AMH02 FUNDAMENTALS OF HORTICULTURE

UNIT-1 THEORY

- 1.1 Scope and importance, classification of horticultural crops and nutritive value, area and production, exports and imports, fruit and vegetable zones of India and of different states,
- 1.2 Nursery techniques and their management, soil and climate, vegetable gardens, nutrition and kitchen garden and other types of gardens
- 1.3 Principles, planning and layout, management of orchards, planting systems and planting densities.
- 1.4 Production and practices for fruit, vegetable and floriculture crops.
- 1.5 Principles objectives, types and methods of pruning and training of fruit crops, types and use of growth regulators in horticulture, water management— irrigation methods, merits and demerits.
- 1.6 Weed management, fertility management in horticultural crops-manures and fertilizers, different methods of application, cropping systems, intercropping, multi-tier cropping, mulching
- 1.7 Objectives, type's merits and demerits,
- 1.8 Classification of bearing habits of fruit trees, factors influencing the fruitfulness and unfruitfulness.
- 1.9 Type of fruits- morphology.
- 1.10 Principles of organic farming, market chain management.

UNIT-2 PRACTICAL

- 2.1 Features of orchard, planning and layout of orchard, tools and implements,
- 2.2 Identification of various horticultural crops, layout of nutrition garden,
- 2.3 Preparation of nursery beds for sowing of vegetable seeds, digging of pits for fruit plants, planting systems, training and pruning of orchard trees,
- 2.4 Preparation of fertilizer mixtures and field application,
- 2.5 Preparation and application of growth regulators, layout of different irrigation systems,
- 2.6 Identification and management of nutritional disorder in fruits, assessment of bearing habits,
- 2.7 Maturity standards, harvesting, grading, packaging and storage.

Reference Books:

- 1. Prasad and Kumar, 2014. Principles of Horticulture 2nd Edn. Agrobios (India). Neeraj Pratap Singh, 2005.
- 2. Basic concepts of Fruit Science 1st Edn. IBDC Publishers. Gardner/Bardford/Hooker. J.R., 1957
- 3. Fundamentals of Fruit Production. Mac Graw Hill Book Co., New York. Edmond, J.B., Sen, T.L., Andrews, F.S. and Halfacre R.G., 1963.
- 4. Fundamentals of Horticulture. Tata Mc Graw Hill Publishing Co., New Delhi.