

**Rayat Shikshan Sanstha's**

**D. P. Bhosale College, Koregaon**

**Autonomous (Self-Financed) Add-On Course in**

**“Herbarium Technique and Digital Herbaria”**

Organized by

**Department of Botany**

**Dr. S. M. Deshpande**

Head and Course Co-ordinator,

Department of Botany,

D. P. Bhosale College, Koregaon, Satara

**(2021-2022)**

*Rayat Shikshan Sanstha's*

**D. P. Bhosale College, Koregoan**

**Department of Botany**

**ADD-ON COURSE**

**HERBARIUM TECHNIQUE AND DIGITAL HERBARIA**

**Year: 2021-2022**

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**D. P. Bhosale College, Koregaon**

**Department of Botany**

**ADD-ON COURSE**

**Herbarium Technique and Digital Herbaria  
(2021-2022)**

**NOTICE**

**Date: 16.02.2022**

All the students of B. Sc. – I are hereby informed that the Department of Botany is conducting a self-financed One-month Add-on course on “**Herbarium Technique and Digital Herbaria**” that is scheduled from 2<sup>nd</sup> March to 31<sup>st</sup> March, 2022.

Interested students should register their names to Dr. P. P. Kamble madam before 23<sup>rd</sup> February, 2022.

*Kaarpnaja*

**Head**  
Department of Botany  
P. Bhosale College, Koregaon



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**PRINCIPAL,**  
D. P. Bhosale College,  
Koregaon.

*Rayat Shikshan Sanstha's*

**D. P. Bhosale College, Koregoan**

**Department of Botany**

**ADD-ON COURSE**

**Herbarium Technique and Digital Herbaria  
(2021-2022)**

*Autonomous (Self-Financed) Add-On Course*

- |                               |  |
|-------------------------------|--|
| <b>1. Eligibility:</b>        | XII Std. Pass                              |
| <b>2. Duration of Course:</b> | 1 Month                                    |
| <b>3. No. of Students:</b>    | 20   |
| <b>4. Admission fees:</b>     | --   |
| <b>5. Examination:</b>        | Theory (50 Marks)                          |
|                               | Practical (40 Marks)                       |
|                               | Submission/ Excursion report (10 Marks)    |
|                               | Total marks (100 Marks)                    |
| <b>6. Faculty:</b>            | Dr. R. B. Patil                            |
|                               | Dr. U. A. Desai                            |
|                               | Dr. S. S. Patil                            |
|                               | Dr. P. P. Kamble                           |
| <b>7. Co-ordinator:</b>       | Dr. S. M. Deshpande                        |
| <b>8. Director:</b>           | Principal, D. P. Bhosale College, Koregoan |

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**ADD-ON COURSE**

**Herbarium Technique and Digital Herbaria  
(2021-2022)**

**Syllabus – Theory**

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**UNIT – 1:** **(6 Lectures)**

**Importance of Herbarium:** Plant specimen repository, type specimen, Compilation of Floras, Manuals and Monographs, Training in herbarium methods, Identification of specimens, Information on geographical distribution, Preservation of voucher specimens.

**UNIT – 2:** **(6 Lectures)**

**Herbarium Methodology –**

- 1) Collection (Vasculum and field press)
- 2) Processing of specimen (Pressing - pressing of special groups of plants such as conifers, water plants, succulents and mucilaginous plants)
- 3) Drying – natural and artificial
- 4) Poisoning
- 5) Mounting and Stitching
- 6) Labelling

**UNIT – 3:** **(6 Lectures)**

Deposition of mounted specimens; Maintenance – Specimen care, Insertion of materials, correspondence and record keeping; maintenance for insects and pests; Herbaria in India.

