

VAMS 021: AQUACULTURE

Course Objectives

- To understand the techniques involved in aquaculture practices.
- To get a detailed information about aquaculture.
- To provide a basic idea about the importance of live feed in culture systems.

Learning Outcome

- ✓ The learners will be aware of all the techniques involved in aquaculture.
- ✓ At the end of the course, student can able to gain the knowledge on the aquaculture practices.

UNIT-I

Overview importances of coastal and freshwater aquaculture, global scenario, present status in India - prospects and scope.

UNIT II

Selection of site: topography, water availability, soil conditions, design and layout, structure and construction. Preparation of ponds – different methods for the eradication of weed fishes, predators, aquatic insects and aquatic weeds.

UNIT III

Selection of cultivable Species- Finfishes, Shellfishes and Seaweeds. Seed selection protocol and seed availability – wild source, hatchery source. Live feed culture – artemia, rotifer and microalgae. Water Quality Management.

UNIT- IV

Stocking of seed and culture techniques - traditional, extensive, semi-intensive and intensive; mono sexculture, monoculture, polyculture - pond, raceway, cages, pens, raft and rope culture. Feed management – selection of feed, types of feed, feeding schedule and nutritional value. FCR.

UNIT-V

Diseases diagnosis and treatment. Probiotics and immunostimulants. Harvesting and cost benefit analysis. Coastal zone management – legal issues – Government policies – role of Coastal Aquaculture Authority of India (CAA).

Text Books

1. Pillay, T.V.R .1990. Aquaculture Principles & Practices. Fishing News (Books) Limited, London.
2. Bardach, John.E. 1997 Sustainable Aquaculture. John Wiley and Sons.
3. Chapman, V.J., 1980. Seaweeds and theirs uses Chapman and Hall London.
4. Wheaton, F.W. 1977. Aquaculture Engineering. John Wiley and Sons, New York.
5. Stickney, 1995. Principles of Aquaculture, John Wiley & Sons.
6. Santhanam R. N. Ramanathan and G. Jegatheesan 1990. Coastal Aquaculture in India, CBS publishers and Distributors.
7. Joachim W., Hertrampf and F.P Pascal, 2000 Handbook on Ingredients for Aquaculture feeds. Kluwer Academic Publishers, London