

**CORE COURSE VII FARM MANAGEMENT AND WATER QUALITIES STUDIES**

**Unit 1:**

Selection of site for a fish farm, purchase of land, registration, registration in MPEDA/BFDA for getting subsidy and technical guidance, getting electric connection and other practical considerations.

**Unit 2:**

Soil, Water resources of fish farm -Components of fish farm -design and construction, Water regulating devices. Fertilization of pond, improvement of pond bottom, control of aquatic weeds.

**Unit 3:**

Concept of integrated farming – crop, integrating livestock and fish culture – selection of organisms – techniques of farming, management of integrated farming system, benefit, concept of blending culture fisheries, advantages and management.

**Unit 4:**

Chemical composition of sea water – ionic composition – major and minor elements – trace elements - difference between fresh and sea water.

**Unit 5:**

Water quality management – physico – chemical parameters : nutrients, ammonia, oxygen, pH, hydrogen sulphide and organic matter permissible levels.

**References:**

1. S.K.Gupta and P.C.Gupta. General and Applied Ichthyology (Fishes and Fisheries). S.Chand &Co.New Delhi-55.
2. Brown, E.E.,1976. World Fish Farming, Cultivation and Economics.
3. Sinha, P.R.R. 1974. Studies in Extension Education.
4. Riley, J.P.and R.Chester, 1971. Introduction to Marine Chemistry. Academic press, London.
5. Riley, J.P.and G.Skirrow, 1975-1984. Chemical Oceanography, vols.1 to 8. Academic pres, London
6. Strickland, J.D.H and T.R.Parsons, 1972. A practical Handbook of Seawater analysis. Fisheries Board of Canada, Ottawa, Bulletin, 167.
7. Arumugam.N. Aquaculture.saras Publications, Nagercoil.