Model Program Book

SEMESTER INTERNSHIP

Designed & Developed by

ANDHRA PRADESH
STATE COUNCIL OF HIGHER EDUCATION

(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)

PROGRAM BOOK FOR

SEMESTER INTERNSHIP

Name of the Student: Tankala. Rajasekhar.

Name of the College: GOVERNMENT DEGREE COLLEGE (men), SKLM

Registration Number: 202200104 9084

Period of Internship: From: 12/12/22 To: 16/03/2023.

Name & Address of the Intern Organization Fisheries Development office, ilisupuram, srikakulam.

DR. BR. Ambedkar University

YEAR

An Internship Report on

Fisheries

(Title of the Semester Internship Program)

Submitted in accordance with the requirement for the degree of

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Under the Faculty Guideship of

S. Ravi Babu sir

(Name of the Faculty Guide)

Department of

Zoology, Government Degree collage(men) SKLM.

(Name of the College)

Submitted by:

Tankala. Rajasekhar

(Name of the Student)

Reg.No: 202200104 9084

Department of Zoology

GROVERNMENT Degree college (men), SKLM.

(Name of the College)

Instructions to Students

Please read the detailed Guidelines on Internship hosted on the website of AP State Council of Higher Education **https://apsche.ap.gov.in**

1. It is mandatory for all the students to complete Semester internship either in V Semester or in VI Semester.
2. Every student should identify the organization for internship in consultation with the College Principal/the authorized person nominated by the Principal.
3. Report to the intern organization as per the schedule given by the College. You must make your own arrangements for transportation to reach the organization.
4. You should maintain punctuality in attending the internship. Daily attendance is compulsory.
5. You are expected to learn about the organization, policies, procedures, and processes by interacting with the people working in the organization and by consulting the supervisor attached to the interns.
6. While you are attending the internship, follow the rules and regulations of the intern organization.
7. While in the intern organization, always wear your College Identity Card.
8. If your College has a prescribed dress as uniform, wear the uniform daily, as you attend to your assigned duties.
9. You will be assigned a Faculty Guide from your College. He/She will be creating a WhatsApp group with your fellow interns. Post your daily activity done and/or any difficulty you encounter during the internship.
10. Identify five or more learning objectives in consultation with your Faculty Guide. These learning objectives can address:
    a. Data and Information you are expected to collect about the organization and/or industry.
    b. Job Skills you are expected to acquire.
    c. Development of professional competencies that lead to future career success.
11. Practice professional communication skills with team members, co-interns, and your supervisor. This includes expressing thoughts and ideas effectively through oral, written, and non-verbal communication, and utilizing listening skills.
12. Be aware of the communication culture in your work environment. Follow up and communicate regularly with your supervisor to provide updates on your progress with work assignments.

13. Never be hesitant to ask questions to make sure you fully understand what you need to do your work and to contribute to the organization.
14. Be regular in filling up your Program Book. It shall be filled up in your own handwriting. Add additional sheets wherever necessary.
15. At the end of internship, you shall be evaluated by your Supervisor of the intern organization.
16. There shall also be evaluation at the end of the internship by the Faculty Guide and the Principal.
17. Do not meddle with the instruments/equipment you work with.
18. Ensure that you do not cause any disturbance to the regular activities of the intern organization.
19. Be cordial but not too intimate with the employees of the intern organization and your fellow interns.
20. You should understand that during the internship programme, you are the ambassador of your College, and your behavior during the internship programme is of utmost importance.
21. If you are involved in any discipline related issues, you will be withdrawn from the internship programme immediately and disciplinary action shall be initiated.
22. Do not forget to keep up your family pride and prestige of your College.

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Student's Declaration

I, T. Rajasekhar a student of Internship Program, Reg. No 2022001049084 of the Department of Zoology, Govt degree College do hereby declare that I have completed the mandatory internship from 12/12/2022 to 16/03/2023 in Fisheries department (Name of the intern organization) under the Faculty Guideship of S. Ravi Babu sir (Name of the Faculty Guide), Department of Zoology, GOVERNMENT DEGREE college (men) SRIKAKULAM. (Name of the College)

T. Rajasekhar | 16/03/2023

(Signature and Date)

Official Certification

This is to certify that T. Rajasekhar *(Name of the student)* Reg. No. 202200104 9084 has completed his/her Internship in Fisheries department *(Name of the Intern Organization)* on Fisheries *(Title of the Internship)* under my supervision as a part of partial fulfillment of the requirement for the Degree of IIIrd BZC(E.M) B.Sc in the Department of Govt. Degree college(men) *(Name of the College)*.

This is accepted for evaluation.

Fisheries Development Officer
Dt.....
Srikakulam

(Signatory with Date and Seal)
(K. GANGADHARA RAO)
E.I.D. No: 0104 104
Fisheries Development Officer
Srikakulam Dist

Endorsements

Faculty Guide

Head of the Department

Principal

Government OF Andrapradesh
Departmet OF Fisheries

Certificate from Intern Organization

This is to certify that T. Rajasekhar *(Name of the intern)* Reg. No 202200104 9084 of Govt. Degree college (men) *(Name of the College)* underwent internship in Department of Fisheries *(Name of the Intern Organization)* from 12/12/2022 to 16/03/2023.

