

Gardening and Vermicomposting

Course Objectives:

- To introduce the students with the concept and importance of horticulture.
- To introduce the students with the methods for plant propagation.
- To introduce the students with the scope and importance of vermicomposting

Course Outcomes:

- Students would understand the scope and importance of the horticulture.
- Students would get the skill to propagate the plants through asexual methods.
- Students would understand the importance and use of vermicomposting for horticulture.

Unit-I:

Introduction to horticulture, importance of horticulture crops, Principle of crop production technology, essential plant nutrients and their deficiency symptoms, organic and inorganic manures, water management in horticulture crops

LO: The students will know about the concept and importance of horticulture.

Unit-II:

Types of plant propagation, root curing and tubers, grafting, leaf cutting, runners and offsets, rooting media, rooting hormone, types of nursery bed, irrigation & protection

LO: The students will be able to know how to do the plant propagation.

Unit-III: Vermiculture: Definition, scope and importance; vermicomposting using garden waste; use of vermicomposting in garden

LO: The students will be able to know and how to use the vermicomposting.

Practicals:

1. Identification and description of salient features of ornamental plants
2. Study of asexual propagation methods (grafting, cutting, layering)
3. Study of techniques for rooting
4. Study of irrigation techniques (drip irrigation)
5. Study of preparation of nursery bed.

Text Books:

✓ Rao, K. M. (2005). *Textbook of horticulture*. Macmillan.

Reference book:

- ✓ Don, M. (2021). *The Complete Gardener: A Practical, Imaginative Guide to Every Aspect of Gardening*. Dorling Kindersley Ltd.
- ✓ Solankey, S. S., Akhtar, S., Maldonado, A. I. L., Rodriguez-Fuentes, H., Contreras, J. A. V., & Reyes, J. M. M. (Eds.). (2020). *Urban Horticulture: Necessity of the Future*. BoD–Books on Demand.