

I-Year, I-Semester

L T P Credits: 4
3 1 -

CH571 PLANTATION CROPS, SPICES & CONDIMENT TECHNOLOGY

(Herbs, Plantation Crops, Spices, Condiments)

Unit-I

Plantation Crops - Description of various types of Plantation crops, viz., coconut, arecanut, coffee, tea, cocoa etc. Processing and preservation methods. Value-added products shelf-stable products viz., coconut water bottling, desiccated coconut powder, coffee concentrate, instant coffee powder, instant tea powder, cocoa processing. Leafy vegetables - Description of various types of leafy vegetables, viz., hibiscus, curry leaves, coriander leaves, etc. Their composition, nutritive value, health benefits. Preservation methods and packaging techniques.

Unit-II

Spices & Condiments - Description of various types of spices and condiments, their composition, functional properties, flavouring agents. Nutritive value of spices and their health benefits. Intermediate Moisture Products – Intermediate Moisture Products viz., ginger paste, ginger – garlic paste, tamarind paste, tamarind concentrate. Their importance in culinary preparations. Flavour retention and packaging methods.

Unit-III

Spice Powders & Curry Powders: Their importance in culinary preparations, their preparation methods, grinding and packaging methods for spice powders like chilli powder, turmeric powder, ginger powder, garlic powder; and Masala Powders for chicken masala, meat masala, biryani masala, chat masala etc. Importance of Cryogenic grinding of spices. Spice Oils – Concept and importance of spice oils from spices like and condiments like clove, cardamom, cinnamum etc. Their application in food processing, and extraction methods of spice oils by various techniques, viz., solvent extraction, steam distillation etc.

Unit-IV

Extraction of Oleoresins – Concept and importance of oleoresins in food processing, processing of spices like chilli, turmeric, pepper, ginger etc. for solvent extraction of oleoresins. Oleoresins technology, desolventization methods, regulatory and statutory requirements for oleoresin processing. Extraction of Natural Food Colours - Extraction of Natural Food colours from paprika, turmeric, blue grapes, beet root etc. Their importance in food processing.

Unit-V

Herbs – Description of various types of herbs, viz., Basil, Chives, Cilantro, Dill, Coriander, Mint, Oregano, Parsely, Chives, Borage and Avocada leaves, Rose marry, Saga, Tarragon, Thyme, Winter savory and bolbo leaves, Papalo, Pipicha and Safflower. Their nutritive value & health benefits, their processing and Post harvest handling. Packaging methods for processed products.

Text Books:

1. Spices & Condiments, J S Pruthi, National Book Trust, New Delhi (2001).
2. Spices : Morphology, History , Chemistry., J W Parry, Chemical Publishing Co., New York (1969).
3. Leafy Spices, V Prakash, CRC Press, Florida (1990).