The overall performance of the intern during his/her internship is found to be Very Good (Satisfactory/Not Satisfactory).

Fisheries Development Officer
Dt. 15/3/23
Srikakulam

Authorized Signatory with Date and Seal
(K. GANGADHARA RAO)
E.I.D. No: 0104 104
Fisheries Development Officer
Srikakulam Dist
15/3/23

Acknowledgements

I would like to thank all those people who helped me in successful completion of my internship programme. with deepest sence of gratitude.

I Acknowldge the inspiring guidance, positive criticisam and Encouragement rendered by Respectabul FOO sir..

Through the period of his investigation and preparation of the project, i am really indepted for his valid suggestions. advice and help in collecting the project.

Contents

CHAPTER 1: EXECUTIVE SUMMARY

The internship report shall have a brief executive summary. It shall include five or more Learning Objectives and Outcomes achieved, a brief description of the sector of business and intern organization and summary of all the activities done by the intern during the period.

The sustainabul fisharies management project will be identify innovative for strengthing fisharies management. The Goal of fisharies management is to produce sustainabul biological, environmental and socio-economic benfits from renewable aqualic resources. Resource conservation, food, production, generation of economic wealth, generation of production & reasonable income for fisharies.. maintain employment for fisharies, maintaing the viability of fishing communities are the main objectives of fisharies management.

The activities done during the intern period includes pond preparation for culture, selection of crop, fodder & feeding habits, laboratary techniques, types of ponds, various diseases & prophylaxis.

CHAPTER 2: OVERVIEW OF THE ORGANIZATION

Suggestive contents

A. Introduction of the Organization
B. Vision, Mission, and Values of the Organization
C. Policy of the Organization, in relation to the intern role
D. Organizational Structure
E. Roles and responsibilities of the employees in which the intern is placed.
F. Performance of the Organization in terms of turnover, profits, market reach and market value.
G. Future Plans of the Organization.

Department of fisheries srikakulam is located at rama -rajamma street, ilisipuram, srikakulam, promotion and the development of fishing & fisheries and its associated activities including infrastructure development marketing, exports etc. welfare of fisherman and other fishes folk and strengthing of their livelihood are the main vision values of organisation, schemes include prime minister matsya sampada yojana, govt. schemes will strive promote socioeconomic welfare of fisheries and fish farmers by providing boats, nets, safety kits, nutritional support to fisherman families during fishing bars and lean periods

CHAPTER 3: INTERNSHIP PART

Description of the Activities/Responsibilities in the Intern Organization during Internship, which shall include - details of working conditions, weekly work schedule, equipment used, and tasks performed. This part could end by reflecting on what kind of skills the intern acquired.

The sustainable fisharies management project.

will be identify innove cost ebbective

23/84

mechanisam for strengthening fisheries

management capacity. in accord with the strategic conter

to modernize the role of public sector. in this we

have learned about the pond management. selection of shrimp,

fodder given to the fish. Record maintenance, water quality of

ponds etc ---- major carps include catla, rohu, mrigal &

about their Rearing and feeding habits. And management

capacity of secretarial of agariculture, live stock, fisharies

and food (SAGPYA), particulary those functions required

local & foreign techniques for testing the quality salinity

of water. skills acquired during the project include

management of Fishes, lab equipment of fishery department,

communication.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	pond preparation: The optimum size pond is rectangular in size	fish yield in pond can affected by various factors in pond	
Day - 2	soil & water: The soil type & its fertility is necessary.	It controls pond stability, pH & salinity of water	
Day - 3	Aquatic weeds:- They not only take away nutrients but also upset a bal are	If left unchered may choke the water body posing a serious to fishing.	
Day - 4	unwanted fishes or predators. They may be unwanted fishes & predators were there.	They compete with culture fish for feed, nutrients.	
Day - 5	Liming: liming should be done to the pond based on variety of culture	liming includes $caco_3$, $[ca\,mg(co_3)]_2$.	
Day - 6	Fertilizers: plays a crucial role in fish culture	Ammonium phosphate (20 - 30 kg/ha).	

WEEKLY REPORT

WEEK – 1 (From Dt.12/12/22 to Dt.17/12/22)

Objective of the Activity Done: preparation of pond.

Detailed Report:

preparation of pond: The optimum size of the pond is rectangular with size varying from 0.1 - 20 hectors with depth ranging from 2.0 to 3.0 meters the soil type of pond and its fertility status for the fresh water fishes especially the carp is alluvial soil with neutral p.H ranging between 7.5 - 8.0. The pH has brought to neutral if the pond soil and water are saline alkaline.

The aquatic weeds in Fish pond are undesirabul they not take away the nutrients but also upset the oxygen balance in the water by releasing CO_2 into pond during nights

The unwanted fishes or predators may be predatory they can be eliminated through repeated netting of pond.

The types of lime to be used depend on the water pH it is recomended the lime ($caco_3$) or [$ca\,mg(co_3)_2$] organic fertilizers such as urea are added.

