

INTERSHIP PROJECT REPORT SUBMITTED

TO

SRI ASNM GOVT (A) DEGREE COLLEGE



Submitted by

SHAIK. YASHMEEN

Regd.No : 2023051

Under the Internal guidance of

DR.M. RAMAKRISHNA

DEPARTMENT OF ZOOLOGY

SRI A.S.N.M. GOVT(A) DEGREE COLLEGE

PALAKOL,W.G.Dt

2020 - 2023

Student's Declaration

I, **Shaik.Yashmeen** a student of **BSC BZC Program, Reg. No. 2023051** of the Department of **Zoology SRI ASNM GOVT (A) COLLEGE** do hereby declare that I have Completed the mandatory internship from **26/09/2022** to **16/11/2022** in **FORTUNE AQUA LABS PVT ,LTD** under the Faculty Guide ship of **Dr.M.Ramakrishna** Department of **Zoology, SRI ASNM GOVT (A) COLLEGE.**

SK.Yashmeen

(Signature and Date)

Endorsements

N.Ramakrishna
Faculty Guide 16/11/22.

N.Ramakrishna
Head of the Department 16/11/22

[Signature]

Principal

PRINCIPAL

Sri A.S.N.M. GOVT. COLLEGE (A)
PALAKOL-534 260, W.G.DIST

ACKNOWLEDGEMENT

First I wish to express my sincere gratitude to Dr.M.Ramakrishna sir for providing me an opportunity to do my internship at SRI ASNM GOVT (A) College. For me , it was a unique experience to study about water quality testing. This internship period was a great chance of learning and professional development

I also express my deepest thanks to Dr.Vijay Kumar sir for giving necessary advice and guidance. He has arranged all facilities to make our internship programme more meaningful. His research papers and PowerPoint presentations were very useful for me. I thank him for his valuable guidance.

I sincerely thank to Kum P. Jyotsna sri madam for her careful and precious guidance which was extremely valuable for my study, both theoretically and practically. I also wish to express my gratitude to the officials and staff members including my parents help during my internship period.

I would like to express my sincere thanks to **U.PRADAD BABU**, owner of **AQUA FORTUNE INDUSTRY** for giving me this opportunity to finish my internship in his industry.

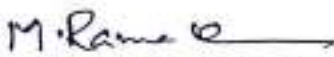
Finally, I would like to extend my deep gratitude towards my family and my friends for their support in carrying out this work Successfully.

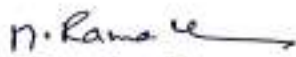

Signature of the candidate

Shaik. Yashmeen

CERTIFICATE

This is to Certify that the project entitled "Water Anylasis " ,is bonafied work done by Shaik.Yashmeen with Regd no 2023051 ddurin2020-2023 in partial fulfillment of the Requirement for the award of degree of "Bachelor of Science " SRI A.S.N.M.GOVT(A)DEGREE COLLEGE, PALAKOL.


Head of the department
LECTURER IN CHARGE
DEPARTMENT OF ZOOLOGY
SRI A. S. N. M. GOVT. COLLEGE
PALAKOL - 534 260


Project guide
LECTURER IN CHARGE
DEPARTMENT OF ZOOLOGY
SRI A. S. N. M. GOVT. COLLEGE
PALAKOL - 534 260

External Examiners

Fortune Aqualabs Pvt.Ltd

#2A-6-19 ; Near Railway Gate

P.P.ROAD ; PALAKOLLU; W.G.Dt ; A.P ; 534260

Email : fortunelab.pkl@gmail.com

website : www.fortunelabs.in

Contact:98480 99097 ; 7075 373737; 7396 373737(BVRM) *Water Testing Experts*



Date : 16-11-2022

PALAKOL

CERTIFICATE FROM INTERN ORGANIZATION

This is to certify that SHAIK YASHMEEN Reg.No.2023051 of SRI A.S.N.M.GOV'T COLLEGE (A) PALAKOL W.G.Dt, A.P, underwent internship in FORTUNE AQUALABS PVT Ltd. From 26/09/2022 to 16/11/2022.

The overall performance of the intern during his/her internship is found to be Satisfactory.

PLACE: PALAKOL

Date: 26/11/2022



[Signature]
Authorized Signatory

DECLARATION

I here by declare that the project entitled "**Water Anylasis** " is an authentication work carried out by me in the department of zoology, **SRI A.S.N.M. GOVT(A) DEGREE COLLEGE** during the period of **2020-2023** under esteemed guidance Of **DR.M.RAMAKRISHNA**(Department of Zoology).

S.K. Yashmeen
Signature of the candidate

SHAIK . YASHMEEN

ACKNOWLEDGEMENT

I take the opportunity to thank one and all who have helped in making the project possible. I am thankful to authorities of **SRI A.S.N.M GOVT (A) DEGREE COLLEGE Palakol**, for giving this opportunity to work in a project as part of curriculum. I am very much thankful to our internal guide **DR.M.RAMAKRISHNA**, Department of zoology, for providing this grate opportunity.

I would like to express my respect and thanks to **P.Jyotsna SRI**, GUEST FACULTY OF DEPARTMENT OF ZOOLOGY, **SRI.A.S.N.M. GOVT(A) DEGREE COLLEGE PALAKOL**.

I would like to express my sincere thanks to **U.PRADAD BABU**, owner of **AQUA FORTUNE INDUSTRY** for giving me this opportunity to finish my internship in his industry.

I am grateful to my father **sri SHAIK.MASTHAN** and my siblings for their moral guidance and encouragement and for permitting me to blossom in all my endeavours.

I wish to extend my warm thanks to those who helped me directly or indirectly during my project period. I sincerely apologize if I forget to mention anybody and thanks to all concerned from the bottom of my heart.

SK. Yashmeen
Signature of the candidate

SHAIK . YASHMEEN

CONTENTS

Introduction

About water

Different types of water

Water Sampling Procedure

Types of Samples

Collection of water samples

Water Treatment methods

PHYSICAL PARAMETERS

- Taste & Odour
- Temperature
- Turbidity
- Colour
- Total solids

CHEMICAL PARAMETERS

- Chlorides
- Sulphides
- Alkanity
- Salinity
- Total Hardness
- pH
- Calcium Hardness
- Magnesium Hardness
- Ammonium
- Nitrite
- Nitrate
- Phosphate
- Flouride
- Acidity
- Chlorine
- Biological Oxygen Demand
- Dissolved oxygen

INTRODUCTION

It is a transparent colorless chemical substance with one oxygen atom covalently bonded to two hydrogen atoms. Water is cycled continuously on Earth through evaporation, transpiration, condensation, precipitation, and other means.

A chemical substance, with chemical formula H_2O , that is a clear, colorless, odorless, and tasteless liquid that may also occur in various forms such as gas (water vapor) and solid (ice).

Microbiological water analysis is a method of analyzing water to estimate the numbers of bacteria present and to allow for the recovery of microorganisms in order to identify them. The method of examination is the plate count.

WATER QUALITY

Water quality is measured by several factors, such as the concentration of dissolved oxygen, bacteria levels, the amount of salt (or salinity), or the amount of material suspended in the water (turbidity). In some bodies of water, the concentration of microscopic algae and quantities of pesticides, herbicides, heavy metals, and other contaminants may also be measured to determine water quality.



WHY TO TEST WATER QUALITY :

Water quality tests will give information about the condition of the waterway. By testing water over a period of time, the changes in the quality of the water can be seen. Parameters that may be tested include temperature, pH, turbidity, salinity, nitrates and phosphates.

Water testing is carried out to meet the regulatory requirements and adhere to the safety procedures that are needed for pollutant-free water. This is a broad concept that involves several procedures to analyze and evaluate the quality of water.

