



ANDHRA UNIVERSITY

TRANS-DISCIPLINARY RESEARCH HUB

Pre. Ph.D., Syllabus for BOTANY / BOTANY AND PLANT SCIENCE

Paper 1: ETHNOBOTANY, MEDICINAL AND AROMATIC PLANTS

Unit – 1	Ethnobotany definition, history, scope, interdisciplinary approaches, World centers of Ethnobotany, Ethnobotany in India. Ethnic communities of India, conservation practices of biodiversity, taboos and totems Different categories of Ethno botanical plants: Food, Medicine, Shelter, Fodder, Timber, Fuel wood, NTFPs.
Unit - 2	Role of research institutes on medicinal and aromatic plants (CDRI, CIMAP, NBRI, NBPGR & IUCN)Application of natural products to certain diseases- Jaundice, cardiac, infertility, diabetics, Blood pressure, skin diseases etc.,.
Unit - 3	History, scope, significance, recent trends of medicinal and aromatic plants in the World and India. History and principles of Ayurveda, Homeopathy, Allopathy, Unani and Siddha system of medicines.
Unit - 4	Conservation of endangered and endemic medicinal plants. In situ conservation: Biosphere reserves, sacred groves, National Parks; Ex situ conservation: Botanic Gardens & In-vitro conservation.
Unit - 5	History, origin, distribution, significance, Taxonomy, Ecology, Alkaloids, Chemical constituents, Patenting and IPR and Cultivation methods of medicinal and aromatic plants (Medicinal plants: Catharanthus, Rauwolfia, Withania. Aromatic plants: Lemon grass, Mint and Ocimum



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Model Question Paper

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Time: 3 hours

Max. Marks: 100
(20 X 5 = 100)

Answer any **FIVE** questions.

All questions carry equal marks.

1. What is Ethnobotany? Describe the scope of Ethnobotany in Detail.
2. Write any two Role of research institutes in medicinal and Aromatic plants.
3. What are different strategies of plant conservation? Add a note on status of plants based on IUCN.
4. Write a note on sacred groves and In-vitro conservation.
5. What is IPR? Explain the mode of patenting of active principles
6. Explain any **TWO** of the following
 - A. Major ethnic groups of Andhra Pradesh
 - B. In-vitro conservation.
 - C. NTFP's.
 - D. CIMAP
7. Write short notes on any **FOUR** of the following
 - A. Siddha system of medicines.
 - B. Biosphere reserves
 - C. Aromatic plants
 - D. Plants used for Skin disease.
 - E. Plants used for Jaundice.