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	selection : male & female fishes are introduced for breeding season.	relased egg (1-10 days) is known as spawn	
Day - 2	spawn : (20-25 days) is called fry, (30-40 days). advanced fry	fry should shifted to rearing tank	
Day - 3	stunted Fingerlings : High amount of density culture is called stunted growth.	High priority is given for this.	
Day - 4	Feeding : General feed should given at morning and evening routine	on 6th day food = protein - egg feed.	
Day - 5	Kacha nursery : advance fry is added to kacha nursery	For good management practices	
Day - 6	water management : measure should be taken to ensure adequate water & soil quality.	measure should be adopted to prevent fish from stress, diseases.	

WEEKLY REPORT

WEEK - 2 (From Dt.19/12/22 to Dt.26/12/22)

Objective of the Activity Done: selecting and stocking of carps.

Detailed Report: selecting and stocking of carps.

selection: about 15-20 days after the initial manuring selected species of carps are introduced into the pond when several species of fishes are rared together in pond in an intensive way.

The survival of fingerlings introduced into particular pond depends vary much in their size bigger than size. it should have size of 10-15 cm.

From the temparature point of view the best time to stock pond will be when the water in the pond is with in optimum range of 20°-30°, obviously temparature below 30°c will affect the growth of fish.

Feed For the carps maybe are of two types: natural, artifical feeds and probiotics also. The natural growth of feeding in pond can be increased by regular measuring.

ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Introduction of major carps: 1) catla: large & brad head protruding saw	Rearing: upper - column	
Day - 2	Feed: Fingerlings consume some plankton algae, zoo plankton	Adults feed mainly on the surface.	
Day - 3	Rohu: coloured fish with dark scales onits upper body.	Rearing: middle column	
Day - 4	Feed: Eat zoo plankton + phyto plankton	Feed wale growth booster helps in faster growth.	
Day - 5	mrigal: it is a ray finned fish, covered with cycloid scales, snout blunt	rearing: Bottom - column	
Day - 6	Feed: plankton feeder, debris found in bottom	Bottom feeders	

WEEKLY REPORT

WEEK – 3 (From Dt 27/12/22 to Dt 03/01/2023)

Objective of the Activity Done: introduction of major carps.

Detailed Report: catla Fish:

calla fish is a large and broad head, with a large protruding lower jaw, & upturned mouth, it has large, grayish scales on its dorsal side & whitish on its belly. it reaches upto 182 cm in length & 36 kg in weight.

it is a surface & mid water feeder.

Adults feed on zooplankton and phytoplankton.

Rohu:- Rohu fish has small head, sharp face, and lowerlip is trill like, long circular body covered with scales, it has maximum length of 1 meter.

Feed is in form of pellet, proteins etc...

mrigal Fish:

mrigal fish large & long upper lip is curved to down, pair of trunk, body is silver coloured, average body length is about 1 meter

-> Feed is bottom based feeders.

-> catch small insects, decomposed organic elements.

ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	salinometer: device used to measure the salinity in a solution	Read out the percentage of salt in solution	
Day - 2	pH meter: it measures the hydrogen ion activity in water	neutral: pH = 7 acedic = pH < 7 Basic = pH > 7	
Day - 3	nitrate test: indicates high nitrate levels in a pond	low nitrate levels improve health of fishes	
Day - 4	Test: 5 drops of reagent A and reagent B in a test tube & shake it well	Red or pink: nitrate reduction. Red or violet: presence of nitrate	
Day - 5			
Day -6			

WEEKLY REPORT

WEEK - 4 (From 01/01/23 to 07/01/23)

Objective of the Activity Done: Laboratory.

Detailed Report: salinometer:

→ it is a device used to measure the salinity or dissolved content of a solution

→ it is specially a caliberated hydrometer to read out the percentage of salt in a solution.

pH meter:

A pH meter measures the hydrogen ion activity in water based solutions

Indicates acidity or alkalinity of a solution

neutral solution $pH = 7$

Acedic solution $pH < 7$.

Basic solution $pH > 7$.

nitrate test: High nitrate levels in pond indicates a build up of fish waste

→ low nitrate improves health of fish.

→ high nitrate level increases algae and poor quality

test: 5 drops of reagent A and reagent B in a test tube & shake it well.

Red or pink - nitrate reduction.

red or violet - presence of nitrate.

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Selection of shrimp: sampling is most important factor in selection of Juveniles	Don'ts: stocking should not be checking the quality of fry	
Day - 2	Fodder: fresh fodder with good nutritional value should be selected & purchased	don'ts: fodder should not be fed without calculating FCR.	
Day - 3	water ownership: Before stocking the water quality should be tested in lab	don'ts: without testing the quality of shrimp fry shouldn't released	
Day - 4	Aeration: Additional aeration must be properly arranged bc3 few shrimps require alot of vital gas	don'ts: high density cultivation shouldn't be done without aeration.	
Day - 5	Healthownership: Bio - security arrangements should be regulary reviewed	don'ts: the fence around the pond and bird net should n't be torn.	
Day - 6	Hed: planning should be done based on market demand.	don'ts: don't caught without proper planning.. caughton full moon days.	

WEEKLY REPORT

WEEK - 5 (From D[09]/01/23 to D[18]/01/23)

Objective of the Activity Done: DO's and DON'Ts in culture.

