

SYLLABUS-BOTANY PROGRAMME (B.Sc.-II year)

COURSE- I: TAXONOMY OF ANGIOSPERMS AND BIODIVERSITY (BSCBO-201)

UNIT SCHEDULE

BLOCK-1- ANGIOSPERMS: GENERAL CONSIDERATION

Unit-1- Historical background and Evolution of Classifications: Classification proposed by Bentham and Hooker, Engler and Prantl and Hutchinson of Angiosperms

Unit-2- Basic principles, plant nomenclature and International code of Botanical nomenclature (ICBN) - History, Principles and Applications

Unit-3- Tools and techniques in Collection and Preservation of specimens: For herbarium and Museum

Unit-4- Botanical gardens and Herbaria: A brief idea of Botanical Survey of India (BSI)

BLOCK-2- FAMILIES

Unit-5- Systematics, Distinguishing Characters, Important genera and Economic importance of the Families: Ranunculaceae, Caryophyllaceae, Rutaceae

Unit-6- Systematics, Distinguishing Characters, Important genera and Economic importance of the Families: Rosaceae, Fabaceae and Asclepiadaceae

Unit-7- Systematics, Distinguishing Characters, Important genera and Economic importance of the Families: Solanaceae, Acanthaceae and Lamiaceae

Unit-8- Systematics, Distinguishing Characters, Important genera and Economic importance of the Families: Orchidaceae, Liliaceae, and Poaceae

BLOCK-3-BIODIVERSITY AND CONSERVATION

Unit-9- Biodiversity-Basic concept: Biodiversity at Global and National level, Threats to Biodiversity

Unit-10- Biodiversity Conservations: *In situ* (Biosphere Reserves, National Parks and Sanctuaries) and *Ex situ*, Gene bank, NBPGR

Unit-11- Biodiversity- Hotspots and Megabiodiversity Countries: Global biodiversity hotspots, India as mega-biodiversity countries

Unit-12- Floristic diversity of India and Endemism: Floristic Regions of India, Flora and Vegetation, Endemism.