**UNIT – 4:** **(2 Lectures)**

**Virtual herbarium – its importance and advantages**

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**Herbarium Technique and Digital Herbaria**  
**(2021-2022)**

**Syllabus – Practicals**

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**Practicals –**

**(10 Lectures)**

**Practical 1.** Collection and Pressing.

**Practical 2.** Identification of plants using available taxonomic literature.

**Practical 3.** Mounting and labelling of plant specimen.

**Practical 4.** Submission of herbarium specimens.

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**(2021-2022)**

**BOARD OF STUDIES PANEL**

**INTERNAL EXPERT**

<b>Sr. No.</b>	<b>Name of Faculty</b>
1.	Dr. S. M. Deshpande
2.	Dr. R. B. Patil
3.	Dr. U. A. Desai
4.	Dr. S. S. Patil
5.	Dr. P. P. Kamble

**EXTERNAL EXPERT**

<b>Sr. No.</b>	<b>Name of Faculty</b>
1.	<b>Dr. U. S. Pawar</b> Head, Department of Botany. Amdar Shashikant Shinde Mahavidyalay, Medha, District Satara – 415012 Maharashtra

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**Department of Botany**  
**ADD-ON COURSE**  
**Herbarium Technique and Digital Herbaria (2021-2022)**

**TIME-TABLE**

**(2<sup>nd</sup> March, 2022 – 31<sup>st</sup> March, 2022)**

<b>Time</b>		<b>DAY</b>	
01.45 – 02.30 pm	<b>Lecture</b>	<b>Monday</b> (Batch - A)	<b>Friday</b> (Batch - B)
01.30 – 2.30 pm	<b>Practical</b>	<b>Tuesday</b> (Batch - A)	<b>Saturday</b> (Batch - B)

*K. P. Bhosale*

**Head**

**Department of Botany**  
**D. P. Bhosale College, Koregaon**



Rayat Shikshan Sanstha's

D. P. Bhosale College, Koregoan

Department of Botany

ADD-ON COURSE

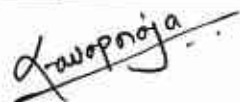
Herbarium Technique and Digital Herbaria  
(2021-2022)

(2<sup>nd</sup> March, 2022 – 31<sup>st</sup> March, 2022)

**SYLLABUS DISTRIBUTION**

**Lectures: 30 (Theory: 20 and Practical: 10)**

Sr. No.	Theory	Name of Faculty
1.	<b>Importance of Herbarium:</b> Plant specimen repository, type specimen, Compilation of Floras, Manuals and Monographs, Training in herbarium methods, Identification of specimens, Information on geographical distribution, Preservation of voucher specimens.	Dr. S. M. Deshpande
2.	<b>Herbarium Methodology:</b> Collection (Vasculum and field press), Processing of specimen, Drying – natural and artificial, Poisoning, Mounting and Stitching, Labelling	Dr. R. B. Patil
3.	<b>Deposition of mounted specimens and Maintenance:</b> Specimen care, Insertion of materials, correspondence and record keeping; maintenance for insects and pests; Herbaria in India.	Dr. U. A. Desai
4.	<b>Virtual herbarium:</b> Importance and advantages	Dr. S. S. Patil
	<b>Practicals</b>	<b>Name of Faculty</b>
1.	Collection and Pressing.	Dr. S. S. Patil
2.	Identification of plants using available taxonomic literature.	Dr. S. S. Patil
3.	Mounting and labelling of plant specimen.	Dr. P. P. Kamble
4.	Submission of herbarium specimens.	Dr. P. P. Kamble

  
Head and Course Co-ordinator  
Department of Botany

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**ADD-ON COURSE**

**Herbarium Technique and Digital Herbaria  
(2021-2022)**

**(2<sup>nd</sup> March, 2022 – 31<sup>st</sup> March, 2022)**

**LIST OF STUDENTS**

<b>Sr. No.</b>	<b>Name of Student</b>
1.	Ankita Ravindra Kokare
2.	Mahesh Dattatray Sathe
3.	Suchita Dattatray Gaikwad
4.	Payal Hanumant Ghorpade
5.	Ruksar Dilawar Shikalgar
6.	Pranali Sanjay Tambe
7.	Arati Tanaji Gaikwad
8.	Uday Yuvraj Mane
9.	Ayesha Tajuddin Shikalgar
10.	Priti Savata Raskar
11.	Snehal Sandip Chavan
12.	Renuka Jadhav
13.	Sahil Nitin Kudave
14.	Sambhaji Shivaji Shinde
15.	Aishwarya Hanumant Raut
16.	Siddhi Pandurang Jadhav
17.	Ankita Dattatray Barge
18.	Shraddha Hanumant Bhosale
19.	Taslim Bakshuddin Bhaladar
20.	Pratiksha Prakash Ghadage

