

An Internship Report on

lab technician

(Title of the Semester Internship Program)

Submitted in accordance with the requirement for the degree of BS (Chem)

Under the Faculty Guide ship of

M. shanthi ham man

(Name of the Faculty Guide)

Department of

chemistry, GDC, Narasannapeta

(Name of the College)

Submitted by

Ragu Jyothi

(Name of the Student)

Reg. No

2222004049001

Department of

chemistry

(Name of the College)

GDC, Narasannapeta

SHORT- TERM INTERNSHIP

Name of the Student: *Bagu. Jyothi*

Name of the College: *Govt. degree college (Narasannapeta)*

Registration Number: *2222064049001*

Period of internship: *2 months* From: *01/05/24* To: *30/06/2024*

Name & Address of the Intern Organization: CMS LABORATORIES INDIA PRIVATE LIMITED, # 47-10-50, 3rd Floor, Above Union Bank, 4th Lane, Dwaraka Nagar, Visakhapatnam -530 016.

Andhra University

2023-2024

Student's Declaration

I, Bagu. Jyothi a student of BSC (CBZ)
Program, Reg. No. 2221004049014 of the Department of chemistry
College do hereby declare that I have completed the CBZ (Group)
Mandatory Internship from 01/05/2024 to 30/06/2024 in
CMS LABORATORIES INDIA PRIVATE LIMITED under the Faculty
Guideship of M. Shanthiham (Name of the Faculty
Guide), Department of chemistry, (Name of the College)
Govt. degree collage.

B. Jyothi
(Signature and Date)

Official Certification

This is to certify that Babu. Tyothi
(Name of the student) 2222004049001 Reg. No. has completed
his/her Internship in CMS LABORATORIES INDIA PRIVATE
LIMITED on lab technician (title of the internship) under my
supervision as a part of partial fulfillment of the Requirement for the
Degree of BSc (CBZ) (Group), Govt. Degree college
(Name of the College).

This is accepted for evaluation.

(Signatory with Date and Seal)

Endorsements

Faculty Guide M. Shanthi Kumar

Head of the Department



Principal PRINCIPAL
GOVT. DEGREE COLLEGE
NARASANNAPETA-532 421
Srikakulam Dist.

Certificate from Intern Organization

This is to certify that Babu Jyothi

(Name of the Student) 2222004049014 (Reg. No), B.A. degree

college (Narasannapeta) (Name of the College) underwent internship
in CMS LABORATORIES INDIA PRIVATE LIMITED from 01/03/2024 to
30/06/2024

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



Authorized Signatory with Date and Seal

CMS LABORATORIES INDIA PVT. LTD.
Plot No- 121-C Floor No:3, Mohan Mansion,
Dwarakanagar, Visakhapatnam (Urban),
Visakhapatnam- 530016, Andhra Pradesh
CIN :U78300AP2024PTC113667

Acknowledgements

It gives me an immense pleasure and pride to express my sincere gratitude and respect for my teacher, internship supervisor and guide M. S. hanthi ham, for his expert and inspiring guidance and support throughout my internship.

Also, I am very grateful to the Head of the Department of P. Saevidya, and the other faculty members of the chemistry Department for being a source of support during this project period.

I would like to extend my gratitude to my Principal Sir Dr. P. latha for providing me all the necessary facilities that were required for successful completion of this internship.

I also thank **CMS LABORATORIES INDIA PRIVATE LIMITED** Visakhapatnam, for providing internship opportunity.

My special thanks to the **Managing Director, G. Jagadeeswara Rao**, for his constant support, encouragement and timely advice.

I'm deeply grateful to my internship trainers, for their invaluable guidance and support. From the moment I started, they took time to get me know the importance of various skills and understand my goals for the internship. Their constructive feedback helped me to improve my skills in which I have interest and approach my tasks with great enthusiasm.

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WHAT IS INTERNSHIP?

Internship is an integral platform for anyone to gain experience in the actual work place. Thus, Internship is a good opportunity for students to learn, to gain experience and also to make preparations. Men learn through experience and real life is full of different kinds of experiences. We will encounter many difficulties and obstacles and with experiences we are expected to be able to encourage and complete the process. Experience in my eyes is a very valuable thing in life because we need to be brave in taking risks.

