DEPARTMENT OF AZC

SRI Y N COLLEGE (AUTONOMOUS): NARSAPUR

Program Specific Outcomes:-

B.Sc., AZC (Aquaculture, Zoology & Chemistry)

The main objective of the AZC Degree Course is to train the students at graduate level for meeting the demands for the skilled man power in both organised and unorganized sectors and also provide an alternate channel for those who aimlessly pursue higher education and to prepare themselves for self reliance.

In this program the study of Aquaculture / Fisheries opting a degree for many students to maintain aquatic life and to elevate its protection.

Aquaculture students are known to submerge into a syllabus that contains a practical approach to the subject. They will get to assess the population of fisheries, control fish hatcheries and aquaculture environments and even monitor and enhance aquatic environments.

Finally the subject of Aquaculture leads students to become aquaculture entrepreneurs, aquaculture farm managers, hatchery managers, fishery officers, research officers, science officers, lecturers, quality control specialists (specially aquatic food), scientists and consultants – it "s a field with plenty of opportunity for growth.

Courses offered and Courses Codes from 2012-2020

S. No.	Program Name	Semeste r	Paper & Cours e Code	Course Name
1	AZC	I	I – 1114	Basic Principles of Aquaculture.
2	AZC	I	I – 1114	Principles of Aquaculture
3	AZC	II	I – 2114	Biology of fin fish & shell fish
4	AZC	II	II – 2114	Biology of fin fish & shell fish
5	AZC	III	III – 3114	Fish Nutrition & Feed Technology
6	AZC	III	III – 3114	Fish Nutrition & Feed Technology
7	AZC	IV	IV – 4114	Fresh Water & Brackish water Aquaculture
8	AZC	IV	IV – 4114	Fresh Water & Brackish water Aquaculture
9	AZC	V	V – 5143	Fish Health Management
10	AZC	V	V – 5143	Fish Health Management
11	AZC	VI	VI – 5144	Fisheries Extension, Economics & Marketing.
12	AZC	VI	VI – 5144	Fisheries Extension, Economics & Marketing.
13	AZC	VII	VII – 6157	Fishery Engineering
14	AZC	VII	VII – 6157	Fishery Engineering

PSO 1 : Aquaculture technology has been introduced to prepare the students which finds the main modules of aquaculture with traces of Biology, Chemistry and Laboratory Science before moving to more specific topics like Fish Hatchery Management, Organic Biology, Fish Orientation and ecology.

PSO 2: This course guide the students how to manipulate aquatic environments to achieve better results in the manner of productivity and protect endangered species from diseases.

PSO 3 : In this program the knowledge about the Aquaculture technology also delves into the legal, ethical, technological and environmental waters and unravels the fields of aquaculture and business, spawning technologies, water quality and methods of production, fish genetics, fish diseases, biostatistics and fish nutrition.

PSO 4 : Ultimately, a bachelor degree in aquaculture grants the tools needed to establish sustainable solutions for marine and fresh water bodies conservation. It inspires the students to play a part in saving our planet.

Course Outcome:-

S.No.

Course Outcome

Fish Nutrition:

- 1. To study about the fish"s digestive system and various nutrient"s digestion, absorption, metabolism and biochemical function. It also overs relevant undesirable substances in feed that can be a challenge for the health and for the seafood product produced.
- 2 To determine optimal nutrient supplementation levels for specific life stages of improved feed.
- To improve the sustainability and production efficiency by developing innovative feeds that reduce dependence on fishery resources.
- 4. To determine nutritional value of alternative ingredients (Protein, Lipid, Energy) and develop practical feed formulations for improved strains of feed.

Fishery Management:-

- 5. To determine total yield from the experimental fishery.
- 6. To understand seasonal species, sex, size and maturity composition of fish caught in arange of different experimental gear types.
- 7. To maintain the target species at or above the levels of necessary to ensure their continued productivity.
- 8. To minimize the impacts of fishing on the physical environment and on non-target (by-catch), associated and dependent species.
- 9. To maximize the net incomes of the participating fishers.
- 10. To maximize employment opportunities for those dependent on the fishery for their livelihoods.

Fish Health Management :-

- 11. To understand exclusion of pathogens through reliable sources of eggs, juveniles andbrood stock, guarantine, eradication programs and long term policies.
- 12. To Know the management of diseases from pathogens present in environment.
- 13. To improve fish health, FCR"s and hence economic returns.
- 14. To identify risks posed at various stages of culture cycles.

Ecology:-

15. To understand the nature of environmental influences on individual fin fishes and shellfishes, their populations and communities.

- 16. To study the inter-relationship between biotic and abiotic components of nature as well asthe relationship among the individuals.
- 17. To study the structural adaptations and functional adjustment of organisms to theirphysical environment.
- 18. To study the local distribution of aquatic animals in various habitats.