



# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru - 570 004

(Affiliated to the University of Mysore)

Reaccredited by NAAC with A grade (CGPA : 3.19)

E-mail : principal@saradavilas.com Website : www.saradavilas.com



**Dr. M. Devika**, M.Sc., M.Phil., Ph.D.

Principal

Mobile : 9880024483

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**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.

Principal

SARADA VILAS COLLEGE , MYSURU

KRISHNAMURTHYPURAM

DEPARTMENT OF PHYSICS

10/10/2023

From

Suganthi S Singh

Associate professor & head

Department of physics

Sarada Vilas College

Mysuru

To

The Principal

Sarada Vilas College

Mysuru

SARADA VILAS EDUCATIONAL INSTITUTIONS®	
No. 942	Date: 10/10/2023
PRESIDENT	
NON. SECRETARY	
ADMINISTRATIVE OFFICER	
MANAGER	

Respected Madam,

Sub: Regarding students industrial visit to Craftizan Rocket , Hunsur

The department of physics is planning to take the final year students to an industrial visit named Craftizan Rocket (place where rocket models are manufactured). This place is situated in Hunsur. At this place students can get a better understanding of making of rocket models and also it's working function.

Sri. Srinivasan Ramanathan an expert in this field will demonstrate it to our students. I had spoken to him over phone for which he has given his concern. I request you to permit us to take our students to the above said place on 12/10/23 (Thursday). Twenty two students with two faculties will be in this visit schedule.

Thanking You

Yours Sincerely

*Suganthi S. Singh*  
Suganthi S Singh

**Suganthi S Singh**

M.Sc., M.Phil  
Head of Physics Department  
Sarada Vilas College, Mysuru.

*Respected Sir,  
As it is mandatory to take 5 Sem  
Physics students for industrial visit,  
I request you to please permit us  
to take students to Craftizan Rocket,  
Hunsur on 12/10/23.  
Permit  
10/10/23  
Principal  
Sarada Vilas College  
Mysuru*

**SARADA VILAS COLLEGE, KRISNAMURTHYPURAM, MYSURU**  
**DEPARTMENT OF PHYSICS**

From

12/10/2023

The head of the department  
Department of Physics  
Sarada Vilas College  
Mysuru

To

Ramji. S  
Craftizan  
Engineering models  
Hunsur road

CEO

Sub: Thanking letter & feedback of our students

Respected sir,

The department of Physics, Sarada Vilas College, Mysuru ,thank you whole heartedly for giving your precious time and taking the interest to explain the rocket models. I request you to write few words about our students for encouraging them.

Thank you

Yours sincerely



Suganthi S Singh 12/10/23

**Suganthi S Singh**

M.Sc., M.Phil

Head of Physics Department  
Sarada Vilas College, Mysuru



**SARADA VILAS COLLEGE**  
KRISHNAMURTHYPURAM, MYSORE  
**DEPARTMENT OF PHYSICS**

LIST OF STUDENTS GOING FOR INDUSTRIAL VISIT ON 12/10/2023

**III YEAR (NEP) (PC/PM/PCs)**

SL No.	NAME	PHONE NO
1	ROHITH N	9380192249
2	DARSHAN D N	7411742646
3	ASHISHRAJ N	7892721405
4	MAHADEVAPPA R	7795283165
5	SHAKEEB PASHA	9880454851
6	GAVINAYAKA KM	9900198988
7	MAHADEVA PRASAD M	8970984185
8	YATHISH KM	8431465143
9	SAGAR RM	6362687686
10	CHETHAN L	7899129251
11	ADARSHA V	7760256901
12	JOVAN PRAKASH LOBO	9535345321
13	MADHU K V	9964260976
14	KIRAN B	9845441540
15	SHASHANK	9980648069
16	NAVEEN N V	9164791408
17	DARSHAN KUMAR G	9380118546
18	YASHWANTH M	6364285779
19	SUDEEP	6362015603
20	LOKESH G	9972944384
21	NAVEENKUMAR B	6366314060
22	DARSHAN NAYAK M	7406617581