Everyone who is affected by the water industry must test water sources. This could be the governmental organizations trying to regulate the quality of water to protect us from the health risks involved with using chlorinated water or it could be homeowners trying to ensure that the water is suitable for consumption.

Water, whether it is meant for business purposes, agriculture, domestic purposes, or is used by public municipalities and private homeowners must be tested regularly in order to keep the source of water safe and free from environmental risks and potential health disorders.

Why is it important to test the quality of water ?

In the whole world, a majority of the people rely on the private water supply. This includes ponds, dugouts, and wells. A superior quality of water is crucial to the economic, health, and social well-being of the people. Monitoring the quality of your water and testing it regularly is very important to maintain reliable and safe water sources and eliminate the potential health risks related to water contamination.

When the water is tested it offers the knowledge; we require to address the problem that is currently involved with the water quality. It will also ensure that the water quality is protected from every potential cause of contamination and an appropriate approach is involved with the treatment system.

It is vital to check the suitability of the water quality before its use. It can be for irrigation, livestock watering, drinking, or spraying. It will also help you in making an informed decision about how to use the water and what should be done about its purity.

DIFFERENT TYPES OF WATER:

- 1. Tap Water :**The water that you get from your faucet is called tap water. This is generally sourced from a dam or river, treated at a water treatment facility, stored in a reservoir, and then supplied to homes through water pipelines. While the quality of tap water generally has to meet the government guidelines and often does at the water treatment plant, intermittent supply through old distribution pipelines (which run parallel to sewage lines in many cities of India), can render this water unsafe, especially during peak summer and during the rainy season which is prone to flooding. For this reason, the use of a water purifier in your home at the point of use is often a practical and safe solution.
- 2. Mineral Water :**Mineral Water, as the name suggests, is water enriched with vital minerals, mostly calcium and magnesium. Natural mineral water is taken from underground sources which are rich in mineral content and then packaged and sold as natural mineral water.
Now, as you can imagine, this process of bottling at the source and then distributing is quite expensive as compared to tap water, but the natural mineral content does provide some health benefits. This includes aiding the digestive system, promoting better immune health, and so on.

6. BRACKISH WATER :

Brackish water means water where the salinity is appreciable but not at a constant high level. The salinity may be subject to considerable variation due to the influx of fresh or sea waters. Brackish water refers to a water source that is somewhat salty (more so than freshwater) but not as salty as seawater. The exact amount of salinity will vary depending on environmental factors and can not be precisely defined. Brackish water is water with salinity levels between seawater and freshwater. It occurs where surface or groundwater mixes with seawater, in deep "fossil aquifers," and where salt dissolves from mineral deposits over time as precipitation percolates down into aquifers.

Nutrients in water :

The quick growth of the fauna in brackish waters and the recruitment of allochthonous species depends on the amount of food available. This is to a large extent determined by the fertility of the water. Rivers bring in organic and nitrogenous matter while sea water brings in its rich supply of potassium and calcium. Brackish water being a mixture of both is a relatively fertile medium for the production of fish food. The capacity of brackish water for yielding fish food, in turn, depends on the quantity of phytoplankton and filamentous algae that it can produce. The productivity of fish depends on the presence of fish and other aquatic animals which can convert the available plant food into fish protein.

7. GROUND WATER :

Groundwater is fresh water (from rain or melting ice and snow) that soaks into the soil and is stored in the tiny spaces (pores) between rocks and particles of soil. Groundwater accounts for nearly 95 percent of the nation's fresh water resources. It can stay underground for hundreds of thousands of years, or it can come to the surface and help fill rivers, streams, lakes, ponds, and wetlands. Groundwater can also come to the surface as a spring or be pumped from a well. Both of these are common ways we get groundwater to drink. About 50 percent of our municipal, domestic, and agricultural water supply is groundwater.

Some hazardous substances dissolve very slowly in water. When these substances seep into groundwater faster than they can dissolve, some of the contaminants will stay in liquid form. If the liquid is less dense than water, it will float on top of the water table, like oil on water. Pollutants in this form are called light non-aqueous phase liquids (LNAPLs). If the liquid is more dense than water, the pollutants are called dense non-aqueous phase liquids (DNAPLs). DNAPLs sink to form pools at the bottom of an aquifer. These pools continue to contaminate the aquifer as they slowly dissolve and are carried away by moving groundwater. As DNAPLs flow downward through an aquifer, tiny globs of liquid become trapped in the spaces between soil particles. This form of groundwater contamination is called residual contamination.

WATER SAMPLING PROCEDURE :

(A) Assessment of Sampling Location :

1. Unsatisfactory environmental condition e.g. surroundings dusty, covered with Debris, or poorly ventilated;
2. Leaking taps;
3. Taps connected to anti-splash nozzles, rubber tubings or other accessories;
4. Taps connected to heaters or water filters (that cannot be detached); or
5. Taps with sand strainers that cannot be detached.

(B) Sampling Method :

1. Detach sand strainer or water filter from tap with appropriate tools;
2. Check for the correct sample bottle and label;
3. Turn on cold water tap at maximum flow and start timing;
4. Let water flow for 2 to 5 minutes depending on how often the tap is used (If the Internal plumbing system has not been used for a long period of time, flush the System thoroughly before sampling);
5. After flushing, open cap of the sample bottle;
6. Keep holding the sample bottle cap in one hand while sample is being collected To ensure it does not come into contact with anything to avoid contamination;
7. Fill the sample bottle carefully to prevent overflow (Figure 1);
8. Carefully put the cap back on the sample bottle;
9. The following should be noted during sampling:
10. Never rinse the bottle; the sampling bottle shall be so held that the water Does not come in contact with the hand before entering into the bottle;
 - i. Make sure that all samples are correctly labeled (sampling point, date and Flushing time)
 - ii. Reinstall tap sand strainer or water filter with tools;
 - iii. Store water samples in ice-boxes with freezer packs and deliver to Laboratory on the same day.

Objectives of water Sampling :

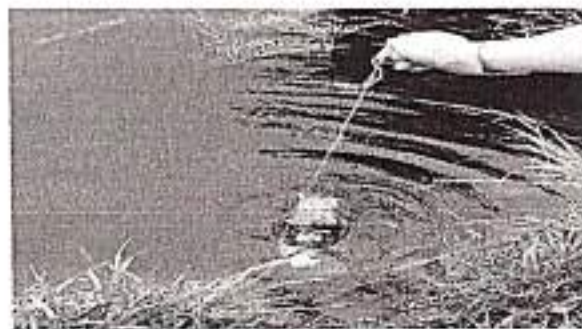
- To observe and measure how water quality changes over time.
- To identify the acidity and alkalinity of water.
- Identification of contaminant sources.
- Development and refinement of water management plans. Water SamplingDCE-IIUI.

TYPES OF SAMPLES :

Grab sample: A grab sample is a discrete sample which is collected at a specific location at a certain point in time. If the environmental medium varies spatially or temporally, then a single grab sample is not representative and more samples need to be collected

Composite sample: A composite sample is made by thoroughly mixing several grab samples. The whole composite may be measured or random samples from the composites may be withdrawn and measured Water Sampling DCE-IIUI .

Integrated sampling : Integrated sampling is carried out by collecting Mixture of grab samples collected from different Points simultaneously. The points may be Horizontal or vertical variation. Examples include River, stream or reservoir or lake that varies in Composition across the width and depth. Also in Industries that have different streams and Combined treatment is proposed, than Integrated sampling of different streams can be Made to understand the significant effect on Treatment.



COLLECTION OF WATER SAMPLES

Obtaining representative samples is of primary importance for a relevant Description of the environment. In order to collect a representative sample That will yield the information required,

- (1) study objectives, including Data-quality requirements,1 must be understood in the context of the Water system to be sampled, and
- (2) artifacts of the sampling process Must be minimized.2 Field personnel must be alert to conditions that Could compromise the quality of a simple.

