

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm

SEMESTER: VII

Subject Name: Agronomy and Forestry of Medicinal Plants

Subject Code: 2270013

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	Theory		Practical	
				External	Internal	External	Internal
3	0	0	3	80	20	0	0

No	Course Content	Hrs
1	Ecosystem system structure. Ecology, diversity, and conservation of plants and ecosystems in India. Phytogeographical regions and vegetation of India	5
2	The Indian Forest Act, 1927; The National Forest Policy 1894, 1952 and 1988; Forests extent, basis for classification and distribution in India; geographical distribution and salient features of major forest types	5
3	Role of forests in national economy	3
4	The cultivation of medicinal plants in agroforestry systems	4
5	Biodiversity; Principles of conservation of biological diversity <i>in-situ</i> and <i>ex-situ</i> . Causes of loss of biodiversity. Biodiversity in relation to global environmental changes; biodiversity hot spots in India and world impact of cultivation and gathering of medicinal plants on biodiversity. The Indian Biodiversity Act 2002; biodiversity and economics with special reference to India	10
6	The Forest Conservation Act, 1980. The Wildlife Protection Act, 1972; Methods of conservation, role of national parks, wildlife sanctuaries, biosphere reserves; national and global conservation measures, institutions and conventions	5
7	Guidelines on the conservation of medicinal plants;WHO, IUCN, WWF & TRAFFIC	3
8	Definition, object and scope of silviculture. Silviculture of important species - acacia, eucalyptus, dalbergia, tectona, shorea, pterocarpus, anogeissus, santalum, quercus etc	5
9	Importance of medicinal and aromatic plants in human health, national economy and related industries, classification of medicinal and aromatic plants according to botanical characteristics and uses	5

References Books:

1. Chadha KL & Gupta R. 1995. Advances in Horticulture. Vol. II. Medicinal and Aromatic Plants. Malhotra Publ.
2. Das NR. 2007. Introduction to Crops of India. Scientific Publ.
3. Handa SS. 1984. Cultivation and Utilization of Medicinal Plants. RRL, CSIR, Jammu.
4. Hussain A. 1984. Essential Oil Plants and their Cultivation. CIMAP, Lucknow.
5. Hussain A. 1993. Medicinal Plants and their Cultivation. CIMAP, Lucknow.
6. ICAR 2006. Hand Book of Agriculture. ICAR, New Delhi.
7. Kumar N, Khader MD. Abdul, Rangaswami JBM & Irulappan 1997, Introduction to Spices, Plantation Crops, Medicinal and Aromatic Plants. Oxford & IBH.
8. Prajapati ND, Purohit SS, Sharma AK & Kumar T. 2003. A Hand Book of Medicinal Plants: A Complete Source Book. Agrobios.

9. Sharma R. 2004. Agro-Techniques of Medicinal Plants. Daya Publ. House.
10. Atal CK. And Kapur BM, Cultivation and Utilization of Medicinal Plants, RRL Jammu, 1st Edition, 1989.
11. Atal CK And Kapur BM, Cultivation and Utilization of Aromatic Plants, RRL Jammu, 1st Edition, 1989.
12. Handa SS. and Kaul MK; Supplement to Cultivation and Utilization of Medicinal Plants, 1996. RRL, CSIR Publication, Jammu Tawi.
13. Handa SS and Kaul MK,; Supplement to Cultivation and Utilization of Aromatic Plants, 1996. RRL, CSIR Publication, Jammu Tawi.