Detailed Report: After stress tests, microscopic & PCB tests for shrimps, quality seed is selected and stocked.

DON'Ts: shrimp fry should not be purchased from hatcheries not licenced by CCA

Fodder: fresh fodder with good nutritional value should be selected.

DON'Ts: DO not use cheap fodders.

Water ownership: check the standard range.

oxygen and pH should be checked every morning and evening.

DON'Ts: in saline ponds, there is no need to add minerals every week

Aeration: Depending up on no of aerators pond should be arranged in 2 circles.

DON'Ts: DON't use poor quality aeration.

Health ownership: probiotics used instead of antibiotics

prawn in a check tray should be checked

DON'Ts: same tools used in one pond should not use in other pond.

ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	complete Fish Farming: culture is taken up from the process of spawning to Full size	Farms have breading tanks, hatcheries, nursary, rearing, production ponds	
Day - 2	Restricted Fish Farming: culturing any one stage in Life cycle of Fish.	ponds are concerned only for production of spawn / seed / Full size Fish.	
Day - 3	Extensive Fish Farming: Fish depend on the natural Feed for growth.	productivity is directely proportonal to availabul natural Feed.	
Day - 4	Intensive Fish Farming: Fishes are provided with artificial seed	Achiving maximum productivity by providing artifical feed	
Day - 5	Traditional Fish culture: most common method of Fish culture	artifically constructed ponds where Fin Fishes and shell fish are varied	
Day - 6	Semi-intensive Fish Farming: Both natural and artifical Feed supplied to Fish.	it required inputs of Fertilizers and supplementary Feeding.	

WEEKLY REPORT

WEEK - 6 (From Dt.19/01/23 to Dt.25/01/23.)

Objective of the Activity Done: Different types of Fish Farming techniques.

Detailed Report: Besides traditional ways, Fish is cultured in artificial ponds to meet internal and external demand. By regulating nutritional needs, growth and breading efforts are made to achieve high productivity.

complete Fish Farming culture is taken up From the process of spawning to the stage of attaining maximum size. culture centers will have breeding tanks, hatcheries, nursery ponds, rearing ponds, production ponds etc. Restricted Fish Farming is culturing any one of the stage in the life cycle of fish in the ponds concerned with high yield.

extensive and intensive Farming techniques are Fish depends on natural Feed and artificial Feed for growth and survival respectively.

Traditional Fish Farming are common method of Fish culture where artificially constructed ponds where the aqualic animals such as the finfish and shell fish are rared., semi intensive fish farming riquires a modarate levels of inpuls and Fish production is incresed by use of fertilizers and supplementary feeding.

ACTIVITY LOG FOR THE SEVEN WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Hatchery tanks: cement tanks with an area of $5 \times 1.5\ m^3$.	tanks used for breeding the prawns and larval development.	
Day - 2	selection and transport of Breeders prawns measuring about 18-20 cm.	Fully Grown and Sexually mature breeder prawns are used	
Day - 3	prevention from parasitic infection : By chemical Bath.	chemical bath & supply of sterlized Feed prevents Infections	
Day - 4	Feed : Green algal cells without parasitic inbection are provided	Green algal cells are provided as Feed.	
Day - 5	stocking : About 60 adult prawns are stocked For breeding in above tanks	Ratio of male and female shrimps are 1:1 or 1:2.	
Day - 6	Breeding and spawning: occurs during night time Just 60cms above the bottom.	mating can be said to have occured by presence of spermatophores over thylicum of Female.	

WEEKLY REPORT

WEEK – 7 (From Dt 27/01/23 to Dt 02/02/23)

Objective of the Activity Done: management of hatchery tanks in prawn production.

Detailed Report:

construction of hatchery tanks, selection and transport of breeders, Feed and preventive measures For parasitic infection are discussed in this week as prime management criteria in prawn production.

Hatchery tanks are plastic tubes of 0.5 to 1 tonne capacity or cement tubes with an area of $5 \times 1.5\ m^3$. Fully grown and sexually mature breeder prawns measuring about 18-20 cm are selected from the sea water or culture centers. selected breeders are transported in sealed polythene bags filled with 1/3 marine water and 2/3 oxygen.

selected breeders are given chemical water bath to prevent parasitic inbections. & provided with sterlized Feed. Green algal cells without parasitic infection are provided as Feed. Ratio between male and Female prawns is maintained of 1:1 or 1:2 to facilitate the Females relese large number eggs. maling can be said to have occured by the presence of spermalophores over the thylicum of the Female.

ACTIVITY LOG FOR THE EIGTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Reservoir orhead pond : These are constructed near perrineal watersource.	It is the main pond suppling water to different ponds	
Day - 2	Hatching ponds: constructed near the main culture pond	Fertilized egg develop into Fry stage in these ponds	
Day - 3	Nursery ponds : about 4 to 5 nursary ponds of 15x15x1.2m size are constructed	Fish Fry of 3-4 days age is relesed into these ponds For growing them for 30days.	
Day - 4	Rearing ponds: are 25x10x1.5m size. 10-12 ponds are constructed.	Fish Fry of 30 days are Furthur grown in rearing ponds	
Day - 5	production ponds : these are perennial in nature. 91x50x3.5m in size.	Small Fishes are grown upto maximum size(marketabul size)	
Day -6	stocking ponds: size 25m x 10m x 1.75m.	Fully grown Fishes & breeders are stocked till they are disposed.	