Collect a representative sample : Use appropriate methods and Quality-assurance measures to ensure that the field sites selected And the samples collected accurately represent the environment Intended for study and can fulfill data-quality objectives'

Think contamination : To ensure the integrity of the sample, be Aware of possible sources of contamination. Contamination Introduced during each phase of sample collection (and Processing) is additive and usually is substantially greater than Contamination introduced elsewhere in the sample-handling And -analysis process.

WATER TREATMENT METHODS :

Treatment of raw water to produce water of potable quality can be expensive. It is advisable to determine the quantity of water needing treatment, as not all water used in a fishery harbour or processing plant needs to be of potable quality. Sizing of the equipment is crucial to produce acceptable water at reasonable cost. The main point to remember is that separate systems and pipelines are required for potable and non-potable water to avoid cross contamination. Each system must be clearly identified by contrasting coloured pipelines.

Water used for drinking, cleaning fish and ice-making must be free from pathogenic bacteria and may require secondary treatment or even complete treatment depending on chemical elements that need to be removed. Water for other needs like general cleaning may perhaps need only primary treatment.

PRIMARY TREATMENT :

There are four methods of primary treatment: chlorination; ozone treatment; ultraviolet treatment; and membrane filtration.

Chlorination: Fresh or sea water can be chlorinated using either chlorine gas or hypo chlorites. Chlorinated water minimizes slime development on working surfaces and helps control odour.

Chlorination Treatment :

The main advantages of using chlorine gas are:

- It is the most efficient method of making free chlorine available to raw water.
- It lowers the pH of the water slightly.
- Control is simple; testing simple; and it is not an expensive method.

The main disadvantages are:

- Chlorine gas is toxic and can combine with other chemicals to form combustible and explosive materials.
- Automatic control systems are expensive.
- Chlorine cylinders may not be readily available at small centers.
- Chlorine expands rapidly on heating and hence the cylinders must have fusible plugs set at 70°C. It also reacts with water, releasing heat. Water should not therefore be sprayed on a leaking cylinder.

Secondary treatment

Secondary treatment of water consists of sedimentation and filtration followed by chlorination. Sedimentation can be carried out by holding the raw water in ponds or tanks. The four basic types of filtration are cartridge filtration, rapid sand filtration, multimedia sand filtration, and up-flow filtration. Cartridge filtration: This system is designed to handle waters of low turbidity and will remove solids in the 5 to 100 micron range.

The main advantages are:

- Low cost and 'in-line' installation.
- Change of cartridge is simpler.
- Operation is fool-proof. Once the cartridge is clogged, flow simply stops.

The main disadvantages are:

- Sudden increase in turbidity overloads the system.
- Cartridges may not be readily available and large stocks may be required.



COMPLETE TREATMENT

Complete treatment consists of flocculation, coagulation, sedimentation and filtration followed by disinfection. Flocculation and coagulation will assist in removing contaminants in the water, causing turbidity, colour odour and taste which cannot be removed by sedimentation alone. This can be achieved by the addition of lime to make the water slightly alkaline, followed by the addition of coagulants like Alum (aluminium sulphate), ferric sulphate or ferric chloride. The resultant precipitate can be removed by sedimentation and filtration.

Chemical treatment may be required to reduce excessive levels of iron, manganese, chalk, and organic matter. Such treatment is usually followed by clarification. Iron may be removed by aeration or chlorination to produce a flocculant which can be removed by filtration. Manganese may be removed by aeration followed by adjustment of pH and up-flow filtration. Most colours can be removed by treatment with ferric sulphate to precipitate the colours.

WATER QUALITY TESTS

WATER QUALITY PARAMETERS :

Water quality is one of the most important factors in a healthy ecosystem. Rain water supports a diversity of plants and animals.

- The quality of the water you consume or use in municipal or industrial processes must meet Specific parameters to ensure that drinking water remains free from contaminants that could cause health issues .
- Water quality measurement include physical, chemical and biological parameters

I. PHYSICAL PARAMETERS

TASTE & ODOUR :

Objectionable taste and odour can more likely be found at the source (raw water) than at the consumer tap. Pleasant tastes and odours can arise from inorganic or organic compounds in water sources, occurring naturally or as a result of human activity. Unpleasant taste or odour may indicate a failure of drinking-water treatment, and should be investigated to ensure that microbial and chemical quality of the water is not compromised.

A Major cause of taste and odour complaints is chemical disinfection. Utilities with large distribution systems may apply large chlorine doses to ensure a residual throughout the distribution system. In community or household settings, it can be difficult to ensure a consistent chlorine dose while maintaining the desired residual, typically near 0.5 mg/l. Above a residual free chlorine concentration of between .0 and 1. mg/l there is an increasing likelihood of complaints from consumers. Chloramines can also give rise to taste and odour problems.

Total dissolved solids (TDS) are a measure of salinity that can have an important effect on the taste of drinking-water. The palatability of water with a TDS level of less than 0mg/l is generally considered to be good drinking water becomes significantly unpalatable at TDS levels greater than 1 mg/l. Excessive pumping or lack of rainfall in coastal areas can lead to saltwater intrusion, increasing the salinity in freshwater aquifers. Groundwater with high TDS may be too saline to be accepted by users when drilling salinity should be tested as early as possible, and certainly before well completion.

TEMPERATURE :

Temperature is another physical parameter of water that refers to how cold or warm the stream is. In water quality monitoring and scientific field research, temperature is measured in degrees Celsius. Celsius temperature data can be converted to Fahrenheit by multiplying the Celsius reading by 9/5 and adding 32.

Temperature is a critical water quality and environmental parameter because it governs the kinds and types of aquatic life, regulates the maximum dissolved oxygen concentration of the water, and influences the rate of chemical and biological reactions.

Water temperature plays an important role in almost all USGS water science. Water temperature exerts a major influence on biological activity and growth, has an effect on water chemistry, can influence water quantity measurements, and governs the kinds of organisms that live in water bodies.

- Immerse the thermometer in the sample to the proper depth for a correct reading. Record the temperature to the nearest fraction of a degree Celsius before removing.
- Record the temperature of water sample at different depth at different time intervals. Plot the graph of temperature vs time for each sample.

TURBIDITY :

The Turbidity in water is the reduction of transparency due to the presence of particulate matter such as clay or silt, finely divided organic matter, plankton or other microscopic organisms. These cause light to be scattered and absorbed rather than transmitted in straight lines through the sample. The colloidal material eSerts turbidity provides adsorption sites for chemicals that may be harmful or cause undesirable tastes and odours. Disinfection of turbid water is difficult because of the adsorptive characteristics of some colloids and because the solids may partly shield organisms from disinfectant. In natural water bodies, turbidity may impart a brown or other colour to water and may interfere with light penetration and photosynthetic reaction in streams and lakes.

Turbidity measurement results are used to control the amount of coagulant and other chemical aids that produce a water of the desired clarity. 'satisfactory operation of rapid sand filters generally depends upon effective removal of turbidity by chemical coagulation before the water is admitted to the filters.



ELECTRICAL CONDUCTIVITY :

Rapid estimation of the dissolved solids content of the water supply can be obtained by electrical conductivity measurements, which indicate the capacity of a sample to carry an electrical current, and is related to the concentration of ionized substances in the water. Departures from normal conductivity may signal changes in the mineral composition of the source water, seasonal variations in reservoirs, daily chemical fluctuations in rivers, or the intrusion of industrial wastes.

How well a sample of water can carry or conduct electrical current determines its 'Contamination levels.

- Conductivity levels will increase as the amount of ions in the water increases.
- High conductivity means that the water contains a high amount of contaminants.
- Potable water and ultra-pure water are practically unable to conduct electrical current.

