

**SECOND ALLIED COURSE I COMPUTATIONAL AND ANALYTICAL  
METHODS IN AQUACULTURE –I**

**UNIT : 1**

Introduction to computers and their applications: Computer system characteristics – Hardware and Software – Types and generations of Computers – Introduction to I/O and storage devices.

**UNIT : 2**

FORTTRAN programming – Basics: Representation of integer and real constants – variable – Expression – Assignment statements – Input/Output statements.

**UNIT : 3**

FORTTRAN Programming: Design control statements – Loops and subscripted variable – Files.

**UNIT : 4**

Introduction to data processing: records, files – Data collection, preparation, verification, editing and checking – backup and file recovery procedure-sorting, searching and merging.

**UNIT : 5**

FOXPRO fundamentals and programming; Introduction to FOXPRO environment – Database creation and data insertion, deletion and modification-sorting and indexing, Managing Multiple database –Display of data – Foxpro programming –memory variables – Data, Tie, String and math function –report generation.

**References:**

1. Illustrated FOXPRO –Granillo-BPB Publications.
2. Introducing Data processing, N.C.C.Publications.
3. Mastering data processing, J.Bingham, Machmillan Master's Series.
4. Programming in FORTRAN. Rajaraman. Ved.Pentice Hall 1983.
5. Programming with FORTRAN-Seymour Lipschuts and Arthur Poe Schaum series 1982.
6. Computer Today-S.K.Basandra-Galgotia Publications.