

GUJARAT TECHNOLOGICAL UNIVERSITY

BACHELOR OF PHARMACY

Semester: VIII

Subject Name: **Pharmacognosy VII (Herbal Formulations & Complimentary Therapies)**

Subject Code: **280005**

[THEORY]

Sr. No	Course Content	Total Hrs.
1.	The holistic concept for drug administration in traditional systems of medicine. Introduction to Ayurvedic preparation like Churna, Kwath, Gutika, Taila, Ghrita, Lehya, Asavas and Arista, Bhasma and Pisti.	10
2.	Phytopharmaceutical evaluation and modern analytical techniques for screening of herbal drugs.	8
3.	A brief account of plant based industries & institutions involved in work of medicinal & aromatic plants in India. Sources, utilization, production and estimation of phytoconstituents such as – calcium sennoside, diosgenin, quinine, tropane alkaloids, vincristine, podophyllotoxin, geranium oil, sandalwood oil, mentha oil, vetiver oil, lemongrass oil.	10
4.	Poisonous plants.	2
5.	Traditional drugs (Part III) Seed- Karanj Entire herb- <u>Kantakari</u> Bark- <u>Shirish</u> Underground Stem- Garlic Wood- <u>Pterocarpus</u> Root and Rhizome- <u>Majith</u> , <u>Vaj</u> Fruit- Harde, Baheda, Vidang, Bhilama, <u>Piper</u> Leaf- <u>Tylophora</u> , Gymnema, <u>Nagod</u> Flower- Palash	15

[PRACTICAL]

1. Identification of crude drugs mentioned in theory.
2. Microscopic study of underlined drugs.
3. Preparation and evaluation of Ayurvedic formulation like churna, kwath and gutika.
4. Isolation, estimation and chromatographic studies of the phytoconstituents mentioned in theory.
5. List of practicals
 1. Morphology and microscopy of – Nagod
Morphology of Karanj
 2. Morphology and microscopy of – Tylophora
Morphology of Gymnema
 3. Morphology and microscopy of- Pterocarpus
Morphology of Bhilama
 4. Morphology and microscopy of- Majith
Morphology of Harde
 5. Morphology and microscopy of- Vaj
Morphology of Palash
 6. Morphology and microscopy of- Piper
Morphology of Bheda
 7. Morphology and microscopy of- Shirish
Morphology of Garlic
 8. Morphology and microscopy of- Kantakari
 9. Morphology and chemical tests of Vidang
 10. Isolation of-Psoralein
 11. Estimation of-Sennoside
 12. Isolation and estimation of - Embelin
 13. Preparation and standardization of churna
 14. Preparation and standardization of gutika

Text books:

1. Mukherjee Pulok, Quality Control of Herbal Drugs: An Approach to Evaluation of Botanicals.
2. Kalia A.N., Textbook of industrial Pharmacognosy, C.B.S. Publisher, New Delhi.

Reference Books:

1. Anonymous, Ayurvedic Formulary of India, Part- I and II.
2. S.K. Jain, B.K. Sinha and R.C. Gupta, Notable Plants in Ethnomedicine of India, National Botanical Research Institute, Lucknow, Deep Publications.
3. Kirtikar K.R., Basu B.D., Medicinal plants, Volume-III, 2nd edition (reprint), M/S Periodical experts.
4. Trease E. and Evans W.C., Pharmacognosy, 16th edition, Balliere Tindall. Eastbourne, U.K.
5. Anonymous, Ayurvedic Pharmacopoeia of India, Govt. of India.
6. Anonymous, Wealth of India, CSIR.
7. M.G. Chauhan, Microscopy of Leaf Drugs, Jamnagar Ayurveda University.