Faculty: Sri. Prathap M R

Sri. Dhanushchandraguru H M

  
HOD OF PHYSICS

**Suganthi S Singh**  
M.Sc., M.Phil  
Head of Physics Department  
Sarada Vilas College, Mysuru

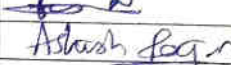


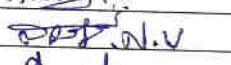





  
PRINCIPAL  
Sarada Vilas College  
Mysore-570001



**SARADA VILAS COLLEGE**  
KRISHNAMURTHYPURAM, MYSORE  
DEPARTMENT OF PHYSICS

LIST OF STUDENTS GOING FOR INDUSTRIAL VISIT ON 12/10/2023

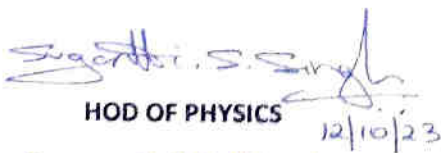
**III YEAR (NEP) (PC/PM/PCs)**

SL No.	NAME	REG. No.	PHONE NO	SIGNATURE
1	ROHITH N	U01BG21S0006	9380192249	
2	DARSHAN D N	U01BG21S0010	7411742646	
3	ASHISHRAJ N	U01BG21S0013	7892721405	
4	MAHADEVAPPA R	U01BG21S0014	7795283165	
5	SHAKEEB PASHA	U01BG21S0017	9880454851	
6	GAVINAYAKA K M	U01BG21S0019	9900198988	
7	MAHADEVA PRASAD M	U01BG21S0020	8970984185	
8	YATHISH K M	U01BG21S0025	8431465143	
9	SAGAR RM	U01BG21S0029	6362687686	
10	CHETHAN L	U01BG21S0032	7899129251	
11	ADARSHA V	U01BG21S0034	7760256901	
12	JOVAN PRAKASH LOBO	U01BG21S0039	9535345321	
13	MADHU K V	U01BG21S0040	9964260976	
14	KIRAN B	U01BG21S0044	9845441540	
15	SHASHANK	U01BG21S0050	9980648069	
16	NAVEEN N V	U01BG21S0062	9164791408	
17	DARSHAN KUMAR G	U01BG21S0068	9380118546	
18	YASHWANTH M	U01BG21S0073	6364285779	
19	SUDEEP	U01BG21S0081	6362015603	
20	LOKESH G	U01BG21S0085	9972944384	
21	NAVEENKUMAR B	U01BG21S0086	6366314060	
22	DARSHAN NAYAK M	U01BG21S0098	7406617581	
23	MANOJ B L	U01BG21S0074	9945691572	
24	ADARSHA M	U01BG21S0070	7483618080	

FACULTIES: Sri. Prathap M R

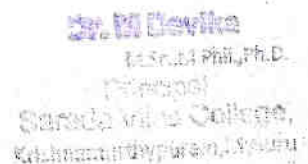
Sri. Dhanushchandraguru H M

  
12 Oct 23

  
HOD OF PHYSICS  
12/10/23

**Suganthi S Singh**  
M.Sc., M.Phil  
Head of Physics Department  
Sarada Vilas College, Mysuru

PRINCIPAL

  
Dr. M. Devika  
B.Sc., M.Phil, Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru

## CRAFTIZAN, ENGINEERING MODELS

Ramji. S  
Craftizan  
Engineering models  
Hunsur road  
CEO

12/10/2023

Feedback about students who visited the Craftizan on 12/10/2023

With reference to visit of students to our premises as on 12/10/23, we found that all students were interested in Rocket subject, all students were interactive & curious about the subjects, hence we wish all of them for better future & wish all of the bright future.

All the best.





**SARADA VILAS COLLEGE**  
**Krishnamurthypuram, Mysuru**  
**DEPARTMENT OF PHYSICS**

**REPORT ON INDUSTRIAL VISIT HELD ON 12.10.2023**

Name of the industry  
Visited : CRAFTIZAN, Engineering models  
Date of visit : 12.10.2023  
Time : 9.30 AM  
Semester : fifth semester  
No of students  
Attended the visit : 24

The department of physics had organised an industrial visit on 12.10.2023 to CRAFTIZAN, engineering models, Hunsur. The visit was organized with prior permission and guidance from the principal Dr. M.Devika, and IQAC coordinator smt. Suganthi S Singh. Prathap M R and Dhanushchandraguru H M were the coordinators for this whole industrial visit. Twenty-four students of final year participated in this visit. The visit started from the college campus at 9.30 AM via bus on 12.10.2023 along with the two faculties. Principal Dr. M Devika and head of the department of physics Suganthi S Singh flagged off the bus for the visit.