It is also not something that we simply create, but we need to undergo through it. By doing my internship in an actual work environment, it helps me to know and discover myself from different angles. It also helps me to control and develop my attitude towards dealing with different kinds of people and situations. I have decided to take the internship course to grab the golden opportunity to apply theoretical knowledge that I have in a real working environment. Through college, I learned about theories but doing an internship, I learned a practical approach on dealing with the real world. Even though it was not that much, it still has profound results in some aspects of my life. In some ways, through internship, I also have learned that I am still lacking as an individual and employee. Internship helps me to identify my weaknesses and also my strengths. "Experience without theory is blind, but theory without experience is mere intellectual play". The other reason why I choose to take the internship as preparation for more challenging work environment and situation. Our life in college is incomparable with real working experience. A working life is very challenging as it requires great effort, commitment and abilities; those are something that I need to be prepared and trained to. Apart from that, I really want to gain professional experience and skills by taking the internship course. At the same time, I also want to improve my communication skills and ability to interact with people. I realize that by being part of society, I will need to meet different people around the office and I will have to communicate with them to settle their needs. Undergoing internship also helps to make me learn on how to work in a systematic organization. It helps me to learn how to be independent in accomplishing my tasks.

CHAPTER – 1

(EXECUTIVE SUMMARY)

1.1 LEARNING OBJECTIVES:

- To aim to provide an understanding of drugs production particularly prescription production in small scale, with special focus on liquid and semi-solid systems.
- The course provides drug administration routes, physicochemical aspects of drug formulation and dosage, as well as consideration regarding their preparation including stability assessment.
- To promote an introduction methods technology and quality system that are used in the production of pharmaceutical forms with requirements for sterility.
- The main focus is the formulation and production of oral, solid and other conventional dosage forms of administration and the science behind them.

1.2 OUTCOMES ACHIEVED

- Idea on basic issues in the pharmaceutical industry.
- R&D and pharmaceutical development in the pharmaceutical industry.
- Learned drug production technologies and process.
- New technologies in the pharmaceutical industry.
- Role of biological products and pharmaceutical biotechnology in the industry.
- About Quality Management and Quality Control issues in licensing drug marketing, pharmacovigilance activities.
- About solid, liquid, semisolid, gaseous pharmaceutical production technologies.

1.3 INTERN ORGANIZATION:

CMS LABORATORIES INDIA PRIVATE LIMITED is a partnership company established in 2017 which is accredited and affiliated by SSC under non PMKVY with a motto of pharmaceutical skill development with placement linked training programs. After providing training on various courses comes under Pharmaceuticals are Chemist Production (pharma, cosmetics and biologics)-V2- API/Bulk drug, Production Machine Operator Active Pharmaceutical Ingredient (API)/Bulk drug V3-non sterile manufacturing, Lab technician- research and quality control-V2 Wet lab, Assistant manufacturing and packaging (pharma, biologics and medical devices)_V3. Courses offered as part of IT & ITeS are BPO(voice/non voice), Customer Care Executive(CCE), Tech Support Engineering. Courses offered for Engineering background are Robotics, Embedded systems, AutoCAD, Cloud Technologies. Skill training CMS will validate and furnish certificate from Life Science Sector Skill Development Council (LSSSDC). More than 2780 trainers are working in various pharmaceutical companies across PAN India. To present skilled man power to pharmaceutical industry along with certification as manufacturing assistants.

1.4 DESCRIPTION OF COURSE:

A quality control chemist (QC chemist) is a specific type of laboratory chemist, whose primary duties are to measure and products according to industry specific standard procedures. Jobs are typically in the pharmaceutical or manufacturing fields.

Quality control in the pharmaceutical industry aims to verify and test the medicine at various stages of production to ensure every product is of the highest quality. Quality control also involves identifying product of the defects and fixing these problems with corrective techniques and measures.

production chemist work for manufacturing companies and are involved in developing products obtains through chemical reactions, such as cosmetics production chemist strategize on effective methods to maximize the products quality and efficiency following safety regulations and legislation procedures.

They also run quality checks on the components to verify their safety and minimize their environmental effect. A production chemist

INTRODUCTION OF THE ORGANIZATION:

About CMS LABORATORIES INDIA PRIVATE LIMITED Empowering Youth for a Brighter Future.

At CMS LABORATORIES INDIA PRIVATE LIMITED, we're on a mission to transform lives through skill development. Our vision is to create robust and high-quality institutions that cater to the diverse needs of individuals, helping them reach their goals and aspirations. We believe in providing unwavering support, with a focus on quality assurance, information systems, and comprehensive training programs aimed at empowering unemployed youth to secure a better life.

Our Approach:

Bridging the Gap between Academics & Industries:

We're committed to closing the gap between Academics & Industries by developing the skills of unemployed youth and connecting them with opportunities in the private sector.

