

**R.G. Bhoyar Arts, commerce and Science College Seloo**

**Department of Zoology**

**Certificate Course in Vermicomposting**

<b>Part A- Introduction</b>		
Programme: Certificate Course	Year: First Year	Session: 2022-23
Course Code		
Course Title	Certificate Course in Vermicomposting	
Course Type	Certificate	
Duration	30hrs	
Course fees per students	250/-	
No. of students admitted		
Pre-requisite (if any)		
Course learning outcome	<ul style="list-style-type: none"><li>➤ Organic waste converted into manure with the help of worms.</li><li>➤ Good thriving, all-season business for entrepreneurs that involves minimum investment and labor but maximum benefits.</li><li>➤ Agricultural, Dairy and Animal Waste used efficiently.</li><li>➤ Making and marketing value added product.</li></ul>	
Expected Job Role/ Career opportunities	<ul style="list-style-type: none"><li>➤ Excellent source of alternate income for farmers</li><li>➤ Compost after drying can be sold</li><li>➤ Worms can be sold to other farmers who are looking to start vermicomposting in their farms</li><li>➤ Set up industry, sale and marketing of compost.</li></ul>	
Credit Value	2	

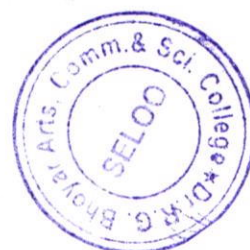


*A*  
Co-ordinator

Internal Quality Assurance Cell  
Dr. R. G. Bhoyar Arts, Comm.  
& Science College, SELOO

**Part B- Content of the Course (syllabus) and Teaching plan**

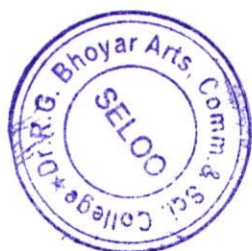
<b>Total No. of Lectures + Practical (in hours per week)</b>		
<b>Total No. of Lectures / Practical: L-30hrs/ P-30hrs (2 credit)</b>		
<b>Module</b>	<b>Topic</b>	<b>No. of Hours</b>
I	<b>Introduction to Vermiculture.</b> <ul style="list-style-type: none"> <li>➤ Objectives of vermicomposting.</li> <li>➤ Definition, Meaning</li> <li>➤ Economic importance and their values</li> <li>➤ Maintenance of soil structure, Role in recycling, reduce and restore.</li> </ul>	6
II	<b>Vermicompost technology (Method/Product)</b> <ul style="list-style-type: none"> <li>➤ Vermicompost technology, Vermicomposting method</li> <li>➤ Small scale earthworm farming for home garden</li> <li>➤ Conventional commercial composting</li> <li>➤ Earthworm farming</li> <li>➤ Extraction (harvest), vermicomposting harvest and processing.</li> </ul>	8
III	<b>Nutritional composting of vermicomposting.</b> <ul style="list-style-type: none"> <li>➤ Nutritional composting of vermicompost</li> <li>➤ Comparison of vermicompost with other fertilizer</li> <li>➤ Composition of vermicompost</li> <li>➤ Uses of vermicompost.</li> </ul>	4
IV	<b>Earthworm Biology</b> <ul style="list-style-type: none"> <li>➤ Types of earthworm and classification</li> <li>➤ Earthworm Farming (Vermiculture)</li> <li>➤ Sickness and worm's enemies.</li> <li>➤ Frequent problems. How to prevent and fix them.</li> </ul>	4
V	<b>Vermicompost equipment</b> <ul style="list-style-type: none"> <li>➤ Devices of vermibeds</li> <li>➤ Preparation of vermibeds</li> <li>➤ Maintenance of vermicompost and climatic condition</li> <li>➤ vermicomposting harvest and packaging</li> <li>➤ Transport and storage of vermicompost.</li> </ul>	8
VI	<b>Practical</b> <ul style="list-style-type: none"> <li>➤ Key to identify different types of earthworms</li> <li>➤ Study of Sytematic position, habits, habitat and External characters of <i>earthworm</i></li> <li>➤ Study of Vermiculture, Vermiwash and Vermicompost equipments, devices</li> <li>➤ Preparation of vermibeds, maintenance of vermicompost and climatic conditions.</li> <li>➤ Harvesting, packaging, transport and storage of Vermicompost and separation</li> </ul>	






