

FOUR YEAR UNDERGRADUATE PROGRAM (2024 – 28)

**DEPARTMENT OF BOTANY
COURSE CURRICULUM**

| PART- A: Introduction | | |
|---|---|--|
| Program: Bachelor in Life sciences <i>(Certificate / Diploma / Degree)</i> | | Semester - VIII/IV |
| Session: 2024-2025 | | |
| 1 | Course Code | BOVAC-01 |
| 2 | Course Title | Herbal Plant & Human Health |
| 3 | Course Type | Value Addition Course (BOVAC-01) |
| 4 | Pre-requisite <i>(if, any)</i> | As per program |
| 5 | Course Learning Outcomes (CLO) | <p>After completion of this course, the students will be able to –</p> <ul style="list-style-type: none"> ➤ Understand the value of herbs, herbal medicine and use of herbal medicine. ➤ Know about botanical medicine professionals in the complementary and alternative medicine (CAM) ➤ Demonstrates the knowledge of the toxicity of plant and essential oil ingredients. ➤ Understand the possibility for allergic and unpleasant reactions to herbal products and the impact of herbal quality on potential toxicity. ➤ Use the herbal plants in their daily life ➤ Adopt the value of herbal medicine to save their health |
| 6 | Credit Value | 2 Credits <i>Credit = 15 Hours - learning & Observation</i> |
| 7 | Total Marks | Max. Marks: 50 Min Passing Marks: 20 |
| PART -B: Content of the Course | | |
| Total No. of Teaching-learning Periods (01 Hr. per period) - 30 Periods (30 Hours) | | |
| Unit | Topics (Course contents) | No. of Period |
| I | <p>Introduction: Elementary knowledge of Herbal plant and Concept of Herb as medicine.</p> <p>Concept of ethno-medicine, folk medicines, ethno-ecology, ethnic communities of the India & the Chhattisgarh. Concept of Herbal garden. Collection of ethnic information.</p> <p><i>Observation/In Practices - Survey and familiarization with herbs & local herbal plants</i></p> | 08 |
| II | <p>Importance of medicinal plants: Importance of Herbal / Medicinal plant in human health care – health and balanced diet (Role of proteins, carbohydrates, lipids and vitamins).</p> <p>Common plants & plant parts providing metals and vitamins.</p> <p><i>Observation/In Practices - Survey and familiarization with local herbal medicinal plants</i></p> | 07 |
| III | <p>Tribal medicine and Traditional knowledge: Introduction, Concept of Tribal medicine, methods of disease diagnosis and treatment – common Plants in folk religion. Traditional knowledge and utility of some medicinal plants in Chhattisgarh.</p> <p><i>Collection /Identification of Herbal plants commonly used by villagers of the state –</i></p> <ul style="list-style-type: none"> • <i>Centella asiatica,</i> • <i>Aloe vera,</i> • <i>Solanum nigrum,</i> • <i>Achyranthus aspera,</i> • <i>Withania somnifera,</i> • <i>Papaver somniferum,</i> • <i>Strychnos nux-vomica,</i> • <i>Atropa belladonna;</i> | 08 |
| IV | <p>Plants in day to day life: Nutritive and medicinal value of common herbal fruits and vegetables of daily use. Precautions during use of herbal medicinal products. Basic idea of contribution of national research laboratories like CDRI, CIMAP, NBRI, etc.</p> <p><i>Collection /Identification of Herbal plants commonly used in daily life - Tulsi, Garlic, Ginger, Turmeric, Ajwain, Methi, Flax, Tea and Coffee.</i></p> | 08 |
| Keywords: Herbal medicine, Folk medicine, Ethno-medicine, Tribal medicine | | |

Signature of Convener & Members (CBoS)

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3. *[Signature]*

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1. Kumar, N.C. (1993). An Introduction to Medical botany and Pharmacognosy. Emkay Publications, New Delhi.
2. Rao, A.P. (1999). Herbs that heal. Diamond Pocket Books (P) Ltd., New Delhi.
3. Iris F. F. Benzie and Sissi Wachtel-Galor. Herbal Medicine, 2nd edition Biomolecular and Clinical Aspects, CRC Press/Taylor & Francis; 2011.
4. Fabrizio Donovan (2020) Medicinal Herbs: The Ultimate Guide to Natural Healing, Learn The Benefits of Herbs and Use the Nature's Most Powerful Medicinal Plants in Making Your Own AZ Remedies to Treat Diseases, Author's Republic.
5. Stargrove Mitchell Bebel ND, Herb, Nutrient, and Drug Interactions, Publisher: Elsevier – Health Sciences Division
6. Iris F. F. Benzie (Editor), Herbal Medicine (Oxidative Stress and Disease) 2nd Edition,

Online Resources-

- > e-Resources / e-books and e-learning portals
- > www.swayam.ac.in
- > www.ignou.ac.in
- > www.egyankosh.ac.in
- > www.iitm.ac.in
- > www.eskillindia.org
- > www.eshiksha.mp.gov.in
- > www.vlab.co.in
- > www.internshala.com
- > www.ndl.litkgp.ac.in

Online Resources-

- > <https://pubmed.ncbi.nlm.nih.gov/22593937/>
- > <https://crimsonpublishers.com/acam/pdf/ACAM.000551.pdf>
- > https://www.researchgate.net/publication/329823398_Medicinal_Plants_Used_in_the_Treatment_of_Mental_and_Neurological_Disorders_in_Ghana
- > <https://www.sciencedirect.com/science/article/abs/pii/S0378874115003013>
- > <https://core.ac.uk/download/pdf/143841457.pdf>
- > <https://practicalselfreliance.com/medicinal-plants/>
- > <https://practicalselfreliance.com/medicinal-plants/>
- > <https://www.pdfdrive.com/medicinal-plants-books.html>

PART -D: Assessment and Evaluation

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| Suggested Continuous Evaluation Methods: | | |
| Maximum Marks: | 50 Marks | |
| Continuous Internal Assessment (CIA): | 15 Marks | |
| End Semester Exam (ESE): | 35 Marks | |
| Continuous Internal Assessment (CIA): (By Course Teacher) | Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar + Attendance - 05 Total Marks - 15 | Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against 15 Marks |
| End Semester Exam (ESE): | Two section – A & B Section A: Q1. Objective – 05 x1= 05 Mark; Q2. Short answer type- 5x2 =10 Marks Section B: Descriptive answer type qts., 1out of 2 from each unit- 4x05 =20 Marks | |

Name and Signature of Convener & Members of CBaS:

1. R. Rao
2. K. K. K.
3. S. S. S.
4. M. M. M.
5. N. N. N.

6. B. B. B.
7. C. C. C.
8. D. D. D.
9. E. E. E.
10. F. F. F.