



MSS's

Arts, Science and Commerce College, Ambad, Dist.-Jalna-431204

Syllabus of Certificate Course in Vermiculturing and Vermicomposting

Objective:

- To inculcate concepts of Vermiculturing and Vermicomposting.
- To understand techniques in Vermiculturing and Vermicomposting.
- To increase employability of the students.
- To improve the soil quality by promoting the organic farming

BRIEF DESCRIPTION OF JOB ROLES

This course is meant for the candidates who aspire to work in preparing Bio Compost, Vermicomposting and vermiculturing and get employment accordingly.

Certificate

Successful Candidate will be awarded certificates issued by MSS College

Duration of course: 60 Hours

Course structure: 1) Paper I: Theory
2) Paper II: Practical

Eligibility for admission: H.S.C. or equivalent qualification

Frame of the course:

Sr. No	Paper Name of subject:	Teaching hours	Maximum marks allotted Passing			Minimum marks for Passing		
	Vermiculturing and Vermicomposting		Examina-tion assess-ment	Internal assess-ment	Total Marks	Examina-tion assess-ment	Internal assess-ment	Total Marks
1	Paper I: Theory Paper based on Syllabus	30Hrs	40	10	50	16	4	20
2	Practical Paper Based on	30Hrs	40	10	50	16	4	20

Course Coordinator
Dr. D. S. Ghogare

IQAC Coordinator
Dr. R. F. Pathre

Principal
Prof. Dr. S. V. Gaikwad

Faculty Members

Dr. S. U. Mhaske

Dr. F. K. Shaikh

Mr. D. A. Pawar

Mr. S. D. Jadhav

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Unit 1:

(6Hrs)

- 1.1 Introduction to Vermiculture and vermicompost
- 1.2 Systematic position, habit and habitat of earthworm
- 1.3 External feature, shapes and size, coloration and distribution of earthworm
- 1.4 Body Segmentation
- 1.5 Species of earthworm used in Vermiculture.

Unit 2:

(6Hrs)

- 2.1 Food and feeding habit of earthworm
- 2.2 Digestive system of earthworm
- 2.3 Reproduction in earthworm
- 2.4 Cocoon formation in earthworm
- 2.5 Respiration in Earthworm

Unit 3:

(6Hrs)

- 3.1 Earthworm for animal feed
- 3.2 Casting of Earthworm as a biofertilizer
- 3.3 Requirements for Vermiculture
- 3.4 Vermicomposting material used in Vermiculture
- 3.5 Cattle dung, plant product

Unit 4:

(6Hrs)

4.1 Preliminary treatment of composting material

4.2 Vermicomposting material storage

4.3 Preparation of Vermiculture bed

4.4 Maintenance of Vermiculture bed

4.5 Natural enemies and their control

Unit 5:

(6Hrs)

5.1 Composition of Vermicompost & worms

5.2 Harvesting Vermicompost and worms

5.3 Marketing of Vermicompost & worms

5.4 Marketing of seed worms

5.5 Role of vermicompost as a fertilizer in agriculture

Practical's for "Certificate Course" in Vermiculturing and Vermicomposting.

(30Hrs)

1. Study of External characters of earthworm.
2. Study of different species of earthworm.
3. Study of Vermiculture pit
4. Preparation of Vermiculture bed
5. Study of different vermicomposting material
6. Diagrammatic study of life-cycle of earthworm.
7. Dissection of Alimentary canal of earthworm
8. Dissection of reproductive system of earthworm.
9. Histological study of gizzard, testis, ovaries & spermatheca.
10. Visit of different Vermiculture centers.