COLOUR :

Colour in water may be due to inorganic ions, such as iron & manganese, humus & peat materials, plankton, weeds and industrial wastes. The term 'colour' is used to mean true colour that is the colour of water from which turbidity has been removed. The term Apparent colour includes not only the colour due to substances in solution, but, also that due to suspended matter. Apparent colour is determined on the original sample without filtration or centrifugation.

APPARATUS :

- Nessler cylinders 50 mL capacity.
- Centrifuge or filter assemblies with glass fiber filters or membrane filters with functional pore sizes of approximately 0.45µm.

REAGENTS:

- Standard chloro platinate solution – Dissolve 1.246 gm potassium Chloroplatinate (K_2PtCl_6) (equivalent to 500 mg metallic platinum) and 1.0 gm.
- Crystalline cobaltous chloride ($CoCl_2 \cdot 6H_2O$) (equivalent to 250 mg metallic cobalt) in
- Distilled water containing 100 mL concentrated hydrochloric acid. Dilute to 1000 mL with distilled water. This standard solution is equivalent to 500 colour units.

PROCEDURE :

- Apparent color – Observe the color of the sample by filling a matched Nessler Cylinder to the 50 mL mark with water and compare with standards. Compare by looking vertically downward through the cylinder towards a white surface placed at such an angle that light is reflected upwards through the column of liquid. If turbidity has not been removed, report the colour as 'apparent colour'. If the colour exceeds 70 Units, dilute the sample with distilled water until the colour is in the range of the standards.

TRUE COLOR :

Remove turbidity by centrifuging the sample until the supernatant liquid is clear. Compare the centrifuged sample with distilled water to ensure that turbidity has been removed. If the sample is clear, then compare with the standards.

Calculation :

$$\text{Color units/Hazen Units} = \frac{50A}{V}$$

Where,

A= Estimated color of diluted sample

V= Volume in ml of sample taken for dilution

REPORT :

S.NO	Color Units / Hazen units	Record to nearest
1	1 to50	1
2	51 to 100	10
3	101 to 250	15
4	251 to 500	20

TOTAL SOLIDS :

Many factors can contribute to the total solids in water. Soil erosion is a large contributor. An increase in water Flow or a decrease in stream-bank vegetation can speed Up the process of soil erosion and contribute to the Levels of suspended particles such as clay and silt. Naturally occurring rocks or minerals in the soil such as Halite, NaCl, or limestone, CaCO₃, may also dissolve Into the water, adding to the total solids. Total solids can also come from various types of runoff. Agricultural runoff often contains fertilizers and Suspended soil particles. Other sources include Industrial wastes, effluent from water treatment plants, And urban runoff from parking lots, roads, and rooftops.

Materials Required :

- Sampling bottles
- Drying oven
- 100-mL graduated cylinder
- Analytical balance (0.001 g)
- Two 250 mL beakers and tongs or gloves to hold beaker.

CONCLUSION :

Freshwater is a finite and limited resource on Earth and, increasingly, much of it is polluted, by both pathogenic microbes and chemical contaminants. Human demand for freshwater is increasing; in particular, water is required to irrigate crops to feed the rapidly expanding human population.

There is no life without water. Water is not only important for human beings but for the entire ecosystem. Without enough water, the existence of humans, as well as animals, is next to impossible. After fresh air, water is the second most important natural resource for the survival of any living being.

Conserving water reduces wear and tear on major resources such as water and wastewater treatment plants and the distribution systems that deliver water to the public.

Traditionally, water management policies and practices have dealt only with problems of water distribution to meet the ever-increasing demand, rather than better management of existing resources. The largely fragmented approach that results has contributed to the overexploitation of water resources

- Restate your topic and why it is important,
- Restate your thesis/claim,
- Address opposing viewpoints and explain why readers should align with your position, Call for action or overview future research possibilities.

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

I start my internship at "FORTUNE AQUA LABS PVT, LTD" in palakolli. On the first day, I went to a lab and I visit the total lab and the water testing equipments.

On the second day, the lab incharge gave me a introduction about aquaculture & aqua labs. The purpose of aqua labs are to testing the water quality.







On the third day, they tell about the advantages & opportunities of aquaculture & labs. Now a days Aqua labs are more needed during this period of time. Because, water is more polluted in present situation.

On the fourth day, the lab incharge gave lab precautions like wearing apron, testing the samples in presence of lab Assistant.

On the fifth day, the reagents which are used for testing the water samples like EDTA, H_2SO_4 , EBT, NaOH, Ammonium buffer, methyl orange, Phenolphthalein etc....

On the sixth day, they teach about to the apparatus using for testing samples like test tubes, Burette, Burette stand, pipette, conical flasks, Conductivity meter, pH meter, Salinity meter, electronic microscopes, Hot air oven, Incubators etc....

ACTIVITY LOG FOR THE FIRST WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	I went to a Fortune Aqua Lab PVT, LTD at Palakollu. I visit the Lab and I know about the water testing equipments.	Knowing about the lab and equipment present in it.	
Day - 2	In the second day, the lab incharge gave introduction about the purpose of aqua labs & water analysis.	Aqua labz are more needed during this period of time. It helps to maintain good water quality.	
Day - 3	The lab incharge said about advantages & opportunities of the aqua culture & labz.	Now a days in aqua culture has a good opportunities to the students.	
Day - 4	In the fourth day the lab incharge said about lab precautions to the students.	<ul style="list-style-type: none"> → Testing samples in the presence of lab incharge. → wearing apron → Take preventive measures. 	
Day - 5	The reagents which are used for testing water sample. Eg: EDTA, H ₂ SO ₄ , EBT, NaOH, Ammonium Buffer, methyl orange, phenolphthalein etc....	I know about the usage of reagents to the parameters	
Day - 6	Apparatus: Burette, stand, conical flask, test tubes, pipette, pH meter, Salinity etc....	Known about the usage of the Apparatus	

WEEKLY REPORT







WEEK - 2 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

In the second week, the lab assistant teach about the types of water like fresh, salt, Brackish and ground water etc. In these organisation testing the bore, pond, plant & construction purpose using waters. On the second day, they tell about the process of water testing contain 3 types of parameters they are physical, chemical, and Biological. On the third day the lab organizer teach about the physical parameters like colour, odour & Taste, Conductivity, temperature, turbidity. On the fourth day, they tell about the chemical parameters like Alkalinity, Hardness, Ca^{+2} , magnesium hardness, pH , Salinity, Ammonium, nitrate, lead, chlorine, zinc etc... On the fifth day, the lab incharge tell about biological parameters like Algae, Bacteria, virus & protozoa. On the sixth day, they tell about ranges of water are Alkalinity 50-300 PPM, Hardness-40-400 PPM, pH 7.5-8.5, Salinity 12-25, Ca^{+2} hardness-75-200 mg/L mg^{+2} Hardness-1.98 (or) 219.51 mg/L, Dissolved oxygen 5-6 PPM, Ammonium- < 0.1 PPM, nitrate- < 0.5 PPM, Chlorine-1.5-2.0 PPM. The value is higher than the normal range it should be harmful and take advices from the lab incharge and apply it.

ACTIVITY LOG FOR THE SECOND WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	The lab assistant tell about the types of water like; Fresh, Salt, Brackish, ground water etc...	In the lab. Bore pond, plant water & construction purpose waters are tested.	
Day - 2	The process of water testing contain 3 types of parameters * physical * chemical * Biological	Known about the types of parameters.	
Day - 3	And the third day, they tell about physical parameters: * Colour * Temperature * odour & taste * Turbidity * Conductivity	I know about the physical parameters	
Day - 4	And the next day, they said about chemical parameters: Alkalinity, Hardness, Ca^{+2} , Mg^{+2} , pH, Salinity, Ammonium, Nitrite, lead, chlorine, zinc.	Knowing about the chemical parameters	
Day - 5	Biological parameters: Bacteria, Algae, virus & Protozoa.	I know about the biological parameters	
Day - 6	The lab incharge said about the ranges of water; Alkalinity - 50 - 300 ppm Hardness - 40 - 400 ppm pH - 7.5 - 8.5, Salinity - 12 - 25	The water contain these ranges of parameters. It has a good water quality.	

