



H.K.E. SOCIETYS
B.V.BHOOMARADDI ARTS, SCIENCE AND
COMMERCE COLLEGE, BIDAR



Value added course on Vermicompost Technology 2020-21

Course co-ordinator

Dr.V.M.Chennashetty
Head of
Department of Zoology



H.K.E. Society's

**B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY**

VALUE ADDED COURSE 2020-2021

Course Name : **Vermicompost Technology**
Duration : 30 Hrs
Course Coordinator : Dr.V.M.Chennashetty
Time of Course : 09:00 to 10:00Am Practical's on Sunday
Number of Students : 25

Name of the lecturers

- Dr.V.M.Chennashetty
- Smt.Manolata.M
-



H.K.E. Society's
B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY

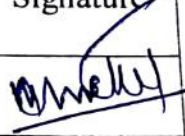


VALUE ADDED COURSE 2020-2021

Vermicompost Technology

Intitutional BOS Meeting

The institutional BOS meeting of the Department of Zoology for the Value added course on "Vermicompost Technology" was held on 02/12/2020 at IQAC room at 11.00am

Institutional BOS

Sl. No	Name	Institute	Designation	Signature
1	Dr.V.M.Chennashetty	Head Department of Zoology B.V.B Degree college Bidar	Chairman	
2	Smt.Manolata.M	Guest Lecture Department of Botany B.V.B Degree college Bidar	Member	
3	Dr.Ranibai.Patil	Department of Zoology Karnataka Degree College	External Member	

At the beginning of the meeting chairman of the institutional BOS welcomed all the members and briefed them about the progress of the Department of Zoology . The members appreciated and expressed their satisfaction about the course and activities of the Department .

After the discussion following resolutions were made

Item 1. Starting of value added course on Mushroom cultivation

The BOS discussed and revolve that the course should be started form **January 2021**.

Item 2. Approval of the syllabus for value added course

The BOS discussed and approved the syllabus for the value added course on Vermicompost Technology

Item 3. Criteria for admission, regulation and policies to run the course and examination pattern

The BOS discussed and approved the criteria for admission and resolved that the student should have enrolled in BOS is concluded with Vote of thanks by Smt.Manolata.M Guest Faculty of Department of Zoology .

The following members were present in the meeting

- Dr.V.M.Chennashetty
- Smt.Manolata.M

Date: 01/12/2020

To,


The Principal
B.V.Bhoomaraddi College of Arts,
Science and Commerce,
BIDAR

Sub: Request to grant permission to start Value added course on
“**Vermicompost Technology**” from the academic year 2020-21.

Respected Sir,

We would like to start the Value added course on “**Vermicompost Technology**” from the academic year 2020-21 with intake of 25 students. Please permit us to start the Value added course and do the needful.

Thanking You.


HOD
Head of Zoology Dept.
B. V. B. College, BIDAR.


PRINCIPAL



H.K.E. SOCIETY'S
B.V. BHOOMARADDI COLLEGE OF ARTS, COMMERCE AND COMMERCE COLLEGE

BIDAR - 585403. (K.S)

Phone :08482-235207



(Affiliated to Gulbarga University, Kalaburgi)

DEPARTMENT OF ZOOLOGY




CERTIFICATE COURSE IN

VERMICOMPOST
TECHNOLOGY

FOR THE ACADEMIC YEAR 2020-2021

LIST OF STUDENTS ADMITTED

COURSE CODE NO : _____

SL .NO	Name of the students	Class /sem .	Roll No.	Cell No	E-Mail ID	Photo with Signature
1	Dikshant	Bsc th IV sem	22			
2	Praphul	B.sc IV th Sem	23			
3	Soundarya	B.sc IV th sem	3			

H.K.E. Society's







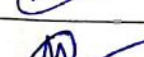
B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY

Value added course 2020-2021 on "Vermicompost Technology"

Time table Theory (Time: 09-10am)