### Lecture plan

Sr No.	Content	Name of faculty	Date	Sign
1.	Introduction to Vermiculture.	Dr. Vaishali Badwaik Department of Zoology Dr. R.G. Bhojar Arts, commerce and Science college seloo.		
2.	Vermicompost technology	Dr. Vaishali Badwaik Department of Zoology Dr. R.G. Bhojar Arts, commerce and Science college seloo.		
3.	Conventional commercial composting	Dr. Vaishali Badwaik Department of Zoology Dr. R.G. Bhojar Arts, commerce and Science college seloo.		
4.	Extraction (harvest), vermicomposting harvest and processing.	Dr. Gajanan S. Mhasal Senior Scientist and head K.V.K Selsura Wardha.		
5.	Comparison of vermicompost with other fertilizer Composition of vermicompost Uses of vermicompost	Dr. Manoj Thakre Department of Zoology K.Z.S. Science College Kalmeshwar, Nagpur		
6.	Earthworm, its sickness, enemies, frequent problems and how to prevent and fix them.	Dr. Dipti Kadu Department of Zoology Arts and Science college Pulgaon.		
8.	Harvest, Packaging, Transport and Storage of Vermicompost	Dr. Kshama Murarkar Department of Microbiology Dr. R.G. Bhojar Arts, commerce and Science college seloo.		



  
 Co-ordinator  
 Internal Quality Assurance Cell  
 Dr. R. G. Bhojar Arts, Comm.  
 & Science College, SELOO



**Name of the college/ Institute: Dr. R.G. Bhojar Arts, Commerce and Science College Selo**  
**Name of the course: Certificate Course in Vermicomposting**  
**Year (Duration): 30 hrs**

Sr. No.	Name of the student	Gender	Date of Birth	Place of birth			Category	Enroll. No. Registration no.	Educational qualification	Contact No.	Email
				Hometown	State						
1	Aishwarya Pramodrao Sawalake	F	12/24/2000	Wardha	MH	OBC	20211069909418	BSc 1st yr	9503215603	aishwaryasawalake1@gmail.com	
2	Ankita Rajkumar Khadse	F	8/5/1996	Wardha	MH	OBC	202101660066930	BSc 3rd yr	9970944089	ankitakhadse0508@gmail.com	
3	Anshul Anil Dahat	M	2/7/2002	Gondai	MH	SC	20211069909419	BSc 2nd yr	9823183290	dahatanshul22@gmail.com	
4	Anuradha Ramesh Rao Sonwane	F	8/27/1995	Wardha	MH	SBC	20201069900752	BSc 3rd yr	7498627486	anuradhasonwane27@gmail.com	
5	Avinash Shankarrao Pawar	M	11/23/1996	Ghorad	MH	VJ-A	2021016600519420	BSc 1st yr	8830275838	avipawar231196@gmail.com	
6	Bhagyashri Arun Naik	F	10/6/1997	Rehaki	MH	OBC	20211069909430	BSc 3rd yr	8767556192	naikbhagyashri76@gmail.com	
7	Dhanashri Ujwalrao Rannavare	F	11/2/2002	Sevagram	MH	Open	2021016600670660	BSc 2nd yr	9322238102	rannawaredhanashri@gmail.com	
8	Drushiti Umesh Korche	F	9/15/2002	Khadki	MH	ST	20211069909431	BSc 3rd yr	7620537276	drushitikorche@gmail.com	
9	Huma Naaz Naim Shaikh	F	2/9/2003	Wardha	MH	Open	20211069909430	BSc 3rd yr	7620537276	humashaikh2003@gmail.com	
10	Isha Raju Deollikar	F	10/26/2002	Selloo	MH	SBC	20211069909434	BSc 3rd yr	7972346707	ishadeollikar10@gmail.com	
11	Jivida Vithalrao Deshmukh	F	5/3/2002	Hinganghat	MH	OBC	20211069909435	BSc 3rd yr	8421087421	jividadeshmukh7@gmail.com	
12	Kalyani Shankar Dudhbade	F	3/22/2002	Selloo	MH	OBC	2021016600477010	BSc 2nd yr	7083894617	krushnalithakare2003@gmail.com	
13	Komal Khushal Mahakalkar	F	8/14/2002	Selloo	MH	OBC	2021016600667890	BSc 2nd yr	9579146397	chinchgharelina@gmail.com	
14	Krushnali Purushottam Thakare	F	1/19/2003	Selloo	MH	OBC	20211069909442	BSc 3rd yr	9356756311	payalkhonde12@gmail.com	
15	Lina Ghongadi chichghare	F	3/6/2003	Selloo	MH	OBC	20211069909479	BSc 3rd yr	7620626923	payaldeollikar@gmail.com	
16	Mayuri Shantaram Dudhbade	F	4/27/2003	Nagpur	MH	OBC	20211069909443	BSc 3rd yr	7028341978	khondepp26@gmail.com	
17	Payal Narayan Khonde	F	7/12/2005	Sevagram	MH	SC		BSc 1st yr	9075277965	mayuridudhbade@gmail.com	
18	Payal Prakashrao Deollikar	F	4/20/2002	Nagpur	MH	SBC		BSc 1st yr	9356756311	payalkhonde12@gmail.com	
19	Piyush Kamleshrao Khonde	M	8/13/1999	Wardha	MH	OBC	20211069909442	BSc 3rd yr	9356756311	payalkhonde12@gmail.com	
20	Prajakta Madhukarrao Khadse	M	4/10/2002	Sevagram	MH	OBC	20211069909442	BSc 3rd yr	9356756311	payalkhonde12@gmail.com	
21	Prajwal Vitthal Somnath	M	8/12/2004	Sawangi	MH	SC	20211069909443	BSc 3rd yr	7620626923	khondepp26@gmail.com	
22	Priyanka Hanuman Tembhekar	F	3/25/2005	Sevagram	MH	OBC		BSc 1st yr	9511294806	pkhadse502@gmail.com	
23	Sakshi Kawdu Mandale	F	11/7/2004	Amagaon	MH	OBC		BSc 1st yr	7720889053	praiwalsomnath@gmail.com	
24	Sakshi Naresh Pohane	F	9/9/2004	Selloo	MH	ST		BSc 1st yr	7066398442	praiyankatembhekar44@gmail.com	
25	Samiksha Sanjay Dhongde	F	9/28/2002	Selloo	MH	OBC		BSc 1st yr	9325616391	sakshimandale8@gmail.com	
26	Sankeet Pramodrao Bhojar	M	9/19/1997	Sevagram	MH	OBC	20211069909449	BSc 3rd yr	8767184164	samikshadhongde07@gmail.com	
27	Saurabha Harishchandra Bunde	M	3/5/2002	Shivangaon	MH	OBC	20211069909497	BSc 3rd yr	8830668711	bsanketbhojar@gmail.com	