Our Strengths:

Empowering Potential and Unleashing strengths, crafting success. CMS Skill Center fosters determination and resilience in young minds. We turn interests into stepping stones on the path to triumph. Your journey to success starts here.

Certification for Excellence:

Founded in 2017, CMS is a partnership company dedicated to Pharmaceutical Skill Development with Placement-Linked Training Programs. We offer a range of certified courses including Manufacturing Assistant, Production Chemist, Production Machine Operator, Lab Technician, Industrial Electrician and Solar PV Installer.

Industry-Aligned Training:

After completing our skill training programs, CMS provides certification recognized by the Life Science Sector Skill Development Council (LSSSDC), ensuring that our graduates are industry-ready.

Impactful Results:

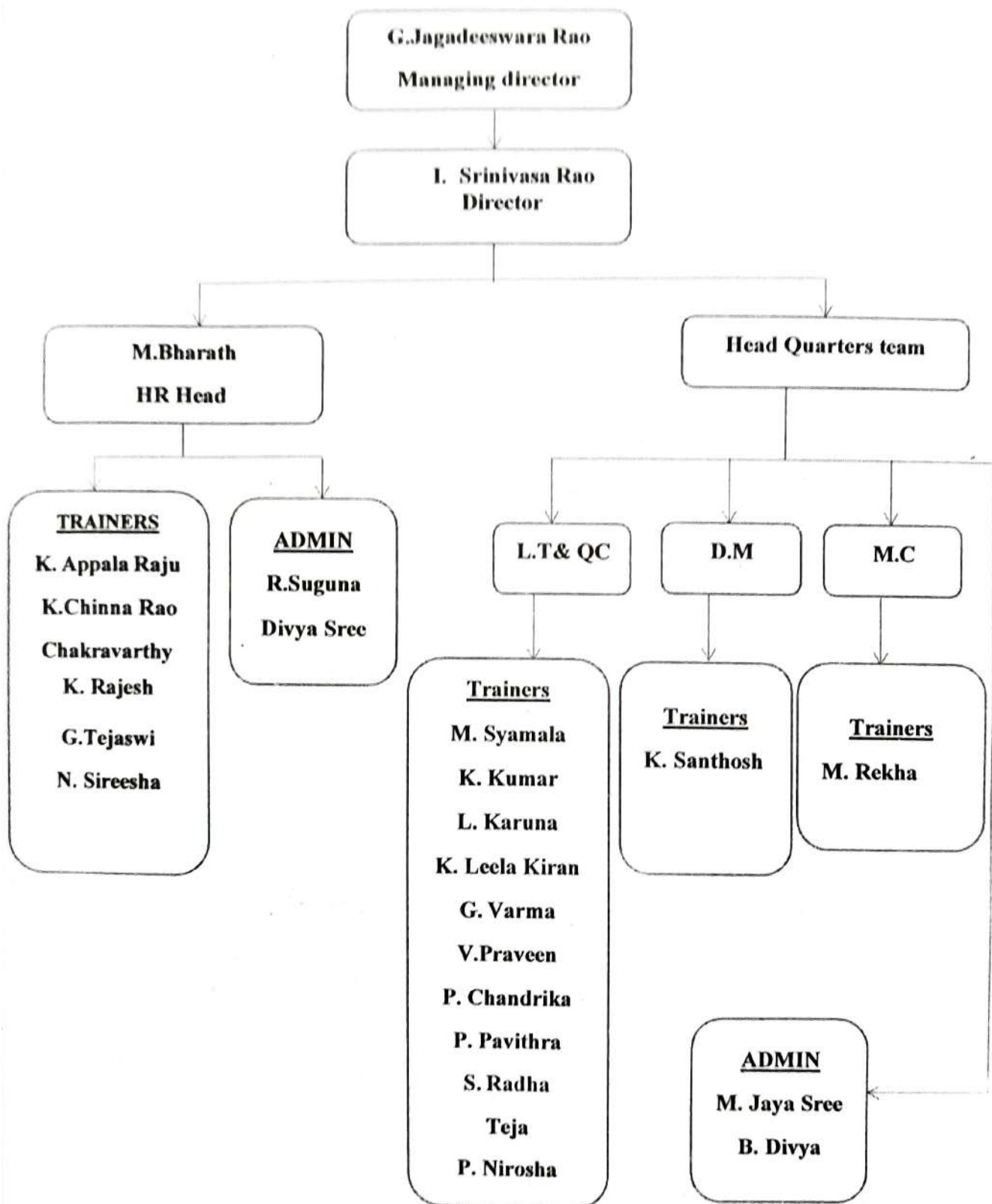
With over 5289 trainees now gainfully employed in various Pharmaceutical Companies across India, we take pride in our track record of making a significant difference in the lives of our graduates.