SL No	Date	Days	Signature
1	02 January	Saturday	
2	03 January	Sunday	
3	09 January	Saturday	
4	10 January	Sunday	
5	16 January	Saturday	
6	17 January	Sunday	
7	23 January	Saturday	
8	24 January	Sunday	
9	30 January	Saturday	
10	31 January	Sunday	
11	06 February	Saturday	
12	07 February	Sunday	
13	13 February	Saturday	
14	14 February	Sunday	
15	20 February	Saturday	
16	21 February	Sunday	
17	27 February	Saturday	
18	28 February	Sunday	
19	06 February	Saturday	
20	07 February	Sunday	

Practical Time table (Time: 11-01pm)

1	03 January	Sunday	
2	10 January	Sunday	
3	17 January	Sunday	
4	24 January	Sunday	
5	07 February	Sunday	
6	14 February	Sunday	
7	21 February	Sunday	
8	28 February	Sunday	
9	07 March	Sunday	
10	14 March	Sunday	


HOD

Head of Zoology Dept.
B. V. B. College, BIDAR,


Principal

PRINCIPAL
B.V.Bhoomaraddi College
of Arts, Science & Comm
BIDAR-585 403.

H.K.E. Society's

**B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY**

Value added course on "**Vermicompost Technology**"

Preamble: Vermicomposting truly is nature's great disappearing act! Aristotle once said ,
"Worms are the Intestine of the Earth"

Using worms to convert decomposing food waste onto nutrient -rich fertilizer is simple ,
inexpensive , energy efficient and a great way to teach Students to become Life -Long -
Recyclers.

Learning Outcomes

- Students can construct their own farm and thereby can get income of Rs.7000-8000.
- Students /Farmers by using Vermicompost in their fields can increase the crop yield .
- They can get the jobs in Educational institutes AS Vermicompost/Vermiculture Technician.
- It will lead towards Organic Farming and Healthy Food .
- The Candidate generate income by supplying worms ,Vermiwash and Vermicompost.
- By Developing and Propogating Vermicompost Technology will directly or indirectly help to prevent environmental pollution by using Vermicompost in the field and there by increasing crop yield he will help to solve food problems.

In Today's World , recycling of garbage has become necessary in order to sustain our Health and Environment.

**So let for Four R 's of Recycling . Reduce ,Recycle ,Restore i.e.certificte course i
"VERMICOMPOST TECHNOLOGY"**

Instructional Design:-

This course is of 30 hours duration which includes theory classes and Practical's.

Eligibility: Students enrolled in B.Sc. program of this college No. of Seats: 25



H.K.E. Society's

**B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY**

Value added course on " Vermicompost Technology "

Theory:-

Unit 1- VERMICOMPOST

06hrs

- General introduction about Vermiculture and Vermicompost.
- Role in biotransformation of residues generated by Human activity and Production of Fertilizers.
- Choosing the right earthworm .Useful species of earthworm

Unit II- EARTHWORM BIOLOGY

06hrs

- Taxonomy , Anatomy
- Physiology and Reproduction of Lumbricidae
- Vital cycle of Eisenia Fetidae

Unit III - VERMICOMPOST TECHNOLOGY

04hrs

- Earthworm compost for home gardens.
- Earthworm composting larger scale .
- Earthworm Farming extraction, Vermicomposting harvest and processing.

Unit IV- NUTRITIONAL COMPOSITION

04hrs

- Vermicompost FOR PLANTS .
- Comparision with other fertilizers.
- Vermiwash Collection , composition and use.
- Enemies of Earthworms , Sickness and worms enemies.



Practicals:

- Key to identify different types of Earthworms. 2hrs
- Field trip-collection local Earthworms and their identification. 2hrs
- Study of Vermiculture ,Vermiwash and Vermicompost equipments devices 2hrs
- Preparation of vermibed , maintainance of Vermicompost ,harvesting ,packing 2hrs
transport and storage of vermicompost
- Study of Worms disease and enemies , as study the effect of vermicompost 2hrs
and vermiwashon any 2 short duration crop plants.

