

DEPARTMENT OF ZOOLOGY MORIDHAL COLLEGE

COURSE TITLE: CERTIFICATE COURSE ON VERMICOMPOSTING TECHNOLOGY

Duration: 3 Months

Full Marks: 50 (Theory =30 + Practical =20)

COURSE OBJECTIVES:

- To inculcate concepts of biofertilizers like vermicomposting.
- To understand techniques in Vermicomposting.
- To increase employability of the students.
- To improve the soil quality by promoting the biofertilizers.

Unit	Contents	Number	of
•		Class	
1	General introduction and definition of vermiculture, economic importance and role of four "R"s in vermiculture.	4	
2	Human residues biotransformation into organic fertilizers, matter and humus cycle	3	
3	selection of worm in vermiculture, other useful species of earthworm, local and exotic species, autoevaluation	4	
4	Rearing of earthworm Identification keys of earthworm, taxonomy, anatomy, physiology and reproduction of <i>Pheretimaposthuma</i> , <i>Eisenia fetida</i> , Lumbricidae family (any one), vital cycle (alimentation, fecundity, annual reproducing potential and limit factors of any two of them), auto evaluation.	12	
5	Vermicompost technology Small scale vermiculture and vermicompost production in home gardens, large scale conventional vermicomposting, details of methods involving vermiculture, harvesting/extraction, processing	4	
6	Applied vermiculture Experience with <i>P. posthuma</i> population in farm industries, economical aspects of this activity, research on different exploitation such as worm's humus production or integrated projects, toxins released by worms and their effects, complementary activity of auto evaluation.	3 lectures	

Suggested Readings:

- 1. Vermitechnology by A. Mary Violet Christy
- 2. A Textbook of Vermicompost by Keshav Singh
- 3. Vermicompost Production by Dr. S. Rehan Ahmad