

## **Principles of Horticultural Crops and Plant Protection 2(1+1)**

### **Theory-**

Scope of horticultural. Soil and climatic requirements for fruits, vegetables and floriculture crops, improved varieties, Criteria for site selection, layout and planting methods, nursery raising, commercial varieties/hybrids, sowing and planting times and methods, seed rate and seed treatment for vegetable crops; macro and micro propagation methods, plant growing structures, pruning and training, crop coefficients, water requirements and critical stages, fertilizer application, fertigation, irrigation methods, harvesting, grading and packaging, post harvest practices, Garden tools, management of orchard, Extraction and storage of vegetables seeds. Major pests and diseases and their management in horticulture crops.

### **Practical-**

Judging maturity time for harvesting of crop; Study of seed viability and germination test; Identification and description of important fruits, flowers and vegetable crops; Study of different garden tools; Preparation of nursery bed; Practices of pruning and training in some important fruit crops, visit to commercial greenhouse/ polyhouse; cultural operations for vegetable crops (sowing, fertilizer application, mulching, irrigation and weed control); seed extraction techniques; identification of important pests and diseases and their control.

### **Suggested Readings-**

- Bansal. P.C. 2008. Horticulture in India. CBS Publishers and Distributors, New Delhi.
- Saraswathy, S., T.L. Preethi, S. Balasubramanyan, J. Suresh, N. Revathy and S. Natarajan. 2007. Postharvest management of Horticultural Crops. Agrobios Publishers, Jodhpur.
- Arjunan, G., Karthikeyan, G, Dinakaran, D. and Raguchander, T. 1999. Diseases of Horticultural Crops. AE Publications, Coimbatore.

- Sharma Neeta and Mashkoo Alam. 1997. Postharvest diseases of Horticultural crops. International Book publishing Co. UP.