

M. G. Science Institute, Ahmedabad

Autonomous | Affiliated to Gujarat University, Ahmedabad

(Managed by The Ahmedabad Education Society)

Department of Botany

Bachelor of Science (Hons.) in Botany

(Effective from Academic Year 2026-27)

Annexure 3: Semester- V

Botany Minor	BOE-354	Bhartiya Knowledge System on plant
COs	COGNITIVE ABILITIES	COURSE OUTCOMES
CO1	REMEMBERING	Define the concept, scope, and methodologies of ethnobotany and describe its historical development at the national and regional levels.
CO2	UNDERSTANDING	Identify and classify major and minor ethnic groups of India and Gujarat, and demonstrate an understanding of their traditional plant use in food, medicine, and rituals.
CO3	ANALYZING	Compare and analyze ethnobotanical data from different tribal communities of Gujarat highlighting their cultural and anthropological aspects.
CO4	EVALUATING	Assess the significance of traditional/indigenous knowledge in the sustainable use of plant resources and its relevance in modern science and conservation efforts.
CO5	EVALUATING	Critically evaluate the legal aspects of ethnobotany, including issues related to biopiracy, intellectual property rights (IPR), and the concept of benefit-sharing with indigenous communities.

CO/PO	PO1	PO2	PO3	PO4
CO1	3	2	1	1
CO2	3	3	2	2
CO3	2	3	3	3
CO4	2	3	1	3
CO5	2	3	2	3

Unit No.	Title of Unit and Contents	No. of hours
I	<p><u>Ethnobotany</u></p> <ul style="list-style-type: none"> • Definition and scope, Methods of study • History and development of Ethnobotany • Major and minor ethnic groups or tribals of India • Major and minor ethnic groups or tribals of Gujarat 	15
II	<p><u>Ethnobotany of indigenous communities in Gujarat</u></p> <ul style="list-style-type: none"> • Preliminary knowledge about ethnobotany of different tribes of Gujarat (Bhil, Dangi, Gamit, Warli, Rathwa, Chaudhary etc.) • Study in brief about Tribal/Folk communities of Gujarat State focusing on Anthropology • Comparative study of Ethnobotanical Data 	15
III	<p><u>Indigenous/ traditional knowledge</u></p> <ul style="list-style-type: none"> • Traditional/indigenous knowledge and its importance • Plants used by ethnic groups as food, medicines (Ethno medicine), beverages, fodder, fiber, resins, oils, fragrances and other uses. • Plants used in rituals by Tribal and Folk communities of Gujarat 	15
IV	<p><u>Ethnobotany and legal aspects</u></p> <ul style="list-style-type: none"> • Role of Ethnobotany in conservation and sustainable development • Ethnobotany as a tool to protect interests of ethnic groups. Sharing of wealth concept with few examples from India • Biopiracy, Intellectual Property Right 	15

References:

1. **Jain, S.K.** (1981) Glimpses of Indian. Ethnobotany, Oxford and I B H, New Delhi. Gangulee, H.C , Das, K. S. & Dutta ,C.. College Botany Vol. I, New Central book Agency.
2. **Jain, S.K.** (ed.) (1989) Methods and approaches in Ethnobotany. Society of Ethnobotanists, Lucknow, India.
3. **Jain, S.K.** (1990). Contributions of Indian ethnobotany. Scientific publishers, Jodhpur.
4. **Jain, S.K.** (1991) Dictionary of Indian folk Medicine and Ethnobotany. Deep Publication, New Delhi.
5. **Jain, S.K.** (1995) Manual of Ethnobotany, 2nd Revised Edition, Scientific Publishers, Jodhpur.
6. **Jain, S.K. and Mudgal, V.** (1999) A Hand Book of Ethnobotany, Bishan Singh Mahendrapal Singh, Dehradun, India.
7. **Joshi, P.**(1995), Ethnobotany of the primitive tribes in Rajasthan, Printwell, Jaipur, Rajasthan, India.
8. **Rama Rao, N. and A.N. Henry** (1996). The Ethnobotany of Eastern Ghats in Andhra Pradesh, India. Botanical Survey of India. Howrah.
9. **Singh, V. and Pandey, R.P.** (1998) Ethnobotany of Rajasthan, India, Scientific Publishers, Jodhpur.
10. **Trivedi, P.C.**(Ed.) (2002) – Ethnobotanical Plants of India, Aavishkar Publishers, Jaipur.

Botany Minor	BOE-355	Ethnobotany Practical
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No.	Practical
1	Study of Ethnobotanical importance of <i>Achyranthes aspera</i>
2	Study of Ethnobotanical importance of <i>Butea monosperma</i>
3	Study of Ethnobotanical importance of <i>Calotropis procera</i>
4	Study of Ethnobotanical importance of <i>Ficu sreligiosa</i>
5	Study of Ethnobotanical importance of <i>Vitex negundo</i>
6	Study of Ethnobotanical importance of <i>Dioscorea alata</i>
7	Study of Ethnobotanical importance of <i>Paspalum scorobiculatum</i>
8	Study of Ethnobotanical importance of <i>Echinochola colona</i>
9	Study of Ethnobotanical importance of <i>Chenopodium album</i>
10	Study of Ethnobotanical importance of <i>Picrorhiza kurrooa</i>
11	Study of Ethnobotanical importance of <i>Moringa oleifera</i>
12	Study of Ethnobotanical importance of <i>Bamboo</i>
13	Field trip to tribal settlement to survey, document and frame hypothesis on people-plant relationship.
14	Collection, processing and preservation of ethnobotanical specimens in the institutional repository.
15	Identify and document plant parts used in preparation of crude drugs/herbal formulations

DSC-Minor-BOT- 355- Practical
Based on DSC-C-BOT- 354
(Bhartiya Knowledge System on plant - Ethnobotany)

Time: 5 hours		Maximum marks –
		50
Q.1	Identify and give ethnobotanical importance of food plants A, B & C.	15
Q.2	Identify and give ethnobotanical importance of medicinal Plants D, E & F	15
Q.3	Project report / Submissions	10
Q.4	Journal & Viva	10