WEEKLY REPORT

WEEK - 3 (From Dt..... to Dt.....)







Objective of the Activity Done:

Detailed Report:

On the third week, the lab incharge teach about the alkalinity procedure and chemical usage for alkalinity are H_2SO_4 , methyl orange, methyl green and also tell about how to calculate the value of alkalinity. In the next day, I practise the Alkalinity test. On the third day, they tell about the Hardness procedure like using apparatus, calculations and chemical reagents usage are EDTA, EBT, Ammonium buffer. On the next day, I practise the Hardness test and standard ranges of test. On the fifth day Hardness is the lab incharge briefly tell about the calcium hardness and their procedure, how to calculate the Ca^{+2} Hardness value. The end point of Ca^{+2} hardness is blue. The range of Calcium hardness [CH] is 200-400 PPM. On the sixth day, they teach about the magnesium test and their procedure, generally subtract the total hardness and calcium hardness gives magnesium hardness.

$$[TH - CH = MH]$$

ACTIVITY LOG FOR THE THIRD WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	The lab incharge said about the alkalinity procedure, chemical usage and their calculations.	I know about the alkalinity test. In which the end point is orange.	
Day - 2	In the next day, I practised the alkalinity test.	I know about the uses of alkalinity test. The range of alkalinity is bet 50-300PPM.	
Day - 3	Hardness & procedure and chemical usage and their calculation.	I know about the hardness test its range is in bet 40-400 PPM.	
Day - 4	The next day, I practised the hardness test.	I know about the ranges and uses of these tests.	
Day - 5	The lab incharge briefly tell about the calcium hardness and their procedure, and calculation.	I know about the purpose of test Range - 200-400ppm End point is blue.	
Day - 6	Magnesium test is depend on the calcium & Total hardness $TH - CH = MH$	Knowing about the magnesium hardness test.	

WEEKLY REPORT







WEEK - 4 (From Dt..... to Dt.....)

Objective of the Activity Done:



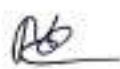



Detailed Report:

In the fourth week, the laboratory incharge teaches about the pH test. It shows that acidic (or) basic (or) neutral nature of water and tell about the procedure of testing. The pH standard range is present in between 7.5-8.5. These range of water has a good water quality. On the second day, they tell about the Salinity test, which is used to determine the salt content present in water by using the Salinity meter. The range of salinity in water is 12-25. On the third day, the Ammonium test is to tell about the Ammonium Content present in water & also tell about the procedure of testing. The range of Ammonium is < 0.1 PPM. It will give green colour. On the fourth day, they tell about the procedure of nitrate test. The range of nitrate is < 0.5 PPM. It will give the pink colour. On the fifth day, the lab incharge information about disadvantages of lead present in water and also tell how to identify the lead content present in water. On the sixth day, they tell about the procedure of testing, their chemical usage, Advantages & Disadvantages of zinc present in water.

ACTIVITY LOG FOR THE FOURTH WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	pH test is used to tell about the acidic, basic, neutral nature of water. & Tell about the procedure of test.	pH range of water is present in b/w 7.5-8.5. These range of water has a good water quality.	
Day - 2	The Salinity test used to determine the salt content present in water by using the Salinity meter.	The range of salinity in water is 12-25. If higher or lower than range take advises from ^{managers}	
Day - 3	Ammonium test is to tell about Ammonium content present in water & also tell about the procedure of testing	The ammonium range of water < 0.1 PPM. It will gives green colour & their uses.	
Day - 4	They tell about the procedure of nitrate test.	I known about the uses & ranges are < 0.5 PPM. It will gives pink colour.	
Day - 5	How to identify the lead content present in water.	lead in water show harmful effects to the living organisms.	
Day - 6	Zinc testing and their chemical usage. Advantages & disadvantages of zinc present in water.	Known about the zinc test.	

ACTIVITY LOG FOR THE FIFTH WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	They tell about chlorine test. It is a toxic gas. The chlorine in water indicates the water is clean.	Naturally found in water. The end point of chlorine is yellow & uses of chlorine in water.	
Day - 2	Algae is a microscopic plant. And tell about the procedure of testing. Algae consume CO_2 & release oxygen.	Algae provide oxygen to the organisms living in water.	
Day - 3	Bacteria is a single celled plant and also explain their procedure of testing.	Blue green algae can reduce nitrogen gas in pond water.	
Day - 4	Viruses are tiny biological structures. And tell about the procedure & uses of viruses.	viruses helps in gene therapy & vectors etc.	
Day - 5	Protozoans can be seen under microscope. And they tell about procedure of testing.	Knowing about the procedure of protozoa.	
Day - 6	Water qualities : → use a water filters → clean water aerators → Boil the drinking water. → Properly dispose of hazardous waste.	How to maintain a good water quality of conditions	

WEEKLY REPORT

WEEK - 5 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

In the fifth week, they tell about the Chlorine test and their procedure. The Chlorine test is used for bore water analysis. It is a toxic gas which is harmless to human. The end point of the Chlorine is yellow. On the second day the lab incharge tell about the algae. It is a microscopic plant and teach about the procedure of testing. Algae consumes CO_2 and releases O_2 . It helps to live the organisms present in the water. On the third day, they teach about the bacteria present in water. How to identify their presence in water. Blue-green algae can reduce NO_2 gas in pond water to ammonia. which is used to in protein synthesis. On the fourth day, they tell about the viruses and their procedure of testing, viruses are having biological structure. Some viruses are used in gene therapy, vectors etc. On the fifth day they tell about problems procedure of testing. On the sixth day they tell about how to improve the water qualities in ponds.

* use a water filters, Clean aerators, Boil the drinking water, properly dispose of hazardous.

Photos Collected During The Internship



WATER ANALYSIS

INTERNSHIP PROJECT REPORT SUBMITTED

To

SRI A.S.N.M GOVT (A) COLLAGE, PALAKOL



Submitted by,

EETHAKOTA NAVYA SRI

Reg NO : 2023060

Under the guidance of

KUM.P.JYOTSNA SRI

DEPARTMENT OF ZOOLOGY

SRI A.S.N.M GOVT (A) COLLEGE

PALAKOLLU

2023-2024

An Internship Report
On
(Title of the Internship)

Submitted in accordance with the requirement for the degree of.....

Name of the College: **SRI A.S.N.M. GOVT (A) COLLEGE PALAKOLLU**

Department: **ZOOLOGY**

Name of the Faculty Guide: **Kum.P.JYOSTNA SRI**

Duration of the Internship: **From 26/9/2022 To 16/10/2022**

Name of the Student: **EETHAKOTA NAVYA SRI**

Programme of Study Year of Study: **III YEAR**

Register Number: **2023060**

Student's Declaration

I, **EETHAKOTA NAVYA SRI**, a student of **B.Sc. CBZ Program**, Reg.No. **2023060** of the Department of **zoology**, **SRI A.S.N.M. GOVT (A) College** do hereby declare that I have completed the mandatory internship from **26/9/2022 to 16/11/2022** **Aqua fortune lab p.v.t, l.t.d** under the Faculty Guide ship Department **ZOOLOGY**, **SRI A.S.N.M GOVT (A) COLLEGE**

(Signature and Date)

E. Navya Sri

Endorsements

P. Jyotsna Sri 16/11/22
Faculty Guide

H. Ran 16/11/22
Head of the Department

[Signature] 20/11/2022
Principal

PRINCIPAL

Sri A. S. N. M. GOVT. COLLEGE (A)
PALAKOL-534 260, W.G.DIST

ACKNOWLEDGEMENT

I take the opportunity to thank one and all who have helped in making the project possible . I am thankful to authorities of **SRI A.S.N.M GOVT COLLEGE (A),PALAKOL** for giving this opportunity to work in project as part of curriculum. I am very thankful to our internal guide **Kum.P.Jyostna sri**Department of zoology or providing this great opportunity

I would like to express my respect thanks to **DR.RAMAKRISHNA,HOD,Department of zoology,Sri A.S.N.MGOVT (A)college, palakol.**

I am very much thankful **E.PRASAD BABU ,FORTUNE AQUA LAB PRIVATE LIMITED, PALAKOL,** gavetheopportunityto finish the two months internship in his industry.

