MANNAM MEMORIAL NSS COLLEGE, KOTTIYAM

STUDENT ENROLMENT LIST (2022-23)

Name of department : Department of Zoology

Name of course : Vermiculture and vermicomposting

Sl No	Name of Student	Signature
1	Akhil S	
2	Anjana A K	
3	Arunima R	
4	Bhagya Lekshmi	
5	Devika Kiran	
6	Devika R A	
7	Karthika J Prakash	
8	Manu S Kumar	
9	Navya A S	
10	Shilpa M	
11	Sruthy P S	
12	Sruthy S Vinod	
13	Akshaya S	
14	Anandhu S	
15	Arunima R	
16	Aswathy G T	
17	Aswathy S	
18	Aswin Rajesh	
19	Athira Ajith	
20	Athulya T S	
21	Gouri S Nair	
22	Janika K J	
23	K R Abhinanda Babu	
24	Krishna Rajeev	
25	Krishnendhu S	
26	Meenakshy Krishnan P R	
27	Nimisha R S	
28	Nisha S	
29	Panchamy S B	
30	Sariga Lekshmi	

Lekshmy S

(Co-ordinator) and HoD

SYLLABUS

DEPARTMENT OF ZOOLOGY
MMNSS COLLEGE, KOTTIYAM
ADD ON COURSE 2022-23
VERMICULTURE AND VERMICOMPOSTING

Total hours: 30

Course Objectives:

- The objective that the learners should be able to do vermiculture in a systematic way.
- Able to get hands on experience in all related activities till vermicomposting.
- This will increase the awareness and skill availability in the need of the day viz. organic farming.

Course outcome: By successfully completing the course, students will be able to:

- Understanding the potential of vermicompost as an alternative to chemical fertilizers.
- Role of vermicultre in maintaining the health of soil and humans.
- Economic importance of vermiculture
- Role of Vermiculture in protecting the environment and managing the waste.

Syllabus

MODULE 1 : Vermiculture (7 hrs)

Definition, History, scope and economic importance. Earthworms-Taxonomic Position and Diversity of different species of earthworms.*Eisenia foetida*- Systematic position, Morphology and Life cycle.

MODULE 2: Culture method and application of vermiculture (5 hrs)

Common species for Vermiculture. Environmental requirements. Earthworm Pests and Diseases.

MODULE 3: Vermicomposting Materials (10 hrs)

Types of vermicomposting: Small Scale and large Scale Vermicomposting. Methods of Vermicomposting: Bed Method, Pit Method. Phases and Steps of Vermicomiposting.

MODULE 4: Harvesting (8 hrs)

Nutrient Content of Vermicompost, Advantages of Vermicompost, Vermiwash Preperation and Applications.

Reference:

1. R.K Bhatnagar& R.K. Palta- Earthworm Vermiculture and Vermicomposting, Kalyani Publishers, No. 1, Mahalakshmi Street, T. Nagar, Chennai -600 017.

2. P.K. Gupta - Vermi Composting for Sustainable Agriculture, AGROBIOS (India), Agro House, Behind Nasrani Cinema, Chopasani Road, Jodhpur – 342 002.

3. Sathe, T. V.-Vermiculture and Organic Farming, Daya Publishing House

4. Bhatt J.V. & S.R. Khambata (1959)- Role of Earthworms in Agriculture. Indian Council of Agricultural Research, New Delhi.

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MANNAM MEMORIAL N.S.S. COLLEGE KOTTIYAM, KOLLAM

28 DEPARTMENT OF ZOOLOGY

Course: Vermiculture and Vermicomposting.

COURSE SCHE D

COURSE SCHEDULE – VERMICULTURE AND VERMICOMPOSTING

DATE	TIME	TOPIC
01/08/2022 (Monday)	3.30 – 4.30 pm	Definition, History, scope
02/08/2022 (Tuesday)	3.30 – 4.30 pm	Economic importance
03/08/2022 (Wednesday)	3.30 – 4.30 pm	Earthworms-Taxonomic Position
04/08/2022 (Thursday)	3.30 – 4.30 pm	Diversity of different species
05/08/2022 (Friday)	3.30 – 4.30 pm	Systematic position
06/08/2022 (Saturday)	9.00 – 1.00 pm	Morphology
08/08/2022 (Monday)	3.30 – 4.30 pm	Life cycle
09/08/2022 (Tuesday)	3.30 – 4.30 pm	Common species for Vermiculture
10/08/2022 (Wednesday)	3.30 – 4.30 pm	Environmental requirements
11/08/2022 (Thursday)	3.30 – 4.30 pm	Earthworm Pests
12/08/2022 (Friday)	3.30 – 4.30 pm	Diseases.
13/08/2022 (Saturday)	9.00 – 1.00 pm	Types of vermicomposting
15/08/2022 (Monday)	3.30 – 4.30 pm	Small Scale vermicomposting
16/08/2022 (Tuesday)	3.30 – 4.30 pm	large Scale Vermicomposting
17/08/2022 (Wednesday)	3.30 – 4.30 pm	Methods of Vermicomposting
18/08/2022 (Thursday)	3.30 – 4.30 pm	Phases and Steps of Vermicomiposting
19/08/2022 (Friday)	3.30 – 4.30 pm	Nutrient Content of Vermicompost
20/08/2022 (Saturday)	9.00 – 1.00 pm	Advantages of Vermicompost
22/08/2022 (Monday)	3.30 – 4.30 pm	Vermiwash Preperation
23/08/2022 (Tuesday)	3.30 – 4.30 pm	Applications
24/08/2022 (Wednesday)	3.30 – 4.30 pm	vermiremediation
31/08/2022	END COURSE EVALUATION	

