

Rayat Shikshan Sanstha's  
RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR.

DEPARTMENT OF ZOOLOGY (2021-22)

INAUGURATION OF CERTIFICATE COURSE IN VERMITECHNOLOGY

REPORT

Department of Zoology started Certificate course in Vermitechnology from Academic year 2020-21. The main objective of this course is to build entrepreneurship skills among the students and to encourage the students for organic farming with the help of vermitechnology. This course is of 3 month duration with 2 credits. Course fee for this year was 400/- rupees per student. Course was inaugurated on 24<sup>th</sup> December, 2021 with auspicious presence of Arts faculty incharge Dr. B. S. Puntambekar madam. Online Examination(MCQ) and oral examination were conducted. Each student who successfully completed this course were awarded course certificate. Outcome of this course resulted in awareness about organic farming among the students.

DM  
Course coordinator  
(smt. D.A. Malvekar)

DM  
Head  
Department of Zoology  
Rajarshi Chh. Shahu College, Kolhapur

## **Information regarding Skill Development Courses/Career Oriented Courses**

**Name of the Department:** Zoology

**Course name:** “CERTIFICATE COURSE IN VERMITECHNOLOGY”

**Course Coordinator name & Contact number:** Smt. D. A. Malvekar (9067197523)

**Duration :** 03 months

**Course Fee:** 300/-

**Eligibility:**12<sup>th</sup> Passed student

**Minimum intake Capacity:** 15

### **Objectives of the Course:**

1. To build an interest about Vermicompost, Vermiwash & Vermiculture among the students
2. To build entrepreneurship skills among the students
3. To encourage students about culture & management of Earthworms
4. To encourage the students for organic farming with the help of vermitechnology.
5. To aware the students about diseases and pests of Earthworm.

### **Learning Outcomes :**

1. Students can construct their own compost in farm & can get monthly income.
2. Students/ farmers by using vermicompost can increase the productivity.
3. Students can produce vermicompost on small scale for garden/household plants.
4. The candidate can generate income by supplying vermiculture, vermiwash, & vermicompost.
5. He/she will directly or indirectly help to reduce environmental pollution.

**Syllabus:**

<b>Sr.No.</b>		<b>Periods</b>
<b>1.</b>	<b>Unit 1: Introduction</b>	<b>07</b>
	1.1 Vermicomposting : Introduction and Scope, History, their value in maintenance of soil structure, role as four r's of recycling : reduce, reuse, recycle, restore. 1.2 Types of Earthworm and Classification Epigeic, Endogeic, Diageic species . Useful species of earthworms. 1.3 Life history of Earthworms (Earthworm Species : <i>Eisenia foetida</i> / <i>Eudrillus euginae</i> ) 1.4 Objectives of Vermicompost.	
<b>2.</b>	<b>Unit 2:</b>	<b>06</b>
	2.2 Methods of Vermicomposting: Small and large scale Bed method, Pit method . 2.3 Vermicompost Production : Establishment of Vermicomposting and Vermiwash unit 2.4 Pests and diseases of Earthworms	
<b>3.</b>	<b>Unit 3 :</b>	<b>06</b>
	3.1 Management of vermicompost bed 3.2 Harvesting the Compost & Vermiwash 3.3 Storage and packaging of vermicompost 3.4 Physico- chemical analysis of vermicompost	
<b>4.</b>	<b>Unit 4 :</b>	<b>06</b>
	4.1 Components of vermicompost and their role in agriculture 4.2 Importance and use of vermicompost 4.3 Importance & use of vermiwash 4.4 Marketing & awareness for farmers by organising farmers meet	

**Practicals:****15**

1. Classification of Earthworm
2. Study of external morphology of Earthworm- *Eisenia foetida*
3. Study of habit and habitat of Earthworm- *Eisenia foetida*
4. Study of Digestive system of earthworm
5. Study of Reproductive system of earthworm
6. Study of cocoon and juvenile stages of earthworm.
7. Study of Pests and diseases of Earthworm
8. Establishment of vermicomposting unit: Pit method
9. Establishment of vermicomposting unit: Bed method

10. Establishment of vermiwash unit
11. Vermicompost production, harvesting and packaging.
12. Study the effects of vermicompost & vermiwash on crops.

**Suggested readings:**

1. Pragatshil sheticha Rajmarg : Gandulsheti ,Dr.R.S.Dubal
2. Bhatt J.V. & S.R. Khambata (1959) “Role of Earthworms in Agriculture” Indian Council of Agricultural Research, New Delhi
3. Dash, M.C., B.K.Senapati, P.C. Mishra (1980) “ Verms and Vermicomposting” Proceedings of the National Seminar on Organic Waste Utilization and Vermicomposting Dec. 5-8, 1984, (Part B), School of Life Sciences, Sambalpur University, Jyoti Vihar, Orissa.
4. Edwards, C.A. and J.R. Lofty (1977) “Biology of Earthworms” Chapman and Hall Ltd., London. 4. Lee, K.E. (1985) “Earthworms: Their ecology and Relationship with Soils and Land Use” Academic Press, Sydney.
5. Satchel, J.E. (1983) “Earthworm Ecology” Chapman Hall, London. 8. Wallwork, J.A. (1983) “Earthworm Biology” Edward Arnold (Publishers) Ltd. London.