I am very graceful to my father **Sri.E.SRINIVAS RAO**and my siblings for their moral guidance and encouragement and for permitting me to blossom in all my endeavours

I wish to extend my warm thanks to these who helped me directly and indirectly during my project period .I sincerely apologize if I forgot to mention anybody and thanks to all concerned from the bottom of my heart .

Signature of the students

(EETHAKOTA NAVYA SRI)

E.Navya Sri

Certificate from Intern Organization

This is to certify that EETHAKOTA NAVYA SRI (Name of the intern) Reg.No2023060 of SRI A.S.N.M GOVT (A) COLLEGE underwent internship in FORTUNE AQUA LAB P.V.T.,L.T.D PALAKOL from 26/9/2022 to 16/11/2022 The overall performance of the intern during his/her internship is found to be Satisfactory

M. Ravi B
Authorized Signatory With Date 16/11/22

Fortune Aqualabs Pvt.Ltd

#2A-6-19 ; Near Railway Gate

P.P.ROAD ; PALAKOLLU; W.G.Dt ; A.P ; 534260

Email : fortunelab.pkl@gmail.com

website : www.fortunelabs.in

Contact:98480 99097 ; 7075 373737 ; 7396 373737(BVRM) ISO 9001:2015 Certified



Date : 16-11-2022
PALAKOL



CERTIFICATE FROM INTERN ORGANIZATION

This is to certify that EETHAKOTA NAVYA SRI Reg.No2023060 of SRI A.S.N.M.GOV'T COLLEGE (A) PALAKOL W.G.Dt, A.P, underwent internship in FORTUNE AQUALABS PVT Ltd. From 26/09/2022 to 16/11/2022.

The overall performance of the intern during his/her internship is found to be Satisfactory.

PLACE: PALAKOL

Date: 16/11/2022


Authorized Signatory


Analytical Chemists For

Drinking Water, Domestic Water, Construction Water, All Sewerage Raw Water, Aquaculture water, Shrimp PCR, Feed Quality Analysis (Protein, Fat,

**INTERNSHIP PROJECT REPORT SUBMITTED
TO
SRI A.S.N.M GOVT (A) DEGREE COLLEGE**



Submitted by

P.SANTHOSH KUMAR

Reg: 2023047

Under the internal guidance of

Dr.M.RAMAKRISHNA

DEPARTMENT OF ZOOLOGY

SRI A.S.N.M GOVT (A)DEGREE COLLEGE

Palakol

2020-2023

**An Internship Report
On
WATER QUALITY MANAGEMENT**

Submitted in accordance with the requirements for the degree of.....

Name of the College : Sri Asnm Govt (A) palakollu

Name of the Department : zoology

Name of the Faculty Guide : Dr.M.Ramakrishna

Duration of the Internship : From: 26/09/2022 To: 26/11/2022

Name of the Student : P.Santhosh Kumar

Programme of Study Year of Study: III Year

Register Number : 2023047

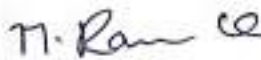
Date of Submission : 16/11/2022

Student's Declaration

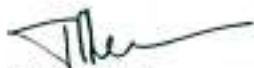
I, **P.Santhosh Kumar**, a student of **B.Sc CBZ Program**, Reg.No. **2023047** of the **Department of Zoology, SRI ASNM GOVT(A) COLLEGE** hereby declare that I have completed the mandatory internship from **26/09/2022** to **16/11/2022** in **FORTUNE AQUA LAB PVT, LTD** under the Faculty Guidance of **Dr.M.Ramakrishna**, Department of Zoology, Sri Asnm Govt (A) College.

Signature and Date

Endorsements


Faculty Guide 16/11/22


Head of the Department 16/11/22



Principal

PRINCIPAL

Sri A.S.N.M. GOVT. COLLEGE (A)
PALAKOL-534 260, W.G.DIST

ACKNOWLEDGEMENTS

I take the project thank one and all who have helped in making the project possible. I am thankful to authorities of **SRI A.S.N.M GOVT (A) Degree College palakol, W.G.Dt**, for giving this opportunity to work on a project as part of curriculum. I am very thankful to our internal guide **Dr.M.Rama Krishna** Department of Zoology, for providing this grate opportunity.

I would like to express my respect and thanks to **Dr.M.Rama Krishna** guest faculty of Botany, **SRI A.S.N.M Govt (A) Degree college palakol, W.G.Dt**.

I am very much thankful to **E. PRASAD BABU ,FORTUNE AQUA LAB PRIVATE LIMITED. PALAKOL**, gave the opportunity to finish the two months intern ship in his industry.

I am graceful to my father **P.Lakshman Rao** and my siblings for their moral guidance and encouragement and for permitting me to blossom in all my endeavours.

I wish to extend my warm thanks to those who helped me directly or indirectly during my project period. I sincerely apologize if I forget to mention anybody and thanks to all concerned from the bottom of my heart.

Signature of candidate
(P.Santhosh Kumar)

Fortune Aqualabs Pvt.Ltd

#2A-6-19 ; Near Railway Gate

P.P.ROAD ; PALAKOLLU; W.G.Dt ; A.P ; 534260

Email : fortunelab.pkl@gmail.com

website : www.fortunelabs.in

Contact:98480 99097 ; 7075 373737 ; 7396 373737(BVRM) ISO 9001:2015 Certified



Date : 16-11-2022
PALAKOL

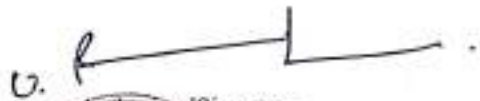

CERTIFICATE FROM INTERN ORGANIZATION

This is to certify that PEETHALA SANTHOSH KUMAR Reg.No2023047 of SRI A.S.N.M.GOV'T COLLEGE (A) PALAKOL W.G.Dt., A.P, underwent internship in FORTUNE AQUALABS PVT Ltd. From 26/09/2022 to 16/11/2022.

The overall performance of the intern during his/her internship is found to be Satisfactory.

PLACE: PALAKOL

Date: 16/11/2022


Authorized Signatory


Analytical Chemists For

Drinking Water, Domestic Water, Construction Water, All Borewell Raw Water, Aqua culture water, Shrimp PCR, Feed Quality Analysis (Protein, Fat, Moisture, Ash)

INTERNSHIP PROJECT REPORT SUBMITTED

To

SRI A.S.N.M GOVT (A) COLLAGE, PALAKOL



Submitted by,

M.JOHNY

Reg NO : 2023064

Under the guidance of

M. RAMA KRISHNA

DEPARTMENT OF ZOOLOGY

SRI A.S.N.M GOVT (A), COLLEGE

PALAKOLLU

2023-2024

**An Internship Report
On
WATER QUALITY MANAGEMENT**

Submitted in accordance with the requirement for the degree of.....