Lekshys

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DEPARTMENT OF ZOOLOGY

END COURSE EVALUATION OF ADD ON COURSE 2022-23

VERMICULTURE AND VERMICOMPOSTING

Max marks: 25 **Time: 1 hr**

Section A. Answer **all questions** in one or two sentences **(5×1= 5)**

1. Which nutrient is abundantly found in worm castings?
2. In earthworms, typhlosome is a ----------
3. The process of covering spawned compost with a suitable material is known as --------
4. The process in which earthworms are used to degrade organic wastes is-----
5. The best worm for composting is ----------

Section B. Answer **any 4** of the following **(4×2=8)**

6. Can vermicomposting be a solution of organic waste management?
7. Write a short note on vermin-wash.
8. Give an account on factors affecting earthworm culture
9. factors affecting earthworm culture.
10. Describe the wooden box method of vermiculture
11. What is the pit method?

Section C. Answer **any 3** of the following **(3×4= 12)**

12. Describe the wooden box method of vermiculture.
13. Give an account on indoor dual bin method and heap method
14. Write an elaborate note on culturing techniques of earthworm
15. Describe about the Environmental requirements for vermiculture.
16. Elaborate the Systematic position, Morphology and Life cycle of *Eisenia foetida*

Mark sheet of end course evaluation of the Add on course Vermiculture (2022-23)

Sl. No:	Name	Candidate code	Mark (25)	Signature
1	Akhil S	25020116001	24	
2	Anjana A K	25020116003	25	
3	Arunima R	25020116004	23	
4	Bhagya Lekshmi	25020116005	21	
5	Devika Kiran	25020116006	17	
6	Devika R A	25020116007	21	
7	Karthika J Prakash	25020116008	19	
8	Manu S Kumar	25020116009	25	
9	Navya A S	25020116010	22	
10	Shilpa M	25020116011	21	
11	Sruthy P S	25020116012	20	
12	Sruthy S Vinod	25020116013	21	
13	Akshaya S	25020116014	15	
14	Anandhu S	25020116016	18	
15	Arunima R	25020116017	20	
16	Aswathy G T	25020116018	25	
17	Aswathy S	25020116019	16	
18	Aswin Rajesh	25020116020	24	
19	Athira Ajith	25020116021	21	
20	Athulya T S	25020116022	18	
21	Gouri S Nair	25020116024	25	
22	Janika K J	25020116025	17	
23	K R Abhinanda Babu	25020116026	25	
24	Krishna Rajeev	25020116027	21	
25	Krishnendhu S	25020116028	20	
26	Meenakshy Krishnan P R	25020116029	25	
27	Nimisha R S	25020116030	25	
28	Nisha S	25020116031	18	
29	Panchamy S B	25020116032	19	
30	Sariga Lekshmi	25020116033	16	

Dr. Lekshmy S

Course Coordinator.

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Kottiyam - 691571

COURSE REPORT

Vermiculture and Vermicomposting is a course which is compatible with sound environmental principles that value conservation of resources and sustainable practices. The duration of the course is 30 hours. A total of 30 students enrolled the course. The start of the course was on 01/08/2022. The entire Syllabus of the course was covered by the faculty of Zoology. The covered course covered the topics like culture method and application of vermiculture, Vermicomposting materials and Harvesting. The course was completed on 31/08/2022 by end course Evaluation.

Leksh

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Kottiyam, Kollam

Principal
M.M.N.S.S.COLLEGE
KOTTIYAM

FEEDBACK REPORT BY STUDENTS

Students were able to construct their own compost farm and generate income by supplying Earthworms, Vermiwash and Vermicompost. Students started vermicomposting units at home. The harvested compost was used in homestead gardens and organic farming

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DEPARTMENT OF ZOOLOGY

YEARLY CONSOLIDATION REPORT OF ADD ON COURSE DURING THE YEAR 2022-23

The three add on courses offered by the Department of Zoology during the year 2022-23 are Apiculture, mushroom cultivation and Vermiculture and Vermicompost. The duration of each course is 30 hrs. Students showed positive attitude towards the courses because, the main aim of the add on course is income generation with small investment. Students successfully completed the course and after the course they are able to start their own carries.

Principal
M.M.N.S.S.COLLEGE
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