

ST AGNES COLLEGE (AUTONOMOUS)

Mangaluru

Re-accredited by NAAC with A+ Grade, CGPA 3.65/4 (Cycle 4) College of Excellence by UGC, New Delhi Star College Status by DBT, MST, Govt. of India

DEPARTMENT OF ZOOLOGY

2022-2023

VALUE ADDED COURSE: VERMITECHNOLOGY

COURSE CODE: VAC56

DURATION: 30 HOURS

RESOURCE PERSON

Ms Blairil Vishma Dcunha Department of Zoology

Course Outcomes:

on completion of the course, the students

- Develop interest in research.
- Develop positive values to work in a laboratory like cleanliness, discipline, punctuality and teamwork.
- · Develop confidence to guide a team and also work independently.
- Learn to prepare in advance the plan of action in a systematic way.
- Learn practical skills to produce something valuable (compost) from waste materials (kitchen waste).
- Develop entrepreneurship skills and are motivated to become self employed, self reliant and financially independent.

SYLLABUS/COURSE CONTENT

THEORY: 16 HOURS

- Introduction, Classification, history, economic importance.
- Bio transformation of the residues generated by human activity and production of organic fertilizers.
- Choosing the right worm. Useful species of earthworms. Local species of earthworms. Exotic species of earthworms.
- Limit factors(gases, diet, humidity, temperature, pH, light, and climatic factors).
- Physio- chemical parameters of vermicompost.
- Different Methods of Vermicomposting: Small- and large-scale
- · Pest and diseases of earthworms.
- · Nutritional Composition of Vermicompost for plants, comparison with other fertilizer
- Vermiwash
- · Small Scale Earthworm farming for home gardens
- · Conventional commercial composting
- · Harvesting, packaging, transport and storage of Vermicompost and separation

PRACTICALS: 14 HOURS

- Scientific classification of Earthworm
- · Study of external morphology of Earhworm
- · Study of habit and habitat of Earhworm
- · Study of Digestive system of earthworm
- Study of Reproduction of earthworm
- Vermicomposting unit Pit method
- Establishment of vermicomposting unit Bed method
- Establishment of vermiwash unit
- Vermicompost production, harvesting and packaging.
- Study of cocoon and vermicast
- Study of Pests and diseases of Earthworms

CRITERIA FOR EVALUATION AND MARKS DISTRIBUTION:

MCQ – 25 Marks Practicals – 20 Marks Assignment – 05 Marks Total – 50 Marks

GRADING PATTERN:

A - 40 and above

B - 30 - 39

C - 25 - 29

D - 24 and below



