

M.Sc. SEMESTER IV

Applied Freshwater Aquaculture

**COURSE – 20 Practical Zoology (IV) LABORATORY MANUAL AND RECOERD
Credits –4**

Paper code: MZO613(L)

Total Marks: 100

BLOCK – I FISHERY SCIENCE

Unit – 1 Study of Commercially Important Fresh Water Finfish
(Craps, Cat Fishes) And Shell Fish (Prawn)

Unit – 2 Fish Morphometrics

**BLOCK – II DISSECTION – FISH REPRODUCTION & NATURAL
FOOD CULTURE**

Unit – 3 Collections and Preservation of Pituitary Gland

Unit – 4 Identification of Ovary Maturation Stages in Crap And Estimation of
Gonad Volume, Fecundity, Gonadomatic Index (GSI)

Unit – 5 Cultivation of Spirulina in Laboratory Conditions

Unit – 6 Artemia (brine Shrimps) – Decapsulation

**BLOCK – III DISSECTIONS – FISH REPRODUCTION & NATURAL
FOOD CULTURE**

Unit – 7 Estimation of pH of Water

Unit – 8 Estimation of Total Hardness Of Water

Unit – 9 Determination of Dissolved Oxygen in Water

Unit – 10 Quantitative Estimation of Plankton

Unit – 11 Quantitative Estimation of Planktonic Organism in Fresh Water Pond
and Food Chains

BLOCK – IV FISH PATHOLOGY

Unit – 12 Identification of Fish Diseases Caused by Micro Organisms and
Parasites

Unit – 13 Determinations of Health Conditions of a Fish

Unit – 14 Extraction of DNA from Fish Fins and Scales

Unit – 15 Separations of Proteins by Polyacrylamide Gel Electrophoresis

Note: The learners please note that in the fourth semester of M.Sc. Zoology they can Opted either Applied Entomology MZO 608(A),MZO 609(A) & MZO 610(L) OR Applied Aquaculture MZO 611(B), MZO 612 (B) MZO 613(L).