FB-D/ADULT/RECEIPT-17

1

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

BOARD OF LIFELONG LEARNING AND EXTENSION

GURUNANAK BHAVAN, UNIVERSITY CAMPUS, NAGPUR.

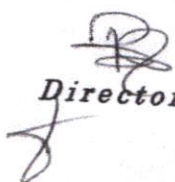
RECEIPT

No. 787

Date 29/11/2022

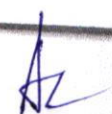
Received from Dr. R.G. Bhojar Arts, Com &  
Science college SELOO, Dist. Wardha the sum  
of Rupees Five hundred only by Cash/Cheque/  
Draft no. 009608 dated 29/11/2022  
on the Bank of Baroda  
on account of Proposal & Registration fees  
under Teemaa Shiksha Course

Rs. 500/-

  
Director

(Receipt of Cheque/Draft is subject to realization)



  
Co-ordinator  
Internal Quality Assurance Cell  
Dr. R. G. Bhojar Arts, Comm.  
& Science College, SELOO



Vidyabharti Sanstha's  
**Dr. R. G. BHOYAR ARTS, COMMERCE &  
SCIENCE COLLEGE SELOO, DIST. WARDHA**  
(Vidyabharti College Seloo)  
NAAC Accredited with B+ Grade

To,  
The Department of Lifelong Learning and Extension,  
RTMN Nagpur University,  
Nagpur.

**Subject:** Submission of Proposal for Short Term Certificate Courses under Jeevan Shikshan Abhiyan.

Respected sir,

With reference to above cited subject, I am herewith submitted short term certificate course proposal for session 2022-23 of following Department and subject along with processing fee demand draft.

Sr. No.	Name of Short Term Certificate Courses	Department	Course Coordinator
1	Certificate Course on Vermicomposting	Zoology	Dr. Vaishali J. Badwaik

Kindly consider above proposal and demand draft 500/- for approval and acceptance as early as possible. Please give acknowledgement receipt for the same.

