

## 2.10 30710 TECHNOLOGY OF SEA FOOD

### UNIT-1

- 1.1 Chilling and Freezing of fish, Relationship between chilling and storage life, MAP,
- 1.2 General aspects of freezing, freezing systems (air blast freezing, plate or contact freezing spray or immersion freezing, freezing on board, onshore processing, changes in quality in chilled and frozen storage, thawing.

### UNIT-2

- 2.1 Fish Curing and Smoking, Drying and salting of fish, water activity and shelf-life , salting process,
- 2.2 Salting methods (brining, pickling, kench curing, Gaspé curing), types of salts, dried and salted fish products- pindang, fish wood, dried shrimp.
- 2.3 Preservation by smoking, smoke production, smoke components, quality, safety and nutritive value of smoked fish, processing and equipment, pre-smoking processes, smoking process control.
- 2.4 Traditional chimney kiln, modern mechanical fish smoking kiln, examples of smoked and dried products.

### UNIT-3

- 3.1 Canning of fish, Principles of canning, classification based on pH groupings, effect of heat processing on fish,
- 3.2 Storage of canned fish, pre-process operations, post process operations, cannery operations for specific canned products. (Tuna, Mackerel, Sardine).

### UNIT-4

- 4.1 Fishery by-products, Surimi- Introduction, fish muscle proteins, the surimi process, traditional and modern surimi production lines, quality of surimi products,
- 4.2 Comparison of surimi and fish mince products.(Ch-3 Hall) Fish protein concentrates (FPC), fish protein extracts (FPE), fish protein hydrolysis (FPH)

### UNIT-5

- 5.1 Fermented fish, Flowchart of Indigenous products- Fish sauce and Paste
- 5.2 Concept of other Sea foods, Crabs, lobsters, prawns, shrimps, shell- fish.

### Reference Books:

1. De Sukumar, Outlines of Dairy Technology, Oxford University Press, and Oxford. 2007.