During the visit, all of the students met Mr. Ramji, CEO of CRAFTIZAN at the Engineering model. Mr. Krishnamurthy, manager of craftizan and Mr. Arshad, project engineer, spoke to the students about the history and developments of the contribution of the Indian scientists in space research with demo models at the museum which was setup in miniature. All the launch vehicles, launchers and rockets used over the period since ISRO was started were demonstrated individually in detail. Students were acquainted to many facts and terms such as payloads, lander, rovers and many more. Later they were taken to the construction site where they were able to see the huge launch pads getting ready. They were also taken to the laser printing section where the miniature



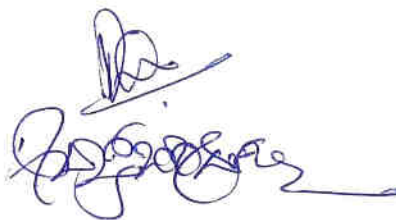
models were being prepared in a large scale. The models of the recent chandrayaan-3 and mars Orbiter mission were also shown to the students.

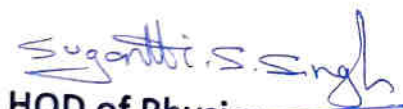
The students were very much interactive and curious to learn many concepts of launchers, satellites and space missions. On a whole, the industrial visit was very helpful to the students. All the related documents such as permission letter from the principal, attendance of the students, geo-tag photographs, and feedback from the host are attached.

**Industrial visit coordinators**

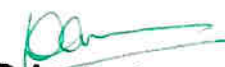
**Prathap M R**

**Dhanushchandraguru H M**



  
**HOD of Physics**

**Suganthi S Singh**  
M.Sc., M.Phil  
Head of Physics Department  
Sarada Vilas College, Mysuru

  
**Principal**  
Dr. M. Devika  
M.Sc., M.Phil, Ph.D.  
Principal  
Sarada Vilas College  
Kittur, Mysuru

**SARADA VILAS COLLEGE**  
**Krishnamurthypuram, Mysuru**  
**DEPARTMENT OF PHYSICS**  
**REPORT ON INDUSTRIAL VISIT HELD ON 12.10.2023**



**Students interacting and getting enlightened about the ISRO and indian space sciences, from the employees of the Craftizan.**





**Students with the big scale models of launchers and a picture with Sri. Ramji, CEO, Crafizan.**



**Students being curious to know about the indian space science and research. Model of the lunar roving vehicle on used on the surface of the moon by NASA which was the first off-planet automobile ride.**

#### Industrial visit coordinators

1. Prathap M R

:

2. Dhanushchandraguru H M :

HOD of Physics

**Suganthi S Singh**  
M.Sc., M.Phil.

Head of Physics Department  
Saretha Vilas College, Mysuru

Principal

**Dr. M Devika**

M.Sc., M.Phil., Ph.D.

Principal

Saretha Vilas College,  
Krishnamurthipuram, Mysuru





# Sarada Vilas College, Mysuru

Krishnamurthypuram, Mysore - 570004 Karnataka

Re accredited by NAAC with A grade ( CGPA : 3.19 )



SARADA VILAS COLLEGE

MYSORE

## Internship report

**RACHANA ENER CARE**

*Engineers for Energy & Environment*



Name of student	Darshan Kumar G
Regn no	U01BG21S0068
Subject	PHYSICS
Topic	SOLAR ENERGY
Duration	32 HOURS



Ref no:

Date: 20/05/2024

## CERTIFICATE

This is to certify that Mr. Darshan Kumar G

Of SARADA VILAS COLLEGE

having registration number U01BG21S0068 has completed internship with  
us from 22/4/2024 to 30/4/2024

Student learnt about basics of energy, use of meters, various practical utilities.  
And specifically involved and learnt about INSTALLATION OF SOLAR PANNEL  
AND ITS SPECIFICATION

He was obedient during course of internship and shown interest in learning.

For **RACHANA ENER CARE**

ANIL KUMAR NADIGER B.E.(E&E)M.I.E

Director & Energy Specialist



Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthyuram, Mysore

## ACKNOWLEDGEMENT

We are thankful to our institution ,principal of SARADA VILAS COLLEGE HOD Smt Suganthi S Singh for providing us the opportunity support and encouragement given to us to undergo internship at Rachana Ener Care Mysuru.

We are thankful to Mr. Anil kumar Nadiger , chairman & energy specialist of Rachana Enercare group Mysuru for permitting us to undergo internship in their firm. We are thankful for all staff of Rachan ener care for their valuable support, guidance during internship

This internship was a great opportunity for us to learn many new things in technology, its application. It also helped us in understanding need of many life skills. Such as discipline, attitude, commitment ,etc

We express our gratitude to both our institution and Rachana Enercare.