H.K.E. Society's

**B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY**

NOTICE

All the students are hereby informed that Department of Zoology is offering the value added course on " **Vermicompost Technology** " interested students can enroll their names with any faculty of Department of Zoology on or before 02/12/2020.


HOD

Head of Zoology Dept.
B. V. B. College, BIDAR.


Principal

PRINCIPAL
B.V.Bhoomaraddi College
of Arts, Science & Comm
BIDAR-585 403.

H.K.E. Society's

B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY

List of students for Value added course 2020-21 on
" Vermicompost Technology "

SL No	Name of the Students	Contact No.	Signature
1	Dikshant	9663747715	
2	Praphul	8296926619	
3	Soundarya	8050306571	
4	Pooja.B	7795591232	
5	Spoorti	7760092802	
6	Sandeep swamy	9019542874	
7	Vijaylaxmi	8792397945	
8	Sai Kiran	9108326961	
9	Hingaladevi	8088783805	
10	Anusuya	7349649788	
11	Kishor	8951836479	
12	Priya	9880057501	
13	Kanaka	7899981620	
14	Sachin	6364599339	
15	Sachin Kumar	8088288613	
16	Bhagyavanti		
17	Shivananda	9353522645	
18	Eramma	6361403550	
19	Roshan	8904773336	
20	Pooja .Z	9448715783	
21	Sachin	8088288613	
22	Saba Khanam	7483413324	
23	Siddarth	9986858067	
24	Chakrapani	8971511011	
25	Saikumar .V	6361377763	

HOD

Head of Zoology Dept.
B. V. B. College. BIDAR.

Principal

PRINCIPAL
B.V.Bhoomaraddi College
of Arts, Science & Comm
BIDAR-585 493.



H.K.E. Society's

**B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY**

NOTICE

All the students enrolled in "**Vermicompost Technology**" are informed that CIE Examination for this course is going to be held on 14/02/2021 at Department of Zoology.


HOD

Head of Zoology Dept.
B. V. B. College, BIDAR.


Principal
PRINCIPAL
B.V.Bhoomaraddi College
of Arts, Science & Comm
BIDAR-585 403.

H.K.E. Society's


**B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY**

NOTICE

All the students enrolled in "**Vermicompost Technology**" are informed that Course End Examination for this course is going to be held on 22/03/2021 at Department of Zoology.


HOD

Head of Zoology Dept.
B. V. B. College. BIDAR.


Principal
PRINCIPAL
B.V.Bhoomaraddi College
of Arts, Science & Comr
BIDAR-585 403.

B.V. BHOOMARADDI COLLEGE

Academic Year 2020-2021

Certificate Course

Students Attendance Register

ARTS, SCIENCE & COMMERCE, B.Aar

Register of Students of the Faculty of Arts, Science & Commerce

Roll No.	Reg. No.	Name of Student	Date																		
			No. of Class	1	2	3	4	5	6	7	8	9	10	11	12						
		Dhishant		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Dhishant		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Saundarya		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Pooja B		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Spoorti		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Sandeep		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Vijaylaxmi		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Sal Khan		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Hingaladani		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Ananya		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Kishore		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Priya		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Kanaka		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Sachin		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Sachin Kumar		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Bhagyavati		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Shivamud		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Ebarna		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Roshan		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Pooja Z		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Sachin		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Saba Khanam		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Siddharth		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Chakrapani		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
		Srikumar V		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Signature of Lecturer with Date			[Handwritten Signatures]																		



H.K.E. SOCIETYS
B.V.BHOOMARADDI ARTS, SCIENCE AND
COMMERCE COLLEGE, BIDAR



DEPARTMENT OF ZOOLOGY

THEORY AND PRACTICAL EXAMINATION ATTENDANCE SHEET
LIST OF STUDENTS FOR VALUE ADDED COURSE 2020-21 ON
" Vermicompost Technology "

