

MARINE BYPRODUCTS AND VALUE ADDED PRODUCTS

Course Objectives:

- To understand the Traditional methods of preservation
- To prepare different types of value added products from fish and shellfishes
- To identify fish byproducts
- To prepare shellfish byproducts.
- To understand the packing, storage and export of fish and fishery products

Unit I – Traditional methods of preservation - Preservative methods – Curing (Drying, Salting, Smoking), Chilling, Freezing, Marinating and Canning. Status of value addition to fish and fish products in Indian seafood sector - Advantages of value addition.

Unit II - Different types of value added products from fish and shellfishes: Preparation and uses of Marinated and fermented products - Fish and prawn pickles, fish sauce, surimi, fish sausage, fish ham, fish cake, kamaboko, fish macaroni, fish biscuits, fish burger, fish mince, fish finger, fish cutlet, fish wafer, fish chowder, fish soup, fish steaks, fillets, fish curry, fish papad, mussel products, etc.

Unit III - Preparation and uses of fish meal, fish body oil, fish liver oil, fish protein concentrate, fish hydrolysates, fish meat, fish silage, fish maws, shark leather, fish manure and guano, fish glue, fish gelatin, fish factice, isinglass, fish fins, fish roe and fish cavier.

Unit IV - Production and uses of Chitin and Chitosan (shrimp wastes); Pearl products – Clam meat pickle – Frozen clam – Frozen mussel – Frozen whelk – Shrimp burger – Breaded shrimps.

Unit V - Role of MPEDA - Packing and Labeling of fish and fishery products. Cold Storages and Export of Fishery Products –Chilled – Frozen – Dried – Live - Squid – Shrimp – Cuttlefish – Fish Products

References:

- Balachandran, K. K. (2016). Post-Harvest Technology of Fish and Fish Products. Daya Publ.
Gopakumar, K. (1997). Tropical Fishery Products. Science Publishers.
Nambudiri, D. D. (2006). Technology of Fishery Products. Fishing Chimes. Venugopal, V. (2006). Seafood Processing. Taylor & Francis.

Course outcomes:

After completion of the course, students will be able to

- evaluate the Traditional methods of preservation
- prepare Different types of value added products from fish and shellfishes
- prepare value added fish products
- prepare value added shellfish products.
- discuss the packing and labeling of fish and fishery products