GUJARAT TECHNOLOGICAL UNIVERSITY
BACHELOR OF PHARMACY
Semester: VI

Subject Name**: Pharmacognosy – V (Plant Biotechnology)**

Subject Code**: 260006**

Sr. No.	Course contents	Teaching Hours
1.	Plant Tissue Culture: Introduction, Basic requirements, Types of culture, Nutritional requirements, & Application	8
2.	Studies of traditional drugs, common vernacular names, botanical sources, morphology, chemical nature of chief constituents pharmacology categories and common uses and marketed formulations of following indigenous drugs: Traditional drugs (Part – I) a. Stem: Galo, Dhamaso b. Root: Satavari, Chitrak c. Bark: Arjuna d. Entire herb: Apamarg, Methi, Eclipta e. Leaf: Karen, Adusa f. Seed & Leaf: Chakramadu g. Fruit: Amla, Malkangni, Kalijiri h. Flower: Dhatakipushpa i. Unorganised: Shilajit	20
3.	Terpenoids: Chemistry, Biogenesis and Pharmacological activity of Geraniol, Menthone, Carvone, Pinene, Abietic acid, β-amyrin, Oleanolic acid, Vitamin – A	12
4.	Herbs as health food.	5

Pharmacognosy – V (Plant biotechnology) Practicals (3 hrs / week)
1. Identification of crude drugs mentioned in theory.
2. Histological study of underlined drugs.

Reference Books:

1. Wallis T.E., Text Book of Pharmacognosy, 5th Edition, CBS Publishers and Distributors.
2. Qadry J.S., Shah and Qadry's Pharmacognosy, B.S.Shah Publication.
3. Trease E and Evans W.C., Pharmacognosy, Balliere Tindall. Eastbourne, U.K.
4. Tyler V.C., Brady L.R. and Robers W.E., Pharmacognosy, Lea and Febiger, Ph.
5. Jackson B.P., Atlas of Microscopy of Medicinal Plants, Culinary Herbs and Spices, CBS Publication.
6. Kokate C.K, Purohit A.P. and Gokhale S.B. Pharmacognosy (Degree), Nirali Prakashan, Pune.
7. Kokate C.K. Practical Pharmacognosy, Vallabh Prakashan, Delhi.
8. Ansari, Pharmacognosy Textbook of Natural Products, Latest Edition.
9. Agrawal O.P., Natural Products, Vol I & II, Goel Publishing House, Meerut, 2004.
10. Kalyan Kumar De, An introduction to Plant Tissue Culture, New Central Book Agency (P) ltd., Culcutta