

**JYOTI NIVAS COLLEGE AUTONOMOUS, BANGALORE**

**DEPARTMENT OF BOTANY**

**BOTANY VALUE ADDED COURSE GARDENER SYLLABUS**

(Organic Manure Production, Mushroom Cultivation, Kitchen and Terrace Gardening & study of Medicinal plants)

(Credits -03)

**50 Hrs**

**Unit I: Organic Manure Production:**

Introduction, Composting, Production of compost and constitution of compost, Factors affecting decomposition. Vermiculture and vermicomposting: Definition, Advantages, Role of Earthworms in soil fertility. Importance of Organic Manure: (a) Value addition - Power of Antioxidants (b) As soil conditioning agent.

**10 Hrs**

**Unit II: Vegetative propagation of Horticulture plants:**

Introduction, Types and Methods of Vegetative propagation: (a) Cuttings (b) Layering (c) Grafting (d) Budding.

**5 Hrs**

**Unit III: Mushroom Cultivation**

Cultivation technology of Oyster mushroom /button mushroom, Prospects of mushroom culture. Important aspects of mushroom.

**5 Hrs**

**Unit IV: Kitchen and Terrace Gardening**

Introduction, Plan of Terrace Garden, Tools and equipment's required for the preparation of garden, Advantages of Terrace gardening.

**5 Hrs**

**Unit V: Study of Medicinal plants: (Parts used and uses only) 15 Hrs**

1. Neem (bevu)
2. Tulasi
3. Drumstick (Nugge)
4. Fenugreek (Menthya)
5. Periwinkle (Kasi kanagalu)

6. Curry leaf (Karibevu)
7. Gooseberry ( Nelli)
8. Bael (Bilva)
9. Centella (Ondelaga)
10. Sweet flag (Baje)
11. Gymnema (Madhu nashini)
- 12.Cynodon(Garika)
13. Aloe vera (Lolesara)
- 14.Tinospora ( Amrutha balli)
- 15.Ashwagandha

**Student activity:** Preparation of Organic manure/ Horticultural Techniques and Mushroom cultivation / Visit to Biocentre Hulimavu **10**  
**Hrs**