SL No	Name of the Students	Theory	Practical
1	Dikshant	Dikshant	Dikshant
2	Praphul	Praphul	Praphul
3	Soundarya	Soundarya	Soundarya
4	Pooja.B	Pooja	Pooja
5	Spoorti	Spoorti	Spoorti
6	Sandeep swamy	Sandeep	Sandeep
7	Vijaylaxmi	Vijaylaxmi	Vijaylaxmi
8	Sai Kiran	Sai Kiran	Sai Kiran
9	Hingaladevi	Hingaladevi	Hingaladevi
10	Anusuya	Anusuya	Anusuya
11	Kishor	Kishor	Kishor
12	Priya	Priya	Priya
13	Kanaka	Kanaka	Kanaka
14	Sachin	Sachin	Sachin
15	Sachin Kumar	Sachin	Sachin
16	Bhagyavanti	Bhagyavanti	Bhagyavanti
17	Shivananda	Shivananda	Shivananda
18	Eramma	Eramma	Eramma
19	Roshan	Roshan	Roshan
20	Pooja .Z	Pooja	Pooja
21	Sachin	Sachin	Sachin
22	Saba Khanam	Saba	Saba
23	Siddarth	Siddarth	Siddarth
24	Chakrapani	Chakrapani	Chakrapani
25	Saikumar .V	Saikumar	Saikumar


HOD

Head of Zoology Dept.
B. V. B. College, BIDAR

Principal

H.K.E. Society's

B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR

DEPARTMENT OF ZOOLOGY

Internal Assessment Test (Theory)

Value Added Course

Paper: "Vermicompost Technology"

Time: 40 Minutes

Max Marks: 10

Note: a) Answer any TWO of the following Questions.

b) Draw the diagram wherever necessary.

- Q** 1. Explain in brief Alimentary Canal of Earthworm.
2. Explain key to identify types of Earthworm.
3. Describe the history of Earthworm.

Verminipost Technology39
10

1) Explain in brief alimentary canal of earthworm

→ The alimentary canal is long and straight and runs between the first and last segment of the body.

→ Mouth is the first segment called peristomium and is covered by protomium which acts as a wedge to force an open crack in the soil.

→ The protomium is sensory in nature.

→ It extends from 2nd to 3rd segment, i.e. Buccal cavity

→ Buccal cavity holding the food during ingestion.

→ pharynx is a thin-walled, pear-shaped chamber which extends till 4th segment

→ pharynx continues into the oesophagus

→ Oesophagus is a small narrow thin tube-like structure present on 5-7 segments.

H.K.E. Society's

B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR

DEPARTMENT OF ZOOLOGY

Main Question Paper (Theory)

Value Added Course

Paper : Vermicompost Technology

Max Marks:40

Time: 2 hours

Note:

1. Answer all Five Questions from **Part "A"** (2x5=10).
2. Answer any Two Questions from **Part "B"** (5x2=10).
3. Answer any Two Questions from **Part "C"** (10x2=20).

PART-A

5X2=10

1. What is Vermicompost ?
2. Define Vermiculture ?
3. Mention the enemies of Earthworm.
4. Classify the types of Earthworm.
5. What is Vermiwash ?
6. Mention the Diseases of worms.

PART-B

2X5=10

1. Describe the Digestive System of Earthworm.
2. Describe the Vermicompost equipment devices.
3. Explain key to identify the types of Earthworm.

PART-C

2X10=20

1. Describe the Life history of Earthworm.
2. Explain the preparation of vermibed, vermiwash and harvesting procedure.
3. Explain in detail account on Vermicompost technology.



Vermipost Technology

37
40

No 1) Answer in brief any five of the following.

1) What is Vermicompost ?

→ Vermicompost is a simple technology for converting biodegradable waste into organic manure with the help of earthworm.