Objective of the Activity Done: various types of ponds.

Detailed Report: Fish farm necessary for artificialculture should posses the following ponds for keeping up various stages seen in development of a fish. each one of it has its own characters to be followed strictly to achieve good yield.

Reservoir ponds supply water to different ponds all through the year. Fertilized eggs are developed into fry stage in hatching ponds. hapas made up of mosquito net also used for breeding fish Fry of 3-4 days age is released into nursary ponds for growing them for 30 days. Fish fry of 30 days age are further grown in rearing ponds of 25 x 10 x 1.5 m size. these are generally stocked in high density after 6 months or one year these fishes are introduced into production ponds up to attaining maximum marketabul size. these fishes & breeders are stocked in stocking ponds till they are disposed off for specific purposes.

ACTIVITY LOG FOR THE NINETH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Temparature : Fishes are poikilothermus organisams	Temparature has influence on growth, Respiration & Reproduction.	
Day - 2	Depth of pond : physio-chemical factors changes basing on depth of the pond.	light cannot penetrated too deep. resulting in abscence of producers.	
Day - 3	Turbidity : clay, sand & other floating particles reduce the transparency of water.	prevents penetration of light, Flood water is highly turbid	
Day - 4	Light : penetration of light into water depends upon intensity of light	Aquatic plants & plankton, silt etc prevent the penetration of light	
Day - 5	water currents : Fishes generally breed only in Flowing waters	Hence waves & water currents formed due to the exit of water increses productivity.	
Day - 6	shore conditions : a wide pond increses the area of water.	Aquatic plants along the shore able to synthesize more Food bcz of photosynthesis.	

WEEKLY REPORT

WEEK - 9 (From Dt.10/02/23 to Dt.17/02/23)

Objective of the Activity Done: Influence of physical factors in

Detailed Report: Fish ponds:

prime physical factors of the pond influencing the productivily are temparature, depth of the pond, transperency of water, light and water moments.

Temparature has influence over respiration, growth, and reproduction of fishes. These are poikilothermous organisams whose body temparature changes in accordance with the temparature of the medium. Raise in temparature reduces the dissolved oxygen content.

An ideal pond should have a depth of 2 meters, physico-chemical factors change basing on the depth. Turbid water containg soil & clay particles entangle between the gill filamants causing obstacle for respiration. light is the most important factor For productivity. waves and water currents formed due to the entry and exit of water contribute to the incresed productivity due to aviad-ability high dissolved oxygen. if a pond has lengthy shore it is use ful for growth of aquatic plants Due to more light availabuily it increses yield.

ACTIVITY LOG FOR THE TENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Hydrogen ion concentration (pH) : it is based on dissolved substances	pH of 6.8 - 9.0 result in high productivity of pond.	
Day - 2	Dissolved oxygen : depleted oxygen is regenerated from photosynthesis	productivity of pond depends upon availbuility & regeneration of oxygen.	
Day - 3	carbondioxide : it is relesed by aquatic organisams during respiratory process.	co_2 riquired for photosynthesis & over concentration of co_2 kills fishes.	
Day - 4	nutrients : necessary for growth of organisams.	when nutrents are plenty yield will be very high.	
Day - 5	Hardness of water : depends up on dissolved calcium and magnesium salts.	Grows better at hardness of 15 ppm. slows growth at less than 5 ppm.	
Day - 6	other chemicals : $caco_3$, nitrates, Ammonia, sulphates & phosphates.	$caco_3$ necessary for growth of bones. Reming nutrients enhance the no of phytoplankton.	

WEEKLY REPORT

WEEK – 10 (From Dt 20/02/23 to Dt 27/02/23)

Objective of the Activity Done: chemical factors in a Fish pond.

Detailed Report: Hydrogen ion concentration, dissolved oxygen, carbondioxide, nutrients, hardness of water and other minerals of the pond influence the growth and productivity of the fish.

pH of 6.8 - 9.0 results in high productivity of the pond Dificiency of water, rain water, turbid water dicreases the pH and increses acidity. A pH of less then 6 & more than 10.8 results in mortality of the organisams. productivity OF pond depends up on the availabulity and regeneration of oxygen, oxygen content in the pond is increased by using areators. CO_2 is riquired For photosynthesis but over concentration of CO_2 may result in causing mass mortality of aquatic organisams.

nutrients are necessary for growth of organisams. micro Elements like copper, nickel, manganese, zinc & salts formed of Na, K, mg, ca, Fe in the Form of sulphates, phosphates, nitrates and carbonates. organisam grow better at a hardness of 15 ppm. Sulphates & phosphates are necessary For growth for the formation of chlorophyll magnesium salts are necessary.

