

# AMH14 TROPICAL AND SUBTROPICAL FRUITS

## UNIT-1 THEORY:

- 1.1 Horticultural classification of fruits including genome classification.
- 1.2 Horticultural zones of India, detailed study of area, production and export potential, varieties, climate and soil requirements,
- 1.3 Propagation techniques, planting density and systems, after care, training and pruning.
- 1.4 Management of water, nutrient and weeds, special horticultural techniques including plant growth regulators, their solution preparation and use in commercial orchards.
- 1.5 Physiological disorders. Post-harvest technology, harvest indices, harvesting methods, grading, packaging and storage of the following crops.
- 1.6 Mango, banana, grapes, citrus, papaya, sapota, guava, pomegranate, bael, ber, amla, anona, fig, pineapple, jackfruit, avocado, mangosteen, litchi, carambola, durian, rambutan, bilimbi, loquat, rose apple breadfruit and passion fruit.
- 1.7 Bearing in mango and citrus, causes and control measures of special production problems, alternate and irregular bearing overcome, control measures.
- 1.8 Seediness and kokkan disease in banana, citrus decline and casual factors and their management.
- 1.9 Bud forecasting in grapes, sex expression and seed production in papaya, latex extraction and crude papain production, economic of production.

## UNIT-2 PRACTICAL

- 2.1 Description and identification of varieties based on flower and fruit morphology in above crops.
- 2.2 Training and pruning of grapes, mango, guava and citrus.
- 2.3 Selection of site and planting system, pre-treatment of banana suckers, desuckering in banana, sex forms in papaya.
- 2.4 Use of plastics in fruit production.
- 2.5 Visit to commercial orchards and diagnosis of maladies.
- 2.6 Manure and fertilizer application including bio-fertilizer in fruit crops, preparation and application of growth regulators in banana, grapes and mango.
- 2.7 Seed production in papaya, latex extraction and preparation of crude papain.
- 2.8 Ripening of fruits, grading and packaging, production economics for tropical and sub-tropical fruits. Mapping of arid and semi-arid zones of India.
- 2.9 Botanical description and identification of ber, fig, jamun, pomegranate, carissa, phalsa, wood apple, West Indian cherry, tamarind, aonla, bael and annona.

## References Books:

1. H.P.Singh and M.M.Mustafa, 2009. Banana-new innovations. Westville PublishingHouse, New Delhi.
2. M.S.Ladaniya, 2013. Citrus Fruits. Elsevier, India post ltd. Bose, T.K., Mitra, S.K. and
3. Sanyal, D., 2002. Tropical and Sub-Tropical-Vol-I. Naya udyog-Kolkata
4. Rajput, CBS and Srihari babu, R., 1985. Citriculture. Kalyani Publishers, New Delhi.