



## **30 Hour Add On Course on Herbarium Technology**



*Offered by the Department of Botany:*

**DINABANDHU ANDREWS COLLEGE**

**GARIA, KOLKATA**

*Joy Sarkar*

# Title:

## Certificate Course on Herbarium Technology

**Course Overview:** This certificate course is designed to foster expertise in plant specimen handling and management, contribute to biodiversity conservation efforts and prepare individuals for roles in both academic and applied settings related to plant sciences.

**Course Duration:** 30 hours (6 hrs per week x 5weeks)

One Class (Theory): 1 Hour

Lab: 2 Hours

Final Assessment on the Last day

**Course Fee:** Free of Cost

**Pedagogy:** Lecture on theory and Practical

**Course Coordinator:** Dr. Joy Sarkar, Dr. Mithun Maji & Dr. Rupa Chakraborty

### SYLLABUS STRUCTURE OF THE ADD-ON COURSE

Module	UNIT TITLE	HOURS
Module -1	Introduction To Herbarium	3
Module -2	Collection & Types of Herbarium	6
Module -3	Processing of specimen	9
Module -4	Collection, preservation and identification of few important biological species	9
Module -5	Maintenance	3
Total		30

### Module 1: Introduction To Herbarium

Introduction of herbarium, herbarium sheet, history, objective and role of herbarium in research and academics.

### Module 2: Collection & Types of Herbarium

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Field equipment, field work, field notebook, and details of collection process of specimen for herbarium. Details of different types of herbaria, acronyms, functions of herbaria and few important herbaria of world and India.

### **Module 3: Processing of specimen**

Details of poisoning, pressing, drying, mounting, stitching, labeling, identification and determination of plant, incorporation.

### **Module 4: Collection, preservation and identification of few important biological species**

Brief discussion on Collection, preservation and identification of few important species such Algae, wild mushrooms and bryophytes.

### **Module 5: Maintenance**

Introduction to different methods of maintenance of such as fumigation, heating, chemical treatment etc.

### **Course Outcome :**

- Students will be able to understand how the herbariums should be organised.
- Understand the working rule in an International herbarium.
- Students will be able to learn how the specimens are collected and preserved.
- Understand the usage of floras and identification keys.
- Students will be capable to organize the identified plants according to scientific rules.

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### LEARNING RESOURCES

SL. NO.	TITLE OF THE BOOK	AUTHOR(S)	PUBLISHER
1	Herbarium Technique	PAYEL PAUL, SAYANTAN DHAR, DIPAYAN DAS, & Dr. MONORANJAN CHOWDHURY	Orange Books Publications
2	A Handbook of Field and Herbarium Methods	S.K. Jain, R. R. Rao	Rao, R R & S K Jain Publishers
3	Field Manual on Herbarium Techniques	H.B. Singh, B. Subramaniam	National Institute of Science, CSIR
4	Herbarium Book on Flowering Plant	Anupam Rajak	Notion Press

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### **EVALUATION POLICY FOR THE ADD-ON COURSE**

The basic philosophy behind the Evaluation policy for this 30 Hours Add-on course is to objectively judge the participants (students) whether the concepts were understandable to them or not and whether they could apply these concepts to solve numerical and conceptual problems. The Evaluation would be done through 2 components –

- i) C1 Course-end Assessments (Written Test) [Total Marks: 30]
- ii) C2 Practical /LAB [Total Marks: 20]

**Total Marks of the Evaluation process would be – 50 Marks**

### **TABLE FOR QUALIFICATION**

<b>TOTAL SCORE (OUT OF 50)</b>	<b>GRADE</b>
<b>45 – 50</b>	<b>O – OUTSTANDING</b>
<b>40 – 44</b>	<b>E – EXCELLENT</b>
<b>35 – 39</b>	<b>A – VERY GOOD</b>
<b>30 – 34</b>	<b>B – GOOD</b>
<b>25 -29</b>	<b>C – FAIR</b>
<b>BELOW 25</b>	<b>F – FAILED</b>

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## GENERAL RULES AND REGULATIONS

1. Students must attend and appear for all the Module-End Assessments. If any student fails to submit any of the Module-End Assignments or fails to attend any of the Module End Assessment examinations , the particular Student would NOT BE ELIGIBLE FOR CERTIFICATE.
2. Students must attend and appear for the Course-End Assessment Examination. If any student fails to submit the Course-End Assessment or fails to attend the Course-End Assessment Examination , the particular Student would NOT BE ELIGIBLE FOR CERTIFICATE.
3. Students must attend and appear for the Course-End Viva. If any student fails to fails to attend the Course-End Viva, the particular Student would NOT BE ELIGIBLE FOR CERTIFICATE.
4. Total Marks of Course Evaluation will be 50 Marks.
5. Minimum 50% Marks has to be scored to receive any Certificate. There will be only ONE Attempt allowed for each of the Module-End Assessments and the Course-End Assessment.
6. There will be NO PROVISION for Backlog Clearance.
7. General Rules and Regulations of the College must be followed without any exception.
8. **Minimum 75% attendance is required to receive the certificate of the course.**

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