ACTIVITY LOG FOR THE ELEVENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Integrated Fish Forming; & advantages: culturing Fish in association with others agriculture & poultry.	Fish wastes fertilise the crop fields while wastes from crops & poultry chicks are used as feed by fish	
Day - 2	Fish - prawn culture: prawn can be cultured in ponds primarely ment for carp culture.	Excreta of carps forms food for prawns. extra income we can earn.	
Day - 3	Fish - poultry: here poultry farm is constructed over a flatform built of bamboo sticks above waterlevel of pond.	This facilitates the direct fertilization of pond by droppings of chicks.	
Day - 4	Rice - Fish cultured simult-anously: Rice varites ADT6, ADT7, Rajarani are used	channa striatus, clarius, catla are genarally grown along with Rice in ditches.	
Day - 5	Rotational Rice & Fish culture: Rice fields are converted to fish culture ponds after harvesting.	soil become fertile with excretes of Fish improves Rice yield.	
Day - 6	coconut (or) Banana + Fish culture: canals in between the rows of plants are utilised for fish cultures.	it provides continous water to plants & utilisation of space and gives additional income.	

WEEKLY REPORT

WEEK – 11 (From Dt.28/02/23 to Dt.06/03/23)

Objective of the Activity Done: integrated Fish forming technology.

Detailed Report: culturing the Fish in association with agriculture or ducks or chicks or pigs or prawns is called integrated fish or mixed culture. Fish wastes are rerlilize the crops and poultry chicks are used as feed by fish. individually these farming methods may yield low income but intigrated farming technique yields multipul products of nutrilional value and Econamic significance.

prawn can be cultured in ponds primarily ment for carp culture. carps are not predators, their excreta forms food for prawns. This facilitates additional income of RS 10,000 per hector. Fish-poultry is also a better integrated farming as poultry wastes are used as food for fish.

Rice-Fish culture can be done in two ways either Both of them cultured simaultaneously or alternatively. canalas or ditches are constructed in rice bields where fishes can be grown. The selected fish variety should with stand high temparature and low depth conditions. The rice varites with withstanding flood conditions are generally selected. same technique can also used in coconut or Banana-fish culture where canals are constructed in between the rows of plants.

ACTIVITY LOG FOR THE TWELVETH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	cotton mouth disease: This is caused by infection of fexibacteria.	characterstic growth of white cotton like filaments around the mouth.	
Day - 2	Furunculosis: This is caused by infection of Aeromonas salmonicida.	Blisters with water or pus are formed at the site of infection such as skin.	
Day - 3	Tuberculosis: This is due to infection by mycobacterium	disease is identified by finrot, wounds on body, blisters, loss of weight e.t.s.	
Day - 4	Dropsy: initially it is due to viral infection & secondary infection by bacterium psudomonas punclata.	Bulging of belly due to accumulation yellow colour liquid in body cavity, scales projected.	
Day - 5	columnaris: This is due to infection of bacteria chondrococcus columnaris.	identified by formation of spots over body, scales fall off & mass mortality of fish.	
Day - 6	prophylactic measures: By using antibiotics & probiotics we can prevent infection.	chemical bath of infected fish & using antibiotics fishes can be cured.	

WEEKLY REPORT

WEEK – 12 (From Dt.07/03/23 to Dt.15/03/23)

Objective of the Activity Done: Bacterial diseases & prophylactic measures.

Detailed Report: Bacteria, virus, protozons are common parasites seen harbouring the Fishes. infection by pathogens cause retardation of growth & some times death of fish wich leads to loss of for cultivators.

cotton mouth disease, furunculosis, fin or tail-rot disease, tuberculosis, dropsy, columnaris are the various bacterial diseases of Fishes. Their symptoms are like wounds on body, blisters over the internal organs, spots over the body, Broken fin rays, & cotton moulds at mouth & mass mortality of fisher also sometimes seen. due to these bacterial diseases, their symptoms very ~~from~~ different Bacterial diseases.

prophylactic measures:- General drugs used to cure the disease are sulphanilamide, sulphadigene, sulpha marizine etc. infections can be prevented by mixing antibiotics like chloramphinicol, terramycin, erythromycin etc. chemical bath of infected fishes cure the disease. maintaing pure and cleanwater and drying of pond frequently prevents many diseases. usage of pro-biotics also enhance immunity of fish.

CHAPTER 5: OUTCOMES DESCRIPTION

Describe the work environment you have experienced *(in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and ventilation, etc.)*

Good environment is very important for learning and doing JOr or any other work. Good environment is always up your intrest.. A working environment is the sifting social features and physical conditions in which you perform your Job. These elements can impact feelings of well being, work place relationships, collaboration and efficiency and employe health. The office is more comfortable and improving your communication. The work environment impacts my mood, drive, mental health and performance. my confidence is increased. overall environment is good at fisheries department through positive influence the entire work in environment. the office is more comfortable and improving my communication. i feel there is a good interaction at the department.

Describe the real time technical skills you have acquired (*in terms of the job-related skills and hands on experience*)

Internship provides valube persional experienc and allow us to test the theories and concepts we have been introduced to throughout our collage carrier skills we have picked up during the course area is

Real time skills:-

1. communication
2. collaboration.
3. time management.
4. critical thinking
5. patience.

Technical skills:

1. data collection
2. Harvest time
3. data entry
4. fish health.
5. laboratory equipment
6. fish culture.

