

Paper X : Coastal Aquaculture

Unit I

Introduction to coastal aquaculture – overview, natural stock, over-fishing, depletion, present status, Potentialities and socio-economic problems of aquaculture.

Unit II

Brackishwater farms – design and layout, selection of site, topography, water availability and supply, soil conditions, farm design, structure and construction.

Unit III

Criteria for choosing cultivable species – plankton, fish, crustaceans, mollusks and seaweeds, biological criteria, environmental adaptability, compatibility of species, adaptability to intensive culture, economic criteria, market value, availability to adjacent regions.

Unit IV

Culture systems and Management – traditional, extensive, semi-intensive and intensive systems, monoculture and polyculture, integrated fish farming – raceways, cages, pens, raft, and racks.

Pond Preparation, control of predator, parasites and diseases, production and economics.

Unit V

Natural seed resources – distribution and abundance, methods of collection, segregation, artificial seed production, breeding under controlled condition, techniques of induced breeding, packing and transportation. Larval and adult feed – Culture of live feeds and formulation of artificial feeds.

Recommended Text Books :

1. Pillay, T.V.R. 1990. Aquaculture – Principles and Practices. Fishing News Books.
2. Samuel Paulraj, 1994. Shrimp Farming Techniques : Problems and Solutions. Paramount. Publications, Palani.
3. Stickney, 1995. Principles of Aquaculture. John Wiley & Sons, New York.
4. Landey, 1995. Introduction to Aquaculture. John Wiley & Sons, New York.
5. Thomas P.C. 1998. Current and Emerging Trends in Aquaculture. Daya Publ., Delhi.
6. James, W. & Meade, 1998. Aquaculture Management, CBS Pub. New Delhi.

Reference Books :

1. Anand, S. Upadhyay, 1995. Hand Book on Design, Construction and Equipments in Coastal Aquaculture. Blackie Academic Pub.
2. Conroydas, R. and L.Heruman. 1997. Text Book of Fish Disease. Narendra Pub.
3. John E.Bardach. 1997. Sustainable Aquaculture. John Wiley & Sons, Inc., New York.
4. Joachim W.Hertrampt and Felicitas Piedad – Pascal, 2000. Hand book on Ingredients for Aquaculture Feeds. Kluwer Academic Publishers, London.