2) Define Vermiculture ?

→ The cultivation of earthworm, especially in order to use them to convert organic waste into fertilizer is called Vermiculture.

3) Mention the enemies of earthworm.

→ Ants → slugs

→ Springtails → mites.

4) Classify the types of earthworm

1) Epigeic earthworm

2) Endogeic earthworm

3) Anecic earthworm

5) What is Vermiwash ?

→ Vermiwash is the liquid that is collected after water passes through compost made by earthworms is known as Vermiwash

H.K.E. Society's

**B.V.BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND COMMERCE, BIDAR
DEPARTMENT OF ZOOLOGY**

RESULT SHEET

Sl.No.	Name of the Students	Class	I.A Marks Obtained	Theory Marks Obtained	Total Marks Obtained	Remarks
1	Dikshant	Bsc 2 nd sem	09	38	47	PASS
2	Praphul	Bsc 2 nd sem	09	37	46	PASS
3	Soundarya	Bsc 2 nd sem	10	38	48	PASS
4	Pooja.B	Bsc 2 nd sem	09	37	46	PASS
5	Spoorti	Bsc 2 nd sem	10	39	49	PASS
6	Sandeep swamy	Bsc 2 nd sem	09	36	45	PASS
7	Vijaylaxmi	Bsc 2 nd sem	09	38	47	PASS
8	Sai Kiran	Bsc 2 nd sem	09	37	46	PASS
9	Hingaladevi	Bsc 2 nd sem	09	39	48	PASS
10	Anusuya	Bsc 2 nd sem	10	38	48	PASS
11	Kishor	Bsc 2 nd sem	10	38	48	PASS
12	Priya	Bsc 2 nd sem	09	37	46	PASS
13	Kanaka	Bsc 2 nd sem	09	39	48	PASS
14	Sachin	Bsc 2 nd sem	10	36	46	PASS
15	Sachin Kumar	Bsc 2 nd sem	09	37	46	PASS
16	Bhagyavanti	Bsc 2 nd sem	09	38	47	PASS
17	Shivananda	Bsc 2 nd sem	09	38	47	PASS
18	Eramma	Bsc 2 nd	10	39	50	PASS

19	Roshan	Bsc 2 nd sem	09	38	47	PASS
20	Pooja .Z.	Bsc 2 nd sem	09	39	48	PASS
21	Sachin	Bsc 2 nd sem	09	37	46	PASS
22	Saba Khanam	Bsc 2 nd sem	10	39	49	PASS
23	Siddarth	Bsc 2 nd sem	10	38	48	PASS
24	Chakrapani	Bsc 2 nd sem	09	38	47	PASS
25	Saikumar .V	Bsc 2 nd sem	10	37	47	PASS


HOD

Head of Zoology Dept.
B. V. E. College, BIDAR.


Principal
PRINCIPAL
B.V.Bhoomaraddi College
of Arts, Science & Comm
BIDAR-585 403.



H.K.E. SOCIETY'S

ESTD : 1960

ಬಿ.ವಿ. ಭೂಮರಡ್ಡಿ ಕಲಾ, ವಿಜ್ಞಾನ ಹಾಗೂ ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ, ಬೀದರ

B.V. BHOMARADDI COLLEGE OF ARTS, SCIENCE & COMMERCE, BIDAR

(Affiliated to Gulbarga University, Kalaburagi)

Accredited with 'A' Grade by NAAC

Department of Zoology

CERTIFICATE

This is to certify that Kum./Kumari Hingaladevi of

B.Sc II Sem Bearing Register No. / Roll No. 52174255 has

Successfully completed add-on Course/Certificate course in "Vermicompost
Technology" during the academic year 2020-2020...


Head of the Dept.


IQAC Co-ordinator
IQAC CO-ORDINATOR
Bhoomaraddi College of Arts,


Principal
B.V.Bhoomaraddi College
of Arts, Science & Commerce
BIDAR-585 403.