), CAB International, UK and IUBS, Paris, France.

Biodiversity and Ecosystem Functions- Ernst-Detlef Schulze and Harold A. Money (eds.), Springer-Verlag, Berlin. Global Biodiversity Assessment- V.H. Heywood (Ex ed.), Published for the UNEP by Cambridge University Press, Cambridge.

Hot Spots of Endemic Plants of India, Nepal and Bhutan- M.P. Nayar, TBGRI, Tiruvanantpuram.

Bankin on Biodiversity- P. Shengji (ed.), ICIMOD, Kathmandu, Nepal.

Wetlands, Biodiversity and The Ramsar Convention- A.J. Hails (ed.), Ramsar Convention Bureau, Ministry of Environment and Forests (GOI), New Delhi.

Planning A Wildlife Protected Area Networks in India- W.A. Rodgers and H.S. Panwar, India: Establishment of Wildlife Institute of India, Dehradun and FO, Rome.

Conserving Biodiveristy Outside Protected Areas- P. Hallday and D.A. Gilmour (eds.), IUCN, Gland, Switzerland. Biological Diversity Conservation and the Law- C.de Klemn and C. Shine, Environmental Policy and Law Paper No. 29, IUCN, Gland, Switzerland.