*Kavopnaja*  
Head

**Department of Botany  
D. P. Bhosale College, Koregoan**

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**Department of Botany**  
**ADD-ON COURSE**  
**Herbarium Technique and Digital Herbaria**  
**(2021-2022)**

**Theory Examination April 2021-22**

**Total Marks: 50**

**Date: 11<sup>th</sup> April, 2022, Time: 11.00 am – 1:00 pm**

**Instructions:** 1. All questions are compulsory

2. Draw neat and labelled diagrams wherever necessary.

3. Figures to the right indicate full marks.

**Q. 1 Write short notes on any six:**

**(30 Marks)**

- i) Give the advantages of virtual herbarium.
- ii) Deposition and maintenance of herbarium specimens.
- iii) Importance of Virtual herbarium.
- vi) Collection and processing of specimen for herbarium preparation.
- v) Herbaria in India.
- vi) Drying and poisoning techniques in herbarium preparation.
- vii) Maintenance of herbarium from insects and pests.

**Q. 2 Write in detail the importance of herbarium.**

**(20 Marks)**

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**(2021-2022)**

**Practical Examination April 2021-22**

**Total Marks: 50**

**Date: 12<sup>th</sup> April, 2022, Time: 11.00 am – 1:00 pm**

**Instructions:** 1. All questions are compulsory

2. Draw neat and labelled diagrams wherever necessary.

3. Figures to the right indicate full marks.

**Q 1. Press the given plant specimens. (10 Marks)**

**Q 2. Identify the given plant specimens using the available taxonomic literature. (10 Marks)**

**Q 3. Mount and label the given plant specimen. (10 Marks)**

**Q 4. Spotting – (10 Marks)**

A. Identify the object used in herbarium preparation methodology.

B. Identify the object used for collection.

C. Identify the type of taxonomic literature used in identification of plant specimen.

D. Identify the object used in herbarium preparation methodology.

E. Identify the object used in herbarium preparation methodology.

**Q 5. Submission of herbarium specimens. (10 Marks)**

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**OUTCOME**

Preservation of plant specimens is a huge subject as the diversity in plants is endless. The aim of herbarium is to accumulate all possible information about the habits, habitats, variations and uses of all the plants in one place. However big or small the herbaria may be, it is a repository of information and a research tool of considerable value. The herbaria have gained importance for sources of information on endangered species and are of primary interest to conservation groups.

Department of Botany conducted an Add-on Course for students on "**Herbarium Technique and Digital Herbaria**". Twenty students enrolled for this Add-on Course. The students not only learnt about various plant families but also learnt to prepare herbarium physically. With the advancement in herbarium technique, they also learnt about virtual herbarium and its advantages. This Add-on course will benefit students to learn and identify local flora and locate wild varieties of plants.

*Kranonija*  
Head  
Department of Botany  
D. P. Bhosale College, Koregoan



**RAYAT SHIKSHAN SANSTHA'S**

**D. P. BHOSALE COLLEGE, KOREGAON**

**DIST-SATARA, MAHARASHTRA, INDIA-415501**



**Certificate/ Add-On/ Value added Certificate**

**2021-22**

**Certificate**

This is to certify that, Mr./Ms./Miss.....  
.....participated in the Certificate/ Add-On/ Value added Certificate on  
“Add on Course in Herbarium Technique and Digital Herbarium” Organized  
by Department of Botany, D. P. Bhosale College, Koregaon, Satara  
(Maharashtra).



**Coordinator**

**Principal**