Describe the managerial skills you have acquired *(in terms of planning, leadership, team work, behaviour, workmanship, productive use of time, weekly improvement in competencies, goal setting, decision making, performance analysis, etc.*

-> open communication and mutual support are two characteristics of good team work to contribute to increased job satisfaction and active management of idea sharing among the people.

-> A successful and qualified intern needs to have a willingness to learn.

-> internships are introduction to carrier fields that have the capacity to teach really valuable lessons for an interns future carrier path

-> it teaches us to be great listeners who knows how to take decisions

-> showing the willingness to learn the work experience at field s to after the host employess

-> Every learning opperlunities that comes our way, familiarize our selb with various aspects of related areeas

-> segregation ourself with other interns to hangout with other interns and make sure to establish a good work retalionship withothers

Describe how you couid improve your communication skills *(in terms of improvement in oral communication, written communication, conversational abilities, confidence levels while communicating, anxiety management, understanding others, getting understood by others, extempore speech, ability to articulate the key points, closing the conversation, maintaining niceties and protocols, greeting, thanking and appreciating others, etc.,)*

Think before you speak:

Always pause before you speak. not saying the first that comes to mind. Take a moment & pay close attention what you say and how you say it.

written things down:

Take a note when you are listining a class or when you are in a meeting in internship or taking to another persion.

Body language matters:

This is important for face to face meetings and for also vedio conference, make sure that appear accessible. so have open body language keep an eye on contact

maintain a positive attitude:

your positive attitude will shine through & other persion will know it and helps in people will respond positively to you.

Describe how could you could enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

The paricipating candidates will be accessed interms of clarity of thoughts, expression and optness of language.

importance of interpersonb skills:

Interpersonal skills reflect the ability of individual to interact with other members of the group in a brief situation.

=> emotional maturity and balance promotes good interpersonal relationships.

=> The person has to be more centric and less self centered.

Importance of presentation skills:

=> presentation is an effective way to communicate to a large number of people at the same skill.

leadership skills:

⇒ Ability to take leadership roles and ability to lead inspire and carry the team along to help them achieve group's objectives.

Describe the technological developments you have observed and relevant to the subject area of training *(focus on digital technologies relevant to your job role)*

=> Technological developments include equipment and practices used for finding, harvesting, handling, processing and distributing of aquatic resources and their products. processing technology helps reduce food loss & waste. Thus reducing the pressure on the fisheries resources and fostering sustainability of the sector. processing often results in quantity of by products harvesting of aquatic resources and production is done either in the wild or in controved environments. estimates can be made easily, meaning fish spend less time out of the water, increasing their survival-rate. technologies for improving productivity and aquaculture products. snps have been emerged as a genotyping technology which is widely used. lab equipment like salinometer, pH meter helps in maintaing the quality, salinity of water before introduction of fishes in pond culture.

Student Self Evaluation of the Short-Term Internship

Student Name: T. Rajasekhar Registration No: 202200104 9084.

Term of Internship: From: 12/12/2022 To: 16/03/2023.

Date of Evaluation: 16/03/2023

Organization Name & Address: Fisheries development office, Hisgpuram, Srikakulam.

Please rate your performance in the following areas:

Rating Scale: Letter grade of CGPA calculation to be provided

1	Oral communication	1	2	3	4	5
2	Written communication	1	2	3	4	5
3	Proactiveness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	**OVERALL PERFORMANCE**	**1**	**2**	**3**	**4**	**5**

T. Rajasekhar

Signature of the Student

Date: 16/03/2023

Evaluation by the Supervisor of the Intern Organization

Student Name: Tankala · Rajasekhar Registration No: 202200104 9084

Term of Internship: From: 12/12/2022 To: 16/03/2022

Date of Evaluation: 16/03/2023.

Organization Name & Address: Fisheries development office, i/:supuram, SKlm.

Name & Address of the Supervisor with Mobile Number: K. Gangadhara Rao, FDO Srikakulam, 9866089765.

Please rate the student's performance in the following areas:

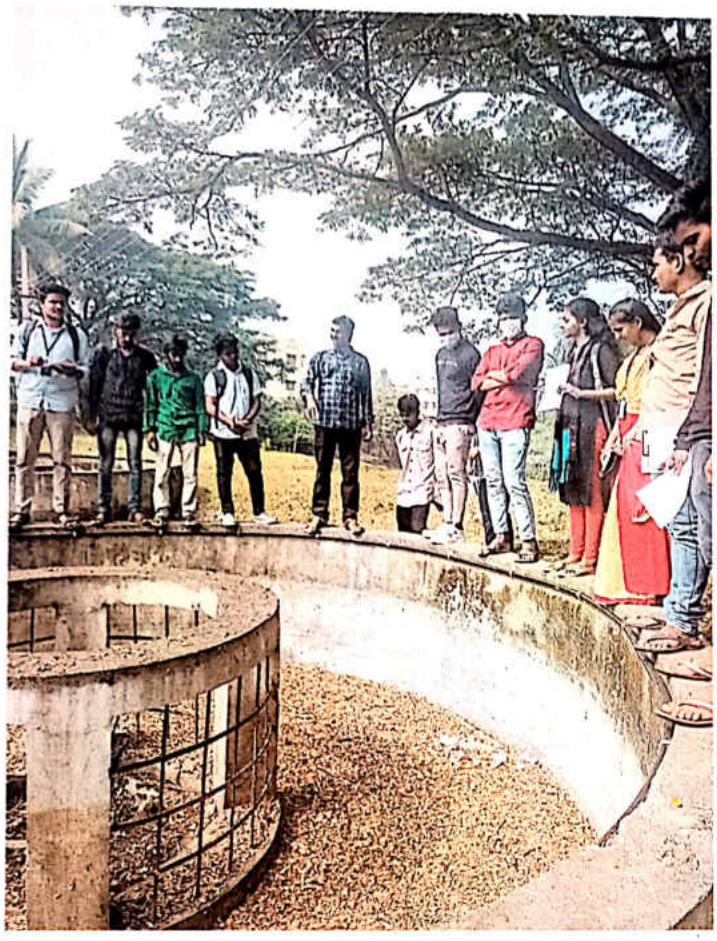
Please note that your evaluation shall be done independent of the Student's self-evaluation

