

**ESTD.** : 1968

(Reaccredited by NAAC with - 'B' Grade with a CGPA of 2.32) An ISO Certified College for ISO 9001 : 2015 & ISO 14001 : 2015

Post – Egra: Dist – Purba Medinipur (West Bengal): Pin – 721429.

President: Mr. Tarun Kumar Maity, M.L.A., W.B.

Principal: Dr. Dipak Kumar Tamili.

**:** 03220-244073, Website - <u>www.egrassbcollege.ac.in</u> : E-mail – <u>info@egrassbcollege.ac.in</u>

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#### Course outcomes:

A course on breeding techniques of indigenous fish would be a valuable asset for anyone interested in fisheries management, conservation, or aquaculture. The course would provide students with the knowledge and skills they need to effectively breed and manage indigenous fish populations.

#### Upon completion of this course, students will be able to:

- Students will be able to describe the different breeding techniques used for indigenous fish.
- Students will be able to explain the advantages and disadvantages of each breeding technique.
- Students will be able to design and implement a breeding program for an indigenous fish species.
- Students will be able to evaluate the success of a breeding program.
- Students will be able to apply their knowledge of breeding techniques to conservation efforts.

#### Specific course outcomes may include:

- Students will be able to identify the different types of indigenous fish in their region.
- Students will be able to collect and store sperm and eggs from indigenous fish.
- Students will be able to artificially inseminate indigenous fish eggs.
- · Students will be able to raise indigenous fish larvae and fry.
- Students will be able to stock indigenous fish populations in natural waters.



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#### EGRA S.S.B COLLEGE

Dept. of Zoology (U.G + P.G)

Syllabus

Of

# BREEDING TECHNIQUES OF INDIGENOUS FISHES

Introduction to reproduction in indigenous fishes
 Factors affecting natural reproduction. Physiology of reproduction. Sexual dimorphism and hermaphroditism, Induced breeding, Fish genetics and selective breeding, Recent developments

II. Pituitary gland of fishes Study of maturity stages in fishes. Collection and preservation of fish pituitary gland. Maturity Stages in fishes. Preparation of pituitary gland extract, Hypophysation and Calculation of fecundity. Pituitary Gland Collection

III. Synthetic hormones Synthetic hormones used for induced breeding of carps. Synthetic hormone used in fish breeding

IV. Seed production of Carps Commercial carp species and its sexual dimorphism, Natural collection of carp seeds, Induced breeding and larval rearing. Materials and equipment used for Induced breeding. Hatchery systems

V. Breeding and seed production of indigenous fishes Brood stock maintenance. Breeding and spawning. Life feed culture. Nursery rearing



Principal
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Fig: 1. Certificate Course On Breeding Techniques of Indigenous Fishes



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Fig: 2. Certificate Course On Breeding Techniques of Indigenous Fishe