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## INTRODUCTION

### About us:

We are a team of engineers & professionals with knowledge & experience in various domains of **energy & environment**. It is both our passion & profession to explore in this domain. Team is headed by Mr Anil Kumar Nadiger, who is an energy expert. Our team members have undergone many trainings & certification examinations conducted by BEE (Govt of India) - Energy Managers & Auditors, NPC (National Productivity council), ASSOCHAM GEM and familiar with various standards such as ECBC, ASHRAE, ISHRAE, Green Building, ETC

We have conducted many energy & environment audits, electrical safety audits, power quality audits, renewable energy study, project management, workshops, for professionals, engineers, etc

We also undertake training & conduct workshops for students, technicians, professional engineers related to energy efficiency, power conditioning, renewable energy, etc. Many such trainings were done through SIUD (Karnataka Government -ATI campus), BEE programs, engineering institutions and various professional bodies.

We are mentors for various 'startups' and guide for various student projects, promoting design of innovative products in energy management, power conditioning

Our clientele includes South Western Railways Mysore Railway along with all other railway stations. Central works shops, KREDL (Renewable Energy Department), BSNL (Telecom), KWS&DB (Karnataka water supply Board), DRC, TERESIAN College, NIE, Agricultural University Yuvaraja college, Mahanarini's college, KSIC (Mysore Silk), Industries Kluber lubrication, Boruka extrusions, Jogeetha pipes, railway workshops, etc

We are happy, if we can get an opportunity to serve society with you.

**Thanks & regards**

*- Anil Kumar Nadiger*

Director & energy specialist  
9449837309

ACTIVITIES OF RACHANA ENER CARE





# CENTRAL GOVERNMENT MSME REGISTRATION CERTIFICATE



UDYAM REGISTRATION NUMBER

UDYAM-KR-22-0019247

NAME OF ENTERPRISE

RACHANA ENERCARE

TYPE OF ENTERPRISE \*

MICRO

MAJOR ACTIVITY

MANUFACTURING

SOCIAL CATEGORY OF ENTREPRENEUR

GENERAL

NAME OF UNIT(S)

S.No.	Name of Unit(s)
1	RACHANA ENERCARE

OFFICIAL ADDRESS OF ENTERPRISE

Flat/Door/Block No.	5551	Name of Premises/ Building	RACHANA ENERCARE
Village/Town	SARANWATIPURAM (POST)	Block	UK LAY OF THIRD STAGE
Road/Street Lane	13TH CROSS (BETD) HSNR RTC	City	MYSURU
State	KARNATAKA	District	MYSURU Pin 570009
Mobile	9449877309	E-mail	growmpower@gmail.com

DATE OF INCORPORATION / REGISTRATION OF ENTERPRISE

04-02-2009

DATE OF COMMENCEMENT OF PRODUCTION/BUSINESS

04-02-2009

NATIONAL INDUSTRY CLASSIFICATION CODE(S)

S.No.	NIC 2 Digit	NIC 4 Digit	NIC 5 Digit	Activity
1	27 - Manufacture of electrical equipment	2790 - Manufacture of other electrical equipment	27900 - Manufacture of other electrical equipment	Manufacturing
2	72 - Scientific research and development	7210 - Research and experimental development on natural sciences and engineering	72100 - Research and experimental development on natural sciences and engineering	Services
3	74 - Other professional, scientific and technical activities	7400 - Other professional, scientific and technical activities n.e.c.	74000 - Other professional, scientific and technical activities n.e.c.	Services

DATE OF UDYAM REGISTRATION

24-01-2022

In case of graduation (uplift) or loss of status of an enterprise, the benefit of the Government Schemes will be available as per the provisions of Notification No. S.O. 1118E dated 26.06.2020 issued by the Mo MSME.

Declaration: I/We, the undersigned, hereby declare that the information furnished above is true and correct to the best of my/our knowledge and belief.

For any assistance, you may contact:

1. District Industries Centre: MYSURU, KARNATAKA.
2. MSME-DI: MYSURU, KARNATAKA.

BE A CHAMPION



# Certificate of Registration

*This is to certify that  
The Quality Management System of*

**RACHANA ENERCARE**

**NO. 555/1, 13TH CROSS, T.K. LAYOUT 3RD STAGE,  
SARASWATHIPURAM (P) MYSORE 570009 INDIA**

*has been assessed and found to be in accordance with the  
requirements of the Quality Management System standard*

**ISO 9001:2015**

for the following scope :

**CONSULTANCY, AUDITS, INNOVATION SUPPORT AND TRAINING  
RELATED TO ENERGY & ENVIRONMENT CONSERVATION.**

**CERTIFICATE NO. : RAC2311Q04IN**

**ISSUED DATE : 01/09/2023  
EXPIRY DATE : 31/08/2026**

**1ST SURVEILLANCE DUE : 31/07/2024  
2ND SURVEILLANCE DUE : 31/07/2025**

Managing Director



CB-MN-0011

Accredited By United Accreditation Foundation (UAF)  
400 North Center DR, STE 202 Norfolk, VA 23502  
United States of America (USA)



For BMG Conformity Assessment Services Pvt. Ltd.