Corporate Social Responsibility (CSR) Commitment:

As part of our Corporate Social Responsibility (CSR) initiative in collaboration with SDI Visakhapatnam (a group of Public Sector Oil Companies), we are dedicated to enhancing the employability and prospects of youth across the nation.

Join us on our journey to empower the youth, build a skilled workforce, and create a brighter future. At CMS Skill Center, we believe that every individual deserves a chance to shine, and we're here to make it happen.

ORGANOGRAM OF CMS:



WEEKLY REPORT-1

OBJECTIVE OF THE ACTIVITY:

Learned about pharmaceutical industry sectors, few guidelines about different and also regulatory agencies, pharmacopoeias.

DETAILED REPORT:

1. Industry : A detail overview about different sectors in industry and their types.
2. Life Science Sector : Urgency of pharmaceuticals and life science with combination of medicine, health and food.
3. Regulatory agencies : Given detail knowledge from various country agencies about their research center, plant, laboratory etc. with supply of medicinal plants.
4. pharmaceutical industry :- include with organization and biotechnology and contract research sector.
5. pharmacopoeia :- It consist of preparations of medicals and it is different from each and other countries and it was issued by the government.

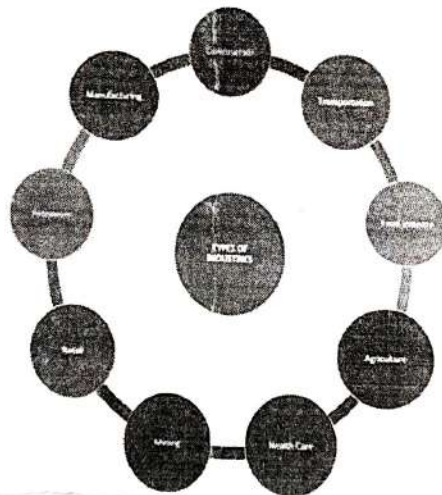
ACTIVITY LOG FOR THE FIRST WEEK

DAY & DATE	DESCRIPTION OF THE ACTIVITY	LEARNING OUTCOMES	PERSON IN-CHARGE, SIGNATURE
DAY-1	Industry and life science Sect 81	Gain knowledge in various sectors aware on pharma	
DAY-2	pharmaceutical industry	Become aware of sectors in pharmaceutical industry	
DAY-3	Regulatory Agencies	Knowing about pharmaceutical Agencies	
DAY-4	Indian pharmaceutical industry	Aware of different pharmaceutical Markets.	
DAY-5	Pharmacopoeia	Gain knowledge about different country pharmacopoeia	
DAY-6	Record	Activity of Whole Week.	

* INTRODUCTION

Industry :-

It is defined as an Economic Activity concerned with the processing of raw materials and manufacture of goods in factories. It is also the aggregate of Manufacturing & technically productive Enterprises in a particular field, often named after principal products. The term industrial revolution coined by Arnold Toynbee.



The goods sold by industry can be either used by other companies for further production or can be used by the end consumers for final consumption. The goods produced in the former case are known as producer goods for ex. Machinery, cloth, groceries, Medicines etc. an organization can also produce materials. Can be used by other companies.

These goods are known as intermediate goods, for example, rubber, copper, plastic, etc. Industry can be further classified into three parts: primary, secondary and tertiary industry.

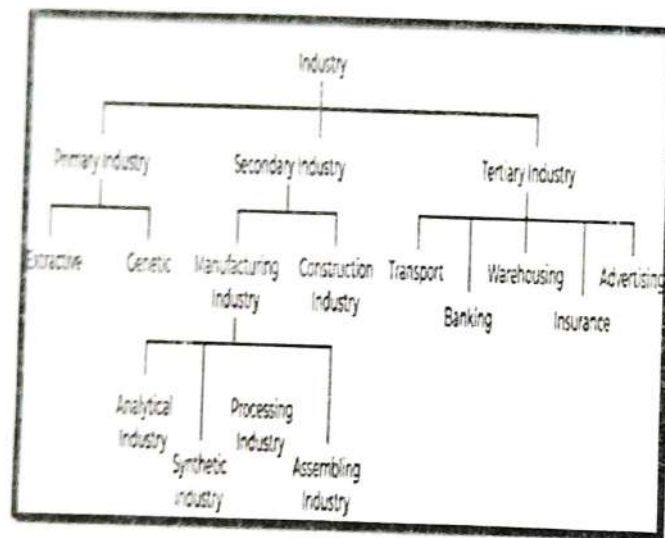


Life science sector :-

The life sciences are supportive in bettering the standard and quality of life. Life sciences have applications in Medicine, health, pharmaceutical, food science and agriculture industries. usually we define "life science" as all sciences that have to do with "organisms" like animals, human beings and plants.

