

S.S. JAIN SUBODH P.G. COLLEGE, JAIPUR

VALUE-ADDED COURSE

COURSE TITLE: VERMI COMPOSTING

NODAL DEPARTMENT: ZOOLOGY

COURSE CODE: 23VAC\_5206T

**MARKING SCHEME**

Tutorial (Hours)	Time Allowed ESE (Hrs)	Course Credits	Total Marks	End Semester Exam (Max. Marks)	Assignment	Minimum Marks
30	2	2	50	35	15	20

**COURSE OBJECTIVES:**

1. Introduce students to the ecological, biological, and environmental principles of vermicomposting, including the role of earthworms in organic waste management and soil enrichment.
2. Equip students with hands-on skills in setting up and managing vermicomposting systems, including worm selection, maintenance, and troubleshooting for various organic waste types.

**COURSE CONTENTS:**

**Introduction to vermiculture.:** Definition, meaning, Scope and significance of Vermicomposting, Factors influencing vermicomposting: temperature, moisture, aeration, pH, carbon-to-nitrogen ratio economic importance and value of earthworms in maintenance of soil structure Types of Earthworm and Classification Epigeic, Endogeic, **Anecic** (e.g., Eisenia fetida, Lumbricus rubellus)

**Types of Vermiculture/ earthworm farming:** Small Scale Earthworm farming for home gardens - Earthworm compost for home gardens, Conventional commercial composting, Earthworm Composting larger scale, Control of predators, pests & diseases in Vermiculture

(20 Hours)

**Vermicomposting Methodology:** Preparation of Vermibed, Different types of Vermibeds, Maintenance & Monitoring of Vermibeds, Preparation of feed & Managing Vermicomposting

**Harvesting & Packing of Vermicompost:** Vermiwash preparation, Collection, Composition & Use Precautions for compost making.

**Economical aspects of Vermicomposting:** Significant Properties of Vermicompost, Agricultural and economic importance of vermicompost

**(10 Hours)**

**SUGGESTED READING:**

1. Singh K., 'The Text book of vermicompost, vermiwash and Biopesticides Publisher: Biotech books, 2014
2. Board E, The Book Hand book of Biofertilizers and vermiculture, Publisher :Engineer India Research Institute 2009
3. Board E, hand book of Organic Farming and organic foods with vermicomposting Neem, Publisher:Engineers India Research Institute
4. Seetha Lekshmy M. and Santhi R., Vermitechnology , Publisher: Saras Publication.

**COURSE OUTCOMES:**

On completion of the course the learner will be able to:

1. Students will be able to explain the science behind vermicomposting and describe how it contributes to sustainable waste management and soil health improvement.
2. Graduates will demonstrate the ability to establish, maintain, and optimize a vermicomposting system, including the ability to monitor and troubleshoot common issues in the process.

  
(Prof. K. B. Sharma)

**Principal**

  
**Head of the Department**