

### Syllabus Structure of Botany (MDC) based on 4YUGP 2023

Year	Semester	MDC	Topics
1 <sup>st</sup>		MDC 1	Cultivation of Medicinal Plants
2 <sup>nd</sup>	3rd	MDC 2	Economic Botany

## **Course:** Theory Syllabus of MDC1 **Paper Name:** Cultivation of Medicinal Plants **Paper Code:** BOT-MDC1

#### **Cultivation of Medicinal Plants**

Scope and Importance of Medicinal Plants. Conservation of endangered and endemic medicinal plants. Propagation of Medicinal Plants: Through seeds and vegetative methods. Preparation and management of the nursery, transplantation, harvesting, post-harvest care. Cultivation techniques, cultural practices of the following medicinal plants: Chatim, Kalomegh, Sarpagandha, Haritaki, Tulshi, Basak, Ginger, Turmeric.

#### INTERNSHIP (INTRN): (To be carried out at 2<sup>nd</sup> semester)

In this course students are required to participate in a professional activity to gain work experience or cooperative education activity with an entity external to the education institution, normally under the supervision of an expert of the given external entity. A key aspect of internship is induction into actual work situations. All students will also undergo internships in a firm, industry, or organization or training in labs with faculty and researchers in their own or other HEIs/research institutions during the summer term. NSS/NCC activities (apart from Regular/ Special NSS activities) may also be considered in the Internship during summer term.



# **Course:** Theory Syllabus of MDC 2 **Paper Name:** Economic Botany I **Paper Code** BOT-MDC 2

Scientific name, family, Parts used and uses of the crops belonging to the following groups:
Cereals : Wheat and Rice, Maize, Jowar, Bajra and Kodo millets.
Legumes: Chick pea, Pigeon pea, Lentil, Arhar dal.
Sugarcane and sugar beets.
Spices: Fennel, large cardamom, clove, Cumin, Coriander, Asafoetida and black pepper.
Beverages: Tea, Coffee
Oil yielding crops: Groundnut, coconut, soybean, mustard .
Natural Rubber
Drug and narcotics yielding plants: Cinchona, Digitalis, Papaver, Aswagandha, Bringaraj, Cannabis sativa; Tobacco.
Timber plants: Teak, Bamboo, Sisoo, Jarul, Mehgani, Simul, Akashmoni and Sal.
Fiber yielding plants: Jute, Cotton, Hemp.
Vegetables: Okra, Cabbage, Potato, Bringal, Cauliflower, Squash, Pumpkin, Bottle gourd.
Fruits: Mango, Orange, Pineapple, Jackfruit, Guava, Watermelon
Flowers: Marigold, Crysanthemum, Rose and Tube rose.

### Suggested Reading (MDC in Botany):

- 1. Medicinal Plants: Ethno botanical Approach. Trivedi P C, Agrobios, India.
- 2. Medicinal Plant Cultivation: A Scientific Approach, 2nd edn. Purohit and Vyas. Agrobios, India
- 3. স্নাতক উদ্ভিদবিদ্যা. জয়ন্ত কুমার শিকদার, কুণাল সেন, প্রণব গিরি; (সম্পাদনা দুলাল চন্দ্র সাঁতরা) সাঁতরা publication.
- 4. <u>ত্রি-বার্ষিক মাতক ব্যবহারিক উদ্ভিদবিদ্যা.</u> ভূপেন্দ্র নাথ সান্যাল. নির্মলা লাইব্রেরী, কলকাতা.



Dated: 12.07.2023

(Chairman) Under Graduate Board of Studies in Botany Cooch Behar Panchanan Barma University, Coochbehar