## A - 934

**Total Pages: 3** 

Roll No. -----

# **MZO-612 (B)**

# Applied Freshwater Aquaculture (Fish Breeding & Production Technology) (Fish Fin Pathology)

M.Sc. Zoology (MSCZO)

4<sup>th</sup> Semester Examination 2024 (June)

Time: 2:00 hrs Max. Marks: 35

Note: This paper is of Thirty Five (35) marks divided into Two (02) Section A and B. Attempt the questions contained in these sections according to the detailed given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

#### **Section-A (Long-Answer-Type Questions)**

Note: Section 'A' contains Five (05) long-answer-type questions of Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

 $[2x9\frac{1}{2}=19]$ 

- Q.1. Discuss the major Bacterial disease affecting fin fish in aquaculture, including their Causative agent.
- Q.2. Discuss in detail on protozoan disease found in fishes.
- Q.3. Discuss on the bacterial hemorrhagic septicemia and red spot disease in fishes.
- Q.4. Explain the PCR technology in detail.
- Q.5. Explain in detail the Branchiomycosis and saprolegniasis.

### Section-B (Short-Answer-Type Questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only.

[4x4=16]

- Q.1. Write a short note on Primers and probes.
- Q.2. Write about the nitrogenous based found in DNA.
- Q.3. Write a short note on Cestode parasitic disease.
- Q.4. Explain the crustacean parasites of fish.
- Q.5. What is the Gyrodactylosis disease?
- Q.6. Explain the life cycle of diplozoon paradoxum in carp.
- Q.7. Write a short note on whirling disease.
- Q.8. Write a shot note on Gel electrophoresis.

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