Rating Scale: 1 is lowest and 5 is highest rank

1	Oral communication	1	2	3	4	5
2	Written communication	1	2	3	4	5
3	Proactiveness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	**OVERALL PERFORMANCE**	**1**	**2**	**3**	**4**	**5**

Date:

Signature of the Supervisor



EVALUATION

Internal & External Evaluation for Semester Internship

Objectives:

- Explore career alternatives prior to graduation.
- To assess interests and abilities in the field of study.
- To develop communication, interpersonal and other critical skills in the future job.
- To acquire additional skills required for the world of work.
- To acquire employment contacts leading directly to a full-time job following graduation from college.

Assessment Model:

- There shall be both internal evaluation and external evaluation
- The Faculty Guide assigned is in-charge of the learning activities of the students and for the comprehensive and continuous assessment of the students.
- The assessment is to be conducted for 200 marks. Internal Evaluation for 50 marks and External Evaluation for 150 marks
- The number of credits assigned is 12. Later the marks shall be converted into grades and grade points to include finally in the SGPA and CGPA.
- The weightings for Internal Evaluation shall be:
    - Activity Log 10 marks
    - Internship Evaluation 30 marks
    - Oral Presentation 10 marks
- The weightings for External Evaluation shall be:
    - Internship Evaluation 100 marks
    - Viva-Voce 50 marks
- The External Evaluation shall be conducted by an Evaluation Committee comprising of the Principal, Faculty Guide, Internal Expert and External Expert nominated by the affiliating University. The Evaluation Committee shall also consider the grading given by the Supervisor of the Intern Organization.
- Activity Log is the record of the day-to-day activities. The Activity Log is assessed on an individual basis, thus allowing for individual members within groups to be assessed this way. The assessment will take into consideration

the individual student's involvement in the assigned work.

- While evaluating the student's Activity Log, the following shall be considered -

  a. The individual student's effort and commitment.

  b. The originality and quality of the work produced by the individual student.

  c. The student's integration and co-operation with the work assigned.

  d. The completeness of the Activity Log.

- The Internship Evaluation shall include the following components and based on Weekly Reports and Outcomes Description

  a. Description of the Work Environment.

  b. Real Time Technical Skills acquired.

  c. Managerial Skills acquired.

  d. Improvement of Communication Skills.

  e. Team Dynamics

  f. Technological Developments recorded.

MARKS STATEMENT
(To be used by the Examiners)

INTERNAL ASSESSMENT STATEMENT

Name Of the Student: Tankala. Rajasekhar
Programme of Study: 3rd. BZC (E.M) [B.Sc]
Year of Study: 2022 - 2023
Group: CBZ (E.M)
Register No/H.T. No: 202Q0010490B4
Name of the College: Govt. Degree college (mens), Srikakulam
University: Dr. Br. Ambedkhar university.

Sl.No	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Activity Log	10	
2.	Internship Evaluation	30	
3.	Oral Presentation	10	
	GRAND TOTAL	50	

Date:

Signature of the Faculty Guide

EXTERNAL ASSESSMENT STATEMENT

Name Of the Student: Tankala. Rajasekhar
Programme of Study: BSc (CBZ (E.M))
Year of Study: 2022 - 2023.
Group: CBZ (E.M)
Register No/H.T. No: 202 2001049084
Name of the College: GOVENMENT DEGREE college (men), SRIKAKULAM.
University: Dr. BR. Ambedkhar university.

Sl.No	*Evaluation Criterion*	*Maximum Marks*	*Marks Awarded*
1.	Internship Evaluation	80	75
2.	For the grading giving by the Supervisor of the Intern Organization	20	19
3.	Viva-Voce	50	
	TOTAL	150	
GRAND TOTAL (EXT. 50 M + INT. 100M)		**200**	

Signature of the Faculty Guide

Signature of the Internal Expert

Signature of the External Expert

(K. GAMBADHARA RAO)
Fisheries Development Officer
Srikakulam Dist

Signature of the Principal with Seal

Fisheries Development Officer * Srikakulam *

ANDHRA PRADESH
STATE COUNCIL OF HIGHER EDUCATION

(A Statuory Body of the Government of Andhra Pradesh)

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