Thank you

all

*Principle*  
29/11/2022

*Ar*  
Co-ordinator  
Internal Quality Assurance Cell  
Dr. R. G. Bhoyar Arts, Comm.  
& Science College, SELOO



*Principle*  
PRINCIPAL  
Dr. R. G. Bhoyar Arts, Comm.  
& Sci. College, SELOO



**R.G. Bhoyar Arts, commerce and Science College Seloo**

**Department of Zoology**

**Certificate Course on Vermicomposting**

Part A- Introduction		
Programme: Certificate Course	Year: First Year	Session: 2022-23
Course Code		
Course Title	Certificate Course on Vermicomposting	
Course Type	Certificate	
Duration	40hrs	
Course fees per students	250/-	
No. of students admitted	20	
Pre-requisite (if any)		
Course learning outcome	<ul style="list-style-type: none"><li>➤ Organic waste converted into manure with the help of worms.</li><li>➤ Good thriving, all-season business for entrepreneurs that involves minimum investment and labor but maximum benefits.</li><li>➤ Agricultural, Dairy and Animal Waste used efficiently.</li><li>➤ Making and marketing value added product.</li></ul>	
Expected Job Role/ Career opportunities	<ul style="list-style-type: none"><li>➤ Excellent source of alternate income for farmers</li><li>➤ Compost after drying can be sold</li><li>➤ Worms can be sold to other farmers who are looking to start vermicomposting in their farms</li><li>➤ Set up industry, sale and marketing of compost.</li></ul>	
Credit Value		






Co-ordinator

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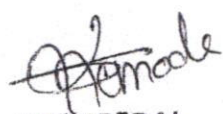


**Part B- Content of the Course (syllabus)**

Total No. of Lectures + Practical (in hours per week)		
Total No. of Lectures / Practical: L-30hrs/ P-30hrs		
Module	Topic	No. of Hours
I	<b>Introduction to Vermiculture.</b> <ul style="list-style-type: none"> <li>➤ Objectives of vermicomposting.</li> <li>➤ Economic importance and their values</li> <li>➤ Nutritional Composition of Vermicompost for plants, comparison with other fertilizers.</li> </ul>	
II	<b>Earthworm Biology and Rearing</b> <ul style="list-style-type: none"> <li>➤ Types of earthworm and classification</li> <li>➤ Earthworm Farming (Vermiculture)</li> <li>➤ Enemies of Earthworms, Sickness and worm's enemies.</li> <li>➤ Frequent problems. How to prevent and fix them.</li> <li>➤ Complementary activities of auto evaluation.</li> </ul>	
III	<b>General aspects of vermicomposting.</b> <ul style="list-style-type: none"> <li>➤ Vermicompost Production Requirement</li> <li>➤ Vermicomposting method</li> <li>➤ Maintenance of vermicompost and climatic condition.</li> <li>➤ Extraction (harvest), vermicomposting harvest and processing.</li> </ul>	
IV	<b>Practical</b> <ul style="list-style-type: none"> <li>➤ Key to identify different types of earthworms</li> <li>➤ Study of Sytematic position, habits, habitat and External characters of <i>earthworm</i></li> <li>➤ Study of Vermiculture, Vermiwash and Vermicompost equipments, devices</li> <li>➤ Preparation of vermibeds, maintenance of vermicompost and climatic conditions.</li> <li>➤ Harvesting, packaging, transport and storage of Vermicompost and separation</li> </ul>	

  
 Coordinator  
 Inter-University Assurance Cell  
 Dr. R. G. Bhoyar Arts, Comm.  
 & Science College, SELOO



  
 PRINCIPAL  
 Dr. R. G. Bhoyar Arts, Comm.  
 & Sci. College, SELOO





RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY,  
NAGPUR  
DEPARTMENT OF LIFELONG LEARNING AND EXTENSION  
PROPOSAL FOR CONDUCTING SHORT TERM CERTIFICATE  
COURSE UNDER JEEVAN SHIKSHAN ABHIYAN

1. Basic Information about the applicant College/Departments:

(i) Name of the College/University Department/Institute

Dr. R. G. Bhojar Arts, Commerce and Science College Seleo

(ii) Complete Postal Address of College/Department/Organization (Registered

Address)  
Nagpur - Wardha Highway  
Th. Seleo Dist. Wardha  
P.in. 442104

(iii) Status:

Affiliated/Conducted/Autonomous... Affiliated

(iv) Affiliation/Registration No. .... Attach Affiliation/Registration Certificate

(v) Name of the Principal/Director/HOD University Dept. ... Dr. Sanjay S. Kanode

(vi) Phone Number /Mobile:

7350480025 / 9881815650

(vii) Email ID of College &

Principal.....

2. Details of the Course Proposed:

(i) Name of the Certificate

Course..... Certificate course on Vermicomposting

(ii) Target Group(s)

UG (Life Science)

(iii) Duration of the Course

40 hrs

(iv) Timings

8:00 pm to 4:00 pm

(v) Medium of Instruction - English.

  
Co-ordinator  
Internal Quality Assurance Cell  
Dr. R. G. Bhojar Arts, Comm.  
& Science College, SELOO





(vii) Fees to be Charged per student ..... 250/- .....