Name of the College: SRI A.S.N.M. GOVT (A) COLLEGE PALAKOLLU

Department: ZOOLOGY

Name of the Faculty Guide: DR.M.RAMAKRISHNA

Duration of the Internship: From 26/09/2022 To 26/11/2022

Name of the Student: M.JOHNY

Programme of Study: III Year

Year of Study: 2022-2023

Register Number: 2023064

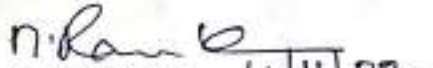
Date of Submission: 16/11/2022

Student's Declaration

I, **M.Johny**, a student of **B.Sc CBZ Program**, Reg.No. **2023064** of the Department of **Zoology**, **SRI ASN M GOVT[A] COLLEGE** do hereby declare that I have completed the mandatory internship from **26/0/22** to **16/11/22** in **FORTUNE AQUA LABS PVT, LTD** under the Faculty Guide ship of **DR.M.RAMAKRISHNA**, Department of **ZOOLOGY**, **Sri Asnm Govt [A] College**.


Signature and Date

Endorsements


Faculty Guide 16/11/22


Head of the Department 16/11/22


Principal

PRINCIPAL
Sri A.S.N.M. GOVT. COLLEGE (A)
PALAKOL-534 260, W.G.DIST

ACKNOWLEDGEMENT

I take the opportunity to thank one and all who have helped in making the project possible . I am thankful to authorities of SRI A.S.N.M GOVT COLLEGE (A),PALAKOL for giving this opportunity to work in project as part of curriculum. I am very thankful to our internal guide Dr.M.RAMAKRISHNA Department of zoology ,For providing this great opportunity

I would like to express my respect thanks to Dr.M.RAMAKRISHNA,HOD ,Department of ZOOLOGY SRI A.S.N.M GOVT college,palakol.

I would like to express my sincere thanks to U.PRASAD BABU, owner of Aqua fortune lab for giving me this opportunity to finish my internship in his industry.

I am very graceful to my father's sri M SRI KRISHNA PRASAD and my siblings for their moral guidance and encouragement and for permitting me to blossom in all my endeavours

I wish to extend my warm thanks to these who helped me directly and indirectly during my project period . I sincerely apologize if I forgot to mention anybody and thanks to all concerned from the bottom of my heart

M. Johny
signature of the candidate

(M JOHNY)

Fortune Aqualabs Pvt.Ltd

#2A-6-19 ; Near Railway Gate

P.P.ROAD ; PALAKOLLU; W.G.Dt ; A.P ; 534260

Email : fortunelab.pkt@gmail.com

website : www.fortunelabs.in

Contact:98480 99097 ; 7075 373737 ; 7396 373737(BVRM) ISO 9001:2015



Date : 16-11-2022

PALAKOL



CERTIFICATE FROM INTERN ORGANIZATION

This is to certify that MANUKONDA JOHNY Reg.No2023064 of SRI A.S.N.M.GOV'T COLLEGE (A) PALAKOL W.G.Dt, A.P, underwent internship in FORTUNE AQUALABS PVT Ltd. From 26/09/2022 to 16/11/2022.

The overall performance of the intern during his/her internship is found to be Satisfactory.

PLACE: PALAKOL

Date: 16/11/2022


Authorized Signatory


INTERNSHIP PROJECT REPORT SUBMITTED

To

SRI A.S.N.M GOVT (A) COLLEGE, PALAKOL



Submitted by:

RAMALAKSHMI GUDALA

Reg NO : 2023061

Under the guidance of

Kum: P. JYOTSNA SRI

DEPARTMENT OF ZOOLOGY

SRI A.S.N.M GOVT (A) COLLEGE

PALAKOL

2023-2024

**An Internship Report
On
(Title of the Internship)**

Submitted in accordance with the requirement for the degree of.....

Name of the College: SRI A.S.N.M. GOVT (A) COLLEGE PALAKOLLU

Department: ZOOLOGY

Name of the Faculty Guide: P.JYOTSNA SRI

Duration of the Internship: From 26/09/2022 To 16/11/2022

Name of the Student: GUDALA RAMALAKSHMI

Programme of Study: BSC(CBZ)

Year of Study: III BSC

Register Number: 2023061

Date of Submission: 16/11/2022

Student's Declaration

I RAMA LAKSHMI GUDALA, a student of BSC CBZ. Program, RegNo. 2023061 of The Department of Zoology, SRI ASN M GOVT COLLEGE (A) PALAKOL do hereby declare that I have completed the mandatory internship from 16/10/2022 to 16/11/2022 in FORTUNE AQUA LABS PVT.LTD, PALAKOL under the Faculty Guideship of Kum PJYOTSNA SRI, , Department of ZOOLOGY, SRI ASN M GOVT COLLEGE(A) PALAKOL.

S. Ramalakshmi 16/11/22
(Signature and Date)

Endorsements

P. Jyotsna sri 16/11/22
Faculty Guide

N. Ram 16/11/22
Head of the Department

[Signature] 20/11/2022
Principal

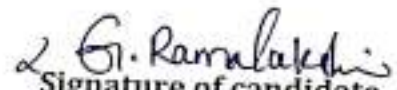
PRINCIPAL
Sri A.S.N.M. GOVT. COLLEGE (A)
PALAKOL-534 260, W.G.DIST

ACKNOWLEDGEMENT

I take the opportunity to thank one and all who have helped in making the project possible. I am thankful to authorities of SRI A.S.N.M GOVT (A) College Palakol ,for giving this opportunity to work on a project as part of curriculum. I am very thankful to our internal guide **P. JYOTSNA SRI** Department of zoology, for providing this great opportunity.

I am very much thank full to **U. Prasad babu, fortune aqua lab Pvt. Ltd.** Palakol give the opportunity to finish the 2 months internship in his industry

I would like to express my respect and thanks to **Dr. M.Ramakrishna** , HOD ZOOLOGY, **Dr.Y.VIJAYAKUMAR**,HOD BOTANY and **V. SaiSree** madam lecturer in Botany moral guidance and encouragement I wish to extend my warm thanks to those who helped me directly or indirectly during my project period. I sincerely apologize if I forget to mention any body and thanks to all concerned from the bottom of my heart.


Signature of candidate

RAMALAKSHMI GUDALA

Fortune Aqualabs Pvt.Ltd

#2A-6-19 ; Near Railway Gate

P.P.ROAD ; PALAKOLLU; W.G.Dt ; A.P ; 534260

Email : fortunelab.pkl@gmail.com

website : www.fortunelabs.in

Contact:9848099097 ; 7075 373737 ; 7396 373737(BVRM) Internship Report



Date : 16-11-2022
PALAKOL

CERTIFICATE FROM INTERN ORGANIZATION

This is to certify that GUDALA RAMA LAKSHMI Reg.No2023061 of SRI A.S.N.M.GOV'T COLLEGE (A) PALAKOL W.G.Dt., A.P, underwent internship in FORTUNE AQUALABS PVT Ltd. From 26/09/2022 to 16/11/2022.

The overall performance of the intern during his/her internship is found to be Satisfactory.

PLACE: PALAKOL

Date: 16/11/2022


Authorized Signatory


Analytical Chemists For

Drinking Water, Domestic Water, Construction Water, All Borewell Raw Water, Aqua culture water, Shrimp PCR, Feed Quality Analysis (Protein, Fat, Moisture, Ash)

WATER ANALYSIS

INTERNSHIP PROJECT REPORT SUBMITTED

To

SRI A.S.N.M GOVT (A) COLLEGE, PALAKOL



Submitted by,

Yalamarathi Chandini

Reg NO : 2023071

Under the guidance of

Dr. M.Rama Krishna

DEPARTMENT OF zoology

SRI A.S.N.M GOVT (A) COLLEGE

PALAKOLLU

An Internship Report
On
(Title of the Internship)

Submitted in accordance with the requirement for the degree of.....

