

FOUR YEAR UNDERGRADUATE PROGRAM (2024 – 28)

DEPARTMENT OF BOTANY COURSE CURRICULUM

PART- A: Introduction			
Program: Bachelor in Life sciences (Certificate / Diploma / Degree)		Semester - I/III/V	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 (if, any)	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	Credit = 15 Hours - learning & Observation
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	Introduction: Elementary knowledge of Herbal plant and Concept of Herb as medicine. Concept of ethno-medicine, folk medicines, ethno-ecology, ethnic communities of the India & the Chhattisgarh. Concept of Herbal garden. Collection of ethnic information. Observation/In Practices - Survey and familiarization with herbs & local herbal plants		08
II	Importance of medicinal plants: Importance of Herbal / Medicinal plant in human health care – health and balanced diet (Role of proteins, carbohydrates, lipids and vitamins). Common plants & plant parts providing metals and vitamins. Observation/In Practices - Survey and familiarization with local herbal medicinal plants		07
III	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. Collection /Identification of Herbal plants commonly used by villagers of the state – <ul style="list-style-type: none">• Centella asiatica,• Aloe vera,• Solanum nigrum,• Achyranthus aspera,• Withania somnifera,• Papaver somniferum,• Strychnos nux– vomica,• Atropa belladonna;		08
IV	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. Collection /Identification of Herbal plants commonly used in daily life - Tulsi, Garlic, Ginger, Turmeric, Ajwain, Methi, Flax, Tea and Coffee.		08
Keywords Herbal medicine, Folk medicine, Ethno-medicine, Tribal medicine			
Signature of Convener & Members (CBoS)			

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PART-C: Learning Resources

Text Books, Reference Books and Others

Text Books Recommended –

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.iitkgp.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

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	Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against 15 Marks
	Assignment/Seminar + Attendance -	05	
	Total Marks -	15	

End Semester



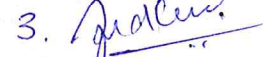
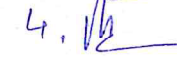

Exam (ESE):

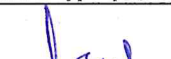




Two section – A & B

Section A: Q1. Objective – 05 x1= 05 Mark; Q2. Short answer type- 5x2 =10 Marks

Section B: Descriptive answer type qts., 1 out of 2 from each unit- 4x05 =20 Marks

Name and Signature of Convener & Members of CBoS:

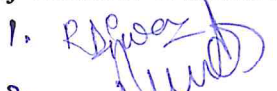



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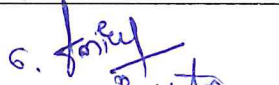




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FOUR YEAR UNDERGRADUATE PROGRAM (2024 -2028)
DEPT. OF BOTANY: VALUE ADDITION COURSE
COURSE CURRICULUM (2024-25)

PART-A: Introduction				
Program: Undergraduate (Certificate / Diploma / Degree/Honors)		Semester - I/III/V		Session: 2024-2025
1	Course Code	BOVAC – 02		
2	Course Title	Academic Research & Report Writing		
3	Course Type	Value Addition Course (VAC)		
4	Pre-requisite(if,any)	As per Government norms / Institutional scheme		
5	Course Learning Outcomes (CLO)	<i>After completion of this course, the students will be able to -</i> ➤ Understand the academic research and its scope & prospects. ➤ Know the Importance of Report writing in academic and Research and Necessity of report writing for achievement of academic & research goals ➤ Demonstrates the knowledge of the toxicity of plant and essential oil ingredients, ➤ Understand the kinds & characteristics of academic and research reports / presentation and its prospective application. ➤ Use the tools and techniques of academic research and report writing ➤ Adopt the skill of research designing and report/ paper / thesis writing		
6	Credit Value	2 Credits	Credit = 15 Hours - learning & Observation	
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)				
Module	Topics (Course contents): Learning and Practices			No. of Hrs
I	Introduction: Concept of - Academic Research and Research Project, Component of a concept Paper for academic research, Research–Characteristics, Type, Formulation & Design, Format, Scope, Motivation & Prospects. Popular Scheme & Organization in India promoting Research - INSPIRE, NSF, MEF, DBT, DST, DNES, STARD, ICAR, ICMR, CSIR, INSA.-			08 Hours
II	Research paper / Review writing: Steps of writing a research report. Types of Research paper, Structure of Research papers, Research paper formats, Abstract writing, Methodology, Results and Discussion, Different formats referencing, Ways of communicating a research papers, (Assignments)			07 Hours
III	Report/ Dissertation / Thesis Writing - Structure of a thesis , Scope of the work, Literature review, Experimental / Computational details, Preliminary studies, Result and Discussion, Figures & Table Preparation, Conclusion and Future works, Bibliography, Appendixes (Assignments)			07 Hours
IV	Tools, Techniques & Presentation-- Various word processors - MS Office- Word, Excel & PowerPoint, Libra-office, Latex etc. Making effective presentations using Power Point and Beamer. Basic idea of Data collection, Tabulation & Presentation. Plagiarism detection tools (Assignments)			08 Hours
Keywords	Academic Research, Research report, Project, Thesis/ Dissertation/ Review writing			

Signature of Convener & Members of CBOS:

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PART-C

BVAC – 02 (Academic Research & Report Writing)

Learning Resources: Text Books, Reference Books and Others

Text Books Recommended –

- Technical Report Writing and Research Methodology by Dr Naushad Alam Dr Quadri Javeed Ahmad Peer Dr Banarsi Lal, Write & Print Publications
- Research Writing A Complete Guide (PB) by Srinivasan R, How Academics
- GUIDE TO REPORT WRITING by Netzley, Snow, PEARSON INDIA
- A Student Guide to Writing Research Reports, Papers, Theses and Dissertations By Cathal Ó Siochrú; ISBN 9780367621049. Published 2022 by Routledge
- <https://www.goodreads.com/shelf/show/report-writing>

Online Resources–

- e-Resources / e-books and e-learning portals
 - <https://www.questionpro.com/blog/research-reports/>
 - <https://egyankosh.ac.in/bitstream/123456789/39238/1/Unit-5.pdf>
 - <https://www.studocu.com/in/document/visvesvaraya-technological-university/research-methodology/general-format-of-a-research-report/33791300>
 - <https://students.unimelb.edu.au/academic-skills/resources/report-writing/research-reports>
- ❖ Use of following sites
- <https://www.wiley.com/en-ie/Student+Research+and+Report+Writing:+From+Topic+Selection+to+the+Complete+Paper-p-9781118963913>
- <https://www.researchgate.net/publication/275654158> HAND BOOK FOR WRITING RESEARCH PAPER

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Suggested Continuous Evaluation Methods:

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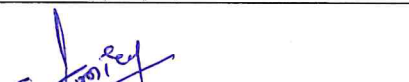



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