3. Syllabus for the proposed Course: A copy of the Syllabus must be attached giving details about Theory & Practical etc. along with the Teaching Plan and course objectives

4. Details of the Faculty for Course:

(i) Whether College /Department has any Degree/ Diploma Course related to the Proposed course :- YES / NO

(ii) Whether the course is prepared by Experts from related field YES / NO

(iii) Information of Course Coordinator (To be appointed for the course):

Name and Address/ e-mail & Mobile No. (WhatsApp)	Qualification	Experience
Dr. Vaishali Badwaik	MSc., Mphil., PhD (Zoology) Specialization - Entomology	3 yrs.

(iv) Information of Faculty Members (To be appointed for the course)

Sr. No.	Name of the Faculty Member	Qualification	Topics	Full Postal Address/ e-mail & Mobile No.
1)	Dr. Vaishali Badwaik	MSc., Mphil. PhD.	Vesmi - Composting	Wadgaon Road Ward No. 4 Sector 7350480025

5. Details of the Physical Facility to be provided for the course :

(i) Class Rooms Details - 01



(ii) Library Details

..... Adegnate books .....

(iii) Details of Practical

Room/Laboratory..... hand (field area).....

(iv) Details of Laboratory

Equipment's..... Vermibeds,..... Kharpi..... etc.

(v) Any Other facility/Online Platforms etc.

..... Google Meet,..... Zoom .....

6. Particulars of Expenditure:

Sr. No.	Particulars	Amount
1	Honorarium to Staff	2000
2	Teaching Material	2000
3	Contingencies	1000
4	Total	5000

7. Credit weightage of the course.

Name of the Course	Number of Hours of Teaching/Training	Number of Credits as per Table A

\*The Application Form should be accompanied with Hourly Teaching Plan to justify the teaching hours and duration of course.

Signature & Seal of the  
Principal/Director/Head of Department

Dr. R. G. Bhoyar Arts Comm  
& Sci. College, SELOO



Signature & Seal of the  
Course Director

UNDERTAKING

I, Dr./Mr./Mrs./M/SS.

..... Sanjay S. Kanode .....

Principal/Head of the Department/ Secretary or President of Institution

..... Dr. R. G. Bhoyar Arts, Comm. & Science College Selo .....

Undertake to state that I shall be abiding by the rules & regulations of the Department regarding organization and completion of the course.

Dated: 23/11/2022



Internal Quality Assurance Cell  
Dr. R. G. Bhoyar Arts, Comm.  
& Science College, SELOO

Signature & Seal  
PRINCIPAL

Dr. R. G. Bhoyar Arts, Comm.  
& Sci. College, SELOO







# RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

(Established by Government of Central Provinces Education Department by Notification No.513 dated the 1<sup>st</sup> August 1923 & presently a State University governed by Maharashtra Universities Act, 1994)

No. RTMNU/BCUD/G/2017/ 232

Date: 02 / 03 / 2017

To

✓ The Principal  
Vidyabharati College,  
Near Grampanchayat Bhavan,  
Seloo. Dist. Wardha-442104

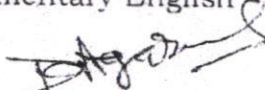
Reference: Your Application for Permanent Affiliation.

With reference to above, this is to inform you that your application for Permanent Affiliation has been processed as per the provisions of Section 88 of the Maharashtra Universities Act, 1994 and Statute No.1 of 2010.

A committee constituted by the Board of College and University Development has scrutinized the infrastructural facilities, academic, administrative and financial standards of your college. The report of the committee was considered and approved by the Board of College and University Development and thereafter by the Academic Council.

Accordingly, your college has been accorded Permanent Affiliation in the following Subjects under the **Commerce and Science Faculties**.

<u>Sr. No.</u>	<u>Faculty</u>	<u>Courses/Subjects</u>
(1)	<b>Commerce Faculty</b>	<b>(Bachelor of Commerce)</b> 1) English, 2) Marathi, 3) Hindi, 4) Commerce
(2)	<b>Science Faculty</b>	<b>(Bachelor of Science)</b> 1) Chemistry, 2) Botany, 3) English, 4) Physics, 5) Marathi, 6) Biochemistry, 7) Mathematics, 8) Zoology, 9) Microbiology, 10) Hindi, 11) Electronics, 12) Computer Science, 13) Supplementary English

  
(Dr. D. K. Agarwal)  
Director, BCUD

Rashtrasant Tukadoji Maharaj  
Nagpur University, Nagpur.

Copy to:-

The Deputy Registrar, (College Section)  
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

Co-ordinator

Internal Quality Assurance Cell  
Dr. P. V. Bhojar Arts, Comm.  
& Science College, SELOO





