

**1<sup>st</sup> SEMESTER**  
**HORTICULTURE TECHNOLOGY**  
**SKILL ENHANCEMENT COURSE (SEC)**

**TFP122S: TEMPERATE FRUIT PRODUCTION (TFP) I: BASICS OF FRUIT PRODUCTION**

**CREDITS: THEORY: 2, PRACTICAL: 2**

*Objectives: To acquaint the students with planting, land preparation and orchard establishment of fruit crops*

**THEORY (2 CREDITS)**

**UNIT I**

Roles and responsibilities of a temperate fruit grower, Employment opportunities in Horticulture.

Brief account of temperate fruits grown in Kashmir and their common varieties and cultivation period of various temperate fruits.

Various pests and diseases affecting temperate fruits and production process of various planting materials.

Pre-planting Preparation: Methods to assess the planting material quality, Identify types of fruit for cultivation, Site selection, Risks and hazards to temperate fruit growing, Soil testing, Irrigation.

**UNIT II**

Planting Material: Identify suitable planting material for various fruits, general sources of procuring genetically true and pure planting material, vendors/suppliers of the planting material, quality and market price of seedling and planting material, storage methodology for the planting material,

Various practices for planting and maintain disease free plant material. Market need, prices, production costs and time to harvest of different temperate fruit crops.

Preparation for planting a fruit orchard: Aims and purposes of building orchard or plantation, basic principles for orchard design, plan for the orchard plantation, layout of the orchard, features and characteristics, growing requirements, planting schedules and timelines, of temperate fruit plants and trees, of plants used in temperate fruit orchard systems.

**PRACTICALS (2 CREDITS)**

- Soil preparation for growing temperate fruits.
- Identification of various temperate fruits grown in India.
- Identification of agro climatic zones in India where temperate fruits are grown.
- Visit to different orchards of temperate fruit crops.
- Identification of different soil types/ textures suitable for fruit growing.
- Identify design template, symbols and features used in design documents for orchards.
- Layout of different planting systems.
- Soil testing for different macro- and micro nutrients.
- Explain various planting material treatment techniques.
- Visit to nurseries of temperate fruit for identification of rootstocks.