Silviculture

1. Silviculture and its Place in Forestry
    1.1.   Purpose of Silviculture
    1.2.   Silviculture as applied ecology
    1.3.   Relationship with forest management and social sciences
    1.4.   Silviculture and long term economic viewpoint

2. Stand Dynamics
    2.1   Initiating disturbances and succession
    2.2   Natural regeneration
    2.3   Artificial regeneration
    2.4   Tending operations
    2.5   Management of growth and stand yield by tending operations

3. Silvicultural Systems
    3.1   Characteristics of Silvicultural System
    3.2   Scope and purpose of Silvicultural Systems
    3.3   Classification of Silviculture systems
    3.4   Selection of Silvicultural Systems in Nepalese context

4. Silvicultural Management
    4.1   Timber management
.   4.2   Watershed ecosystem management
    4.3   Wildlife habitat management

5. Silvicultural Control of Damaging Agencies
    5.1   Protection against Abiotic agencies
    5.2   Protection against Biotic agencies
    5.3   Damage control cuttings

6. Site Classification and Species Selection
    6.1   Methods of Identifying and classifying sites
    6.2   Selection of species at different sites applicable to Nepal

7. Tree Improvement
    7.1   Economics of Tree Improvement
    7.2   Methods used for tree improvement,
    7.3   Importance and management of seed orchard
    7.4   Application and practices of Tree Improvement in Nepal

8. Urban Forestry
    8.1   Establishment and maintenance of trees in urban environment
    8.2   Benefits of urban forest
    8.3   Stress management in urban trees
    8.4   Scope of Urban Forestry in Nepalese context.

9. Quantitative Silviculture
    9.1   Growth function and growth cycle
    9.2   Probability of individual tree mortality
    9.3   Models of tree mortality
    9.4   Competition and Plant Geometry