

M.Sc. (Zoology) Semester - 3 (CBCS) Examination
OCT/NOV-2024 (AS PER SYLLABUS YEAR JUNE-2019)
Aquaculture & Fisheries Technology (Core (New))

Time: 2:30 Hours

Marks: 70

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.
3. Draw neat and labeled diagram wherever needed.

SECTION-1

Que. 1 Answer the Following.

- (A) Write in detail about the Gujarat fisheries act, coastal aquaculture authority act and biodiversity act. (07)
- (B) Explain fresh water and marine aquariums. (07)

OR

Que. 1 Explain different types of fishing boats and gears used in Fisheries. (14)**Que. 2 Answer the Following.**

- (A) Explain Estuarine capture and culture fisheries status in Gujarat and India. (07)
- (B) Describe: Pomfret fishery and Bombay duck fishery (07)

OR

Que. 2 Explain Shrimp, Prawn, Molluscan, Crab and Pearl Oyster fisheries. (14)**Que. 3 Answer any seven out of eight.** (07)

- (1) Fishes belong to phylum _____ and subphylum _____.
- (2) Concerning appendages, how do crustaceans differ from other arthropods?
- (3) Give two examples of cephalopods.
- (4) Write two advantages of aquaculture in Gujarat.
- (5) Female lobsters can carry live sperm for how many years?
- (6) Write the scientific name of Catla and Rohu.
- (7) Common carp (*Cyprinus carpio*) was introduced to India from _____ country in _____ year.
- (8) What is freshwater aquaculture?

SECTION-2

Que. 1 Explain in the context of induced breeding: Hormonal regulation of gonadal development, Activity of gonadotropin releasing hormone, and Application of hormones in aquaculture. (14)

OR

Que. 1 Answer the Following.

- (A) Explain in detail: Microbial hazards in seafood. (07)
- (B) Describe common fungal, bacterial and protozoan diseases of fish its symptoms and control methods. (07)

Que. 2 Write about the need of fish preservation, methods of preservation, and their advantages. (14)

OR

Que. 2 Answer the Following.

- (A) Write about drug resistance aquafeed: nutrition, feed formulation, feed additives, alternative feed ingredients. (07)
- (B) Describe global and local environmental water pollution and their effect on fisheries. (07)

Que. 3 Answer any seven out of eight. (07)

- (1) Is it important to separate the fry from adults in fish breeding? Why?
- (2) Define hypophysation technique.
- (3) Give two names of environmental parameters that are very important to influence the hormonal activity of pituitary and gonads for induced breeding.
- (4) What are the stages of fish seed?
- (5) What is canning in fish preservation?
- (6) A gelatinous substance from the _____ of Indian salmon used to produce isinglass.
- (7) What is the use of immunostimulants in aquaculture?
- (8) Which monoclonal antibody is generally used to measure catfish health?