Name of the College: SRI A.S.N.M. GOVT (A) COLLEGE PALAKOLLU

Department: Zoology

Name of the Faculty Guide: Dr. M.rama Krishna

Duration of the Internship: From 26/9/2022 To 16/11/2022

Name of the Student: YALAMARTHI CHANDINI

Programme of Study Year of Study: III YEAR

Register Number: 2023071

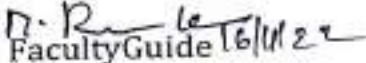
Student's Declaration

I, **Y.CHANDINI** student of B.Sc. CBZ Program, Reg.No. **2023071** of the Department of **zoology**, SRI A.S.N.M. GOVT (A) College do hereby declare that I have completed the mandatory internship from **26/9/2022** in **16/11/2022** **Fortune Aqua lab p.v.t, l.t.d** under the Faculty Guide ship Department **zoology**, SRI A.S.N.M GOVT (A) COLLEGE

(Signature and Date)

Y. C. L. D. V. K. Parameswari

Endorsements


Faculty Guide 16/11/22


Head of the Department


Principal

PRINCIPAL

SRI A.S.N.M. GOVT. COLLEGE (A)
PALAKOL-534 260, W.G.DIST

ACKNOWLEDGEMENTS

I take the project thank one and all who have helped in making the project possible. I am thankful to authorities of **SRI A.S.N.M GOVT (A) Degree College palakol, W.G.Dt**, for giving this opportunity to work on a project as part of curriculum. I am very thankful to our internal guide **Dr.M.rama Krishna Department of zoology**, for providing this grate opportunity.

I would like to express my respect and thanks to **M.rama Krishna** guest faculty of Botany, **SRI A.S.N.M Govt (A)Degree college palakol, W.G.Dt**.

I am very much thankful to **E. PRASAD BABU ,FORTUNE AQUA LAB PRIVATE LIMITED. PALAKOL**, gave the opportunity to finish the two months intern ship in his industry.

I am graceful to my father **y.n.v.s.kumar Kumar** and my siblings for their moral guidance and encouragement and for permitting me to blossom in all my endeavours.

I wish to extend my warm thanks to those who helped me directly or indirectly during my project period. I sincerely apologize if I forget to mention anybody and thanks to all concerned from the bottom of my heart.

Signature of candiate

y.c.l.v.k. patameswari

Certificate from Intern Organization

This is to certify that **Y.chandini** (Name of the intern) Reg.No**2023071SRI A.S.N.M GOVT (A) COLLEGE** underwent internship in **FORTUNE AQUA LAB P.V.T.,L.T.D PALAKOL** from **26/9/2022** to **6/11/2022**. The overall performance of the intern during his/her internship is found to be Satisfactory

Authorized Signatory with Date

Fortune Aqualabs Pvt.Ltd

#2A-6-19 ; Near Railway Gate

P.P.ROAD ; PALAKOLLU; W.G.Dt ; A.P ; 534260

Email : fortunelab.pkl@gmail.com

website : www.fortunelabs.in

Contact:9848099097 ; 7075 373737 ; 7396 373737(BVRM) Ensuring Quality



Date : 16-11-2022

PALAKOL

CERTIFICATE FROM INTERN ORGANIZATION

This is to certify that YALAMARTHI CHANDINI L D V K PARAMESWARI Reg.No.2023071 of SRI A.S.N.M.GOV'T COLLEGE (A) PALAKOL W.G.Dt., A.P, underwent internship in FORTUNE AQUALABS PVT Ltd. From 26/09/2022 to 16/11/2022.

The overall performance of the intern during his/her internship is found to be Satisfactory.

PLACE: PALAKOL

Date: 16/11/2022

C.R.
Authorized Signatory
A circular stamp with the text 'FORTUNE AQUALABS PVT LTD' around the perimeter and 'PALAKOL' in the center.

Analytical Chemists For

Drinking Water, Domestic Water, Construction Water, All Borewell Raw Water, Aqua culture water, Shrimp PCR, Feed Quality Analysis (Protein, Fat, Moisture, Ash)

WATER ANALYSIS

INTERNSHIP PROJECT REPORT SUBMITTED

To



SRI A.S.N.M GOVT (A) COLLAGE, PALAKOL

Submitted by,

Donga devidurga

Reg NO : 2023059

Under the guidance of

Kum P.JYOTSNA SRI

DEPARTMENT OF ZOOLOGY

SRI A.S.N.M GOVT (A) COLLEGE

PALAKOLLU

2023-2024

An Internship Report
On
WATER QUALITY MANAGEMENT

Submitted in accordance with the requirement for the degree of

Name of the College: SRI A.S.N.M. GOVT (A) COLLEGE PALAKOLLU

Department: Zoology

Name of the Faculty Guide: Kum.P.JYOTSNA SRI

Duration of the Internship: From 26/09/2022 To 26/11/2022

Name of the Student: D.Devi Durga

Programmer of Study: III Year

Year of Study: 2022-2023

Register Number: 2023059

Date of Submission: 16/11/2022

Student's Declaration

I, D.DeviDurga, a student of BSc CBZ Program, Reg.No. 2023059 of the Department of Zoology, SRI ASNM GOVT[A] COLLEGE do hereby declare that I have completed the mandatory internship from 26/0/22 to 16/11/22 in FORTUNE AQUA LABS PVT, LTD under the Faculty Guide ship of Kum.P.JYOTSNA SRI, Department of Zoology, Sri Asnm Govt [A] College.

D. Devidurga
Signature and Date

Endorsements

M.R.
Faculty Guide

M.R. 16/11/22
Head of the Department
LECTORER IN CHARGE
DEPARTMENT OF ZOOLOGY
SRI A. S. N. M. GOVT. COLLEGE
PALAKOL - 534 260
Principal

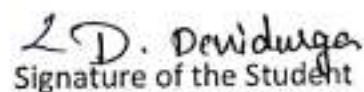
ACKNOWLEDGEMENT

I take the opportunity to thank one and all who have helped in making the project possible . I am thankful to authorities of SRI A.S.N.M GOVT COLLEGE (A),PALAKOL for giving this opportunity to work in project as part of curriculum. I am very thankful to our internal guide P.JYOTSNA SRI Department of zoology ,For providing this great opportunity

I would like to express my respect thanks to DR.M.RAMAKRISHNA ,HOD ,Department of zoology,sri A.S.N.M GOVT college,palakol.

I am very graceful to my father Donga Durgarao and my siblings for their moral guidance and encouragement and for permitting me to blossom in all my endeavours

I wish to extend my warm thanks to these who helped me directly and indirectly during my project period .I sincerely apologize if I forgot to mention anybody and thanks to all concerned from the bottom of my heart


Signature of the Student

(Donga devidurga)

Fortune Aqualabs Pvt.Ltd

#2A-6-19 ; Near Railway Gate

P.P.ROAD ; PALAKOLLU; W.G Dt ; A.P ; 531260

Email : fortunelab.pkt@gmail.com

website : www.fortunelabs.in

Contact:9848099097 ; 7075 373737 ; 7396 373737(IVRM)



Date : 16-11-2022
PALAKOL


CERTIFICATE FROM INTERN ORGANIZATION

This is to certify that DONGA DEVI DURGA Reg.No2023059 of SRI A.S.N.M.GOV'T COLLEGE (A) PALAKOL W.G.Dt., A.P, underwent internship in FORTUNE AQUALABS PVT Ltd. From 26/09/2022 to 16/11/2022.

The overall performance of the intern during his/her internship is found to be Satisfactory.

PLACE: PALAKOL

Date: 16/11/2022


Authorized Signatory
