DEPARTMENT OF BIOSCIENCES

M.Sc. ENVIRONMENTAL SCIENCE

ESS 552 ENVIRONMENTAL CONSERVATION AND MANAGEMENT

39 hrs.

Course Outcomes:

CO1 Know the objectives of conservation.

CO2 Study the role of institutions at local, regional, national and global levels.

CO3 Understand the different methods of conservation.

UNIT I (13 Hours)

Objectives of conservation, concepts of conservation and preservation, development and conservation, conservation of natural resources - air, water, biota. Regional, national and global conservation strategies.

UNIT II (13 Hours)

Methods of conservation: Gene reserves, biosphere reserves, national parks, sanctuaries, national heritage; phytoclimates of Peninsular India, botanical gardens, extinction of species, concepts of threatened, rare, vulnerable and endangered species.

UNIT III (13 Hours)

Biodiversity conservation: Framework for managing biodiversity; priorities for conservation, sustainable use of biodiversity for natural resource management, protecting ecosystems, species, populations and genetic diversity. Capacity building for resources management; Institutions at local, regional, national and global levels.

References:

- 1. Rajendra Maneria, Environment Conservation and Planning.
- 2. Khenshoo, T.N., Environment Concerns and Strategies.
- 3. Tiwari, S.K., 1997. Wildlife Sanctuaries of Madhya Pradesh.
- 4. Khan, T.I., 2000. Global Biodiversity and Environment Conservations. Pointer Publishers, Jaipur.
- Tomer Tubishers, Jaipar.
- 5. Bennett, H.H., 2002. Soil Conservation.
- 6. Deka, M.M., 2002. Joint Forest Management of Water Projects.
- 7. Gangstad, E.O., 2002. Environment Managements of Water Projects.
- 8. Maitra, M.K., 2002. Watershed Management; Project, Planning, Development and Implementation.
- 9. Ural, O., 1980. Soil and Water Conservation