

**CORE COURSE IX – FOREST RESOURCE MANAGEMENT**

**Unit I**

Forest – Forest ecology-biotic and abiotic factors – forest types and classification: State of World's forest. Functions of Forest. Threats to forest ecosystem and forest resources; Impacts of Deforestation on quality of the Environment Forestry; Introduction – objects – branches

**Unit II**

Forest management and management system: objectives and principles; Introduction to Silviculture, silvicultural systems and techniques; stand structure and dynamics, sustained yield relation; growing stock; regulation of yield; management of commercial forests, forest cover monitoring

**Unit III**

Social forestry: different dimensions of social forestry – scope of social forestry, village woodlot – strip plantations – farm forestry-agro forestry; backyard planting-urban forestry – Multipurpose forestry: Approaches to afforestation of barren lands. Joint forest participatory management

**Unit IV**

Bio diversity; Levels and types of biodiversity; Biodiversity hot spots. Threats to biodiversity predator control, exotic introductions, parasites and diseases. Protection and conservation of flora and fauna. Preservation of wet lands; protection measures taken at global level

**Unit V**

Forest surveying and engineering-different methods of surveying maps and reading, Forest laws their role in nature conservation; planning and evaluation – tools and approaches for integrated planning; Forest laws: Multipurpose development of forest resources and forest industries development.

**References:**

1. Khanna, L.S. and Chaturvedi, 2000 Handbook of Forestry, Khanna Bandhu Publication, Delhi
2. Negi, S.S. 1997, Forest law and policy, International book distributor
3. Dwivedi A.P. 1993, Forestry in India, Surya Publications, Dehra Dun
4. Lal. J.B. 1992, Deforestation; Causes and control in : Status of Indian Forestry: Problems and perspectives, P.K. Khosla (ed.) Indian society of tree Scientists, solan, p 33-49.