

EBO-401

BIODIVERSITY

Unit-I: Biodiversity-types, uses and its depletion

Biodiversity Science: Definition, Significance of Biodiversity, types of biodiversity (Genetic diversity, Species Diversity and Ecosystem diversity).

Ethics and Uses of Biodiversity: Biodiversity values, Ethical and Aesthetic values, Uses of plants (Food, Fodder and forage, Rattans and Canes, Medicinal and Ornamental plants).

Depletion of Biodiversity: Loss of Genetic diversity, Species Diversity and Ecosystem diversity, Factors affecting in loss of biodiversity and process of species extinction, Loss in Diversity of major Ecosystem of the World.

Unit-II: Biodiversity-conservation and management

Conservation of Biodiversity: Why Conservation; Conservation of Genetic diversity, Species Diversity and Ecosystem diversity; In-situ and Ex-situ conservation; Role of Biotechnology in Biodiversity Conservation; Current Practice in conservation of it in India; Social Approaches in Conservation of Biodiversity (examples like Chipko movement, etc.); Role of Educational Institute in Biodiversity Conservation.

Biodiversity Management and Prospecting: Organisations Associated with Biodiversity Management (IUCN, UNEP, UNESCO, WWF, ICSU, FAO, WCMC, GEF, ETC); Biodiversity Legislation and Convention; Biodiversity Laws; Biodiversity – Information and Communication; Role of Indigenous Knowledge System in Biodiversity Prospecting and Conservation; Intellectual Property Rights (IPRs); and Biopiracy.