**Examination:**

Examination will be conducted as follow:

Multiple choice questions	30 Marks
Oral	10 Marks
<b>Total Marks:</b>	<b>40 Marks</b>

## Rayat Shikshan Sanstha's

### RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR

#### Board of Studies for Arts, Commerce and Science Faculty

The college has constituted the BoS for approving the curriculum and guidance to the faculty regarding skill/Capsule/COC/Value added and self financing courses run by the college. The college runs the Short Term, COC, Value added courses along with the courses related with Arts, Commerce and Science programmes. The college has formed BoS which gives approval to curriculum of short term, COC, value added courses run by various departments in the college. The BoS keeps track of the emerging trends and latest industry requirement, the global changes taking place in relation to the innovativeness to bring the necessary changes for Skill development, Value addition among the students. The BOS considers the feedback received from stakeholders which include students, parents, alumni, industry experts, academic peers and faculty and deliberates the same to the IQAC of the College to think and recommend various courses that will be brought into curriculum related to various programs. The BOS ensured that overall academic system has been properly built into the curriculum related to various courses offered by the college.

- **Following is the working method adapted by BOS:**

1. College collects feedback from all the stakeholders (students, parents, alumni, industry experts, academic peers, community persons).
2. Discusses the feedback with members of the IQAC.
3. Makes recommendations to the CDC of College for starting the needed courses.
4. Invites proposal for departments of different subjects to start new course like short term, COC, value added courses in difference subjects.
5. The college BoS goes through these received proposals and give approval to start the curriculum.
6. The BoS also decided the duration, student strength and fee structure etc. for the courses and communicates to respective department.
7. Suggest the departments to bring the necessary changes with implementing the required courses if any.

- **The composition of BOS is as follows:**

Chairperson- Hon'ble Principal of the College

Members: 1. Hon'ble Vice- Principal of the College

2. IQAC Co-ordinator

3. In-charge Arts Faculty

4. In-charge Arts Faculty

5. In-charge Science Faculty

6. Criterion -I (Chairman)





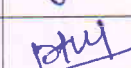

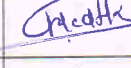

7. All the Heads of the Departments

8. One Expert from other college

**Rayat Shikshan Sanstha's**  
**RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR**

**Department of Zoology**  
**Certificate course in Vermitechnology (2021-22)**

**Board of Studies**

Sr.No.	Name	Designation	Current status	Sign
1	Prof. Dr. V. V. Killedar	I/C Principal	Chairperson	
2	Dr. S. P. Pawar	IQAC Coordinator	Member	
3	Dr. S. S. Lavekar	Chairman, Criterion I	Member	
4	Dr. M.K. Kannade	Chairman, Skill Development courses	Member	
5	Smt. D. A. Malvekar	Head, Dept. of Zoology	Member	
6	Smt. G. R. Katkar	Asst. Professor, Dept. of Zoology	Member	
7	Mr. S. S. Jagtap	Asst. Professor, Dept. of Zoology	Member	
8	Dr. J. A. Chavan	Asst. Professor, Dept. of Zoology, Rajaram College, Kolhapur	Expert	



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RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR  
DEPARTMENT OF ZOOLOGY  
CERTIFICATE COURSE IN VERMITECHNOLOGY (2021-22)  
TIME TABLE**

Day Time	Thursday	Friday	Saturday
10:00 a.m. to 11:00 a.m.	RSD/SSJ	DAM	GRK
3:00 p.m. to 4:00 p.m.	-	-	Practical

*raty*  
Coordinator  
(Smt. D.A. Malvkar)

*Deep*  
Head  
Department of Zoology  
Rajarshi Chh. Shahu College, Kolhanur.

**Rayat Shikshan Sanstha's**  
**Rajarshi Chhatrapati Shahu College, Kolhapur**  
**Department of Zoology**  
**Skill Enhancement Course in Apiculture**  
**2021-22**

**List of Students admitted for the Course**

Sr. No.	Name of Student	Class
1	Bargir Juberahamad Bashir	B.Sc III
2	Gaikwad Goutami Dilip	B.Sc III
3	Jamadar Yasmin Mansur	B.Sc III
4	Khot Pooja Shahaji	B.Sc III
5	Mane Sakshi Rajendra	B.Sc III
6	Nadaf Sunehara Ayyaj	B.Sc III
7	Patel Wasifa Hidayatulla	B.Sc III
8	Patil Bhagyashree Prakash	B.Sc III
9	Powar Onkar Sanjay	B.Sc III
10	Shaikh Heenayasmin Irshad Alam	B.Sc III
11	Bhatal Komal Ashok	B.Sc III
12	Jadhav Vivek Arun	B.Sc III
13	Kamble Ankita Sambhaji	B.Sc III
14	Kamble Pritam Suryakant	B.Sc III
15	Kamble Rinkal Tanaji	B.Sc III
16	Pol Priyanka Bhupal	B.Sc III
17	Sangaokar (Kamble) Omkar Mahadev	B.Sc III
18	Swami Shweta Vishwanath	B.Sc III
19	Talekar Shraddha Madan	B.Sc III
20	Torgal Ayesha Najeer	B.Sc III

  
( Ms. Kattkar.G.R.)  
Co-ordinator

  
Head,  
Department of Zoology



"Education through self-help is our motto" -Karmaveer



Rayat Shikshan Sanstha's,

# RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR.

NAAC Reaccredited 'A' Grade (with CGPA 3.07) 3rd Cycle

## CERTIFICATE

This is to certify that, Shri/Smt. JYOTI KRISHNAT KALE

Mother's Name KALPANA

Class B.Sc III of Department of Zoology College RCSC  
has successfully completed the Career Oriented/Certificate Course in VERMITECHNOLOGY

organized by **Rajarshi Chhatrapati Shahu College, Kolhapur.**

Course organized academic year 2019-20



*Miss*

**Course Coordinator**

(Miss D.A. Malvetae)

*Principal*

**Principal**