The industrial units involved in discovery, Research, development, Manufacturing, distribution and sale of Medicines.

Technologies, biotechnology, life systems technologies, food processing, biomedical devices, environmental, institutions, and organizations that devote the majority of their efforts in the varied stage of Research, development, commercialization and technology transfer.



pharmaceutical industry :-

The pharmaceutical subsector includes all the companies involved in any of following Manufacturing and sale of drugs, formulations of India as well as for exports Active pharmaceutical ingredient (API) Manufacturing Contract Manufacturing of drug formulations, Nutraceutical products and sale.

- pharmaceutical Manufacturers.

* Labeling of chemicals :-

Labeling chemicals properly is crucial for Ensuring Safety in the workplace and preventing accidents.

→ Hazard information



- Hazard statements
- Precautions statements.
- Signal words
- Manufactures information
- Storage and handling instructions
- Date of preparation / Expiration
- Secondary Containers

If transferring chemicals to Secondary Containers, ensure that they are properly Labelled in the same information.

* Dilutions :—

Dilutions are essential techniques used in Laboratories to achieve desired concentrations of solutions. properly performing dilutions ensures accuracy and reliability in Experiments and tests.

Types of dilutions :—

• Simple dilution :—

A straight forward dilution where a volume of stock solutions is mixed with a volume of solvent to achieve desired concentration.

• Serial Concentration dilution :—

A stepwise dilution where each subsequent dilution uses the previous dilution as stock solution.

• First dilution :— mix 1ml of stock solⁿ with 9ml of solvent to achieve 1:10 dilution.

• Second dilution :— 1ml from first to mix with 9ml of solvent achieve 1:100 dilution.

pH meter :-

A pH meter is a device used to measure the acidity or alkalinity of a solution indicating its pH level. It typically consists of a probe connected to an electronic meter that displays the pH reading.

This instrument is essential in laboratory, food production, water quality testing, and various industrial processes to ensure chemical and product safety.



Student Self Evaluation of the Short-Term Internship

Student Name: Bage. Jyothi

Registration No: 2222004049001

Term of Internship: 2 months From: 01/05/24 To: 30/06/24

Date of Evaluation: 26/07/2024.

Please rate your performance in the following areas:

Rating Scale:

Letter grade of CGPA calculation to be provided

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

Date:

B. Jyothi
Signature of the Student

Evaluation by the Supervisor of the Intern Organization

Student Name: Bage. Jyothi

Registration No. 2222004049091

Term of Internship: 2 months

From: 01/05/24 To: 20/06/24

Date of Evaluation: 26/07/2024.

Organization Name & Address: CMS LABORATORIES INDIA PRIVATE LIMITED

Dwarka Nagar, Visakhapatnam

Name & Address of the Supervisor with Mobile Number:

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

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	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 course	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	Regularity	1	2	3	4	5
16	OVERALL PERFORMANCE	1	2	3	4	5

Date: 26/7/2024

P. Dinasho
Signature of the Supervisor

INTERNAL ASSESSMENT STATEMENT

Name of the Student: Bage. Jyothi

Program of Study: CBZ

Year of Study: 2nd BSc (2023-24)

Group: CBZ

Register No/H.T. No: 22220040490401

Name of the College: Govt. degree college (Narasannapeta)

University: Dr. B.R. Ambedkar university

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

Date:


Signature of the Faculty Guide

EXTERNAL ASSESSMENT STATEMENT

Name of the Student: Bage. Jyothi

Program of Study: CBZ

Year of Study: 2nd BSc (2023-24)

Group: CBZ

Register No/H.T. No: 2222004049001

Name of the College: Govt. degree college (Narasannapeta)

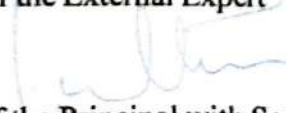
University: Dr. B. R. Ambedkar University

Sl. No	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Internship Evaluation	80	70
2.	For the grading giving by the Supervisor of the Intern Organization	20	20
3.	Viva-Voce	50	50
	TOTAL	150	140
GRAND TOTAL (EXT. 50 M + INT. 100M)		200	50+140=190


Signature of the Faculty Guide


Signature of the Internal Expert

M. Nisha
Signature of the External Expert


Signature of the Principal with Seal
PRINCIPAL
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