1/100, 2nd Floor, Ground 10, Rajagopal Krishna Nagar, T.P. 10010

This certificate is a statement of conformity with the requirements of the standard and does not constitute a guarantee of the quality of the products or services of the organization. The certificate is valid only for the scope of the standard and the organization is responsible for maintaining the standard and the certificate is valid only for the scope of the standard.

From,  
Shilpashree N  
Assistant Professor and Head  
Department of Computer Science  
Sarada Vilas College Mysuru

To,  
The Principal  
Sarada Vilas College  
Mysuru

Respected Madam,

Sub: Seeking permission to send students of B.Sc to "Rankbook Learning and Software solutions Pvt. Ltd." for internship.

With request to above mentioned subject I kindly seek your permission to send the below listed students to complete their internship in "Rankbook Learning and Software solutions Pvt. Ltd" in Python for 90 hours from March 2024 to April 2024.

Sl.No	Name	Combination
1	ROHITH N	P/Cs
2	ASHISH RAJ N	P/Cs
3	MAHADEVAPPA R	P/Cs
4	GAVINAYAKA K M	P/Cs
5	MAHADEVA PRASAD M	P/Cs
6	YATHISH K M	P/Cs
7	KIRAN B	P/Cs
8	NAVEEN N V	P/Cs
9	ADARSHA.M	M/CS
10	MAHADEVAPRASAD C P	M/CS
11	MANOJ B L	M/CS
12	PRAKRUTHI A.k	M/CS
13	KHUSHI M	M/CS
14	DEEPASHRI	M/CS

Thanking You,


Date: 28<sup>th</sup> Feb 2024  
Place: Mysuru

Your's Sincerely



H.O.D

Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

  
Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru-570 004





**Sarada Vilas College, Mysuru**

Krishnamurthypuram, Mysore - 570004 Karnataka

Re accredited by NAAC with A grade ( CGPA : 3.19 )



**UNIVERSITY OF MYSORE**

**MYSORE-570005**



**AN INTERNSHIP REPORT ON**

**“PYTHON”**

Submitted to

**UNIVERSITY OF MYSORE, MYSORE**

In the partial fulfillment of the requirement for the award of

**BACHELORE OF SCIENCE IN  
MATHEMATICS & COMPUTER SCIENCE**

Submitted by

**PRAKRUTHI A R U01BG21S0080**



**RANK BOOK LEARNING AND SOFTWARE SOLUTION PVT.LTD**

Saraswathipuram, bake point, mysore.



## **Acknowledgement**

I sincerely express my profound sense of gratitude to the people who have helped me in the successful completion of my internship.

I am thankful to my trainer **Ms. Manasa** for her continuous encouragement throughout the project .

I am thankful to my principle **Dr.Devika M** for giving me the opportunity to work on this project.

I express my immense gratitude to **Mrs.Shilpashree N**, Asst. Prof and Head, Department of Computer Science for her valuable guidance

## **CERTIFICATE OF INTERNSHIP**

**DATE: 22-MAY-2024**

This is to certify that **Ms. Prakruthi A R**, student of **Sarada Vilas College Mysore**, has successfully completed the internship By **RankBook Learning and Software Solutions Pvt. Ltd.** in “**Python**” for 90 hours from **March 2024 to April 2024**.

During the internship program he/she had been exposed to different processes and was found diligent, hardworking and inquisitive.  
We wish him/her success in future endeavors.

*Nagesh M*

**Mr. Nagesh M**

**Internship Head, RankBook**



startupindia

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## 1 INTRODUCTION

My internship at RankBook Learning and Software Solutions Pvt. Ltd. marked a significant milestone in my journey towards becoming a proficient Python developer. Spanning 90 hours, this period offered me a unique opportunity to immerse myself in the practical application of Python programming and web development concepts. This report aims to provide a comprehensive overview of my internship experience, detailing the objectives pursued, projects undertaken, and activities performed during this transformative period.

### 1.1 Objective of the Internship

The primary objective of my internship was to gain hands-on experience in Python development and web application architecture. With a specific focus on exploring the Django framework, I aimed to deepen my understanding of backend development, database management, and MVC architecture. Additionally, I sought to enhance my problem-solving abilities, collaborative skills, and overall proficiency in software development practices.

### 1.2 Projects Undertaken

During the internship, I had the opportunity to work on main projects:

- Data Analysis
- Building GUI Application
- Developing a web Application

### 1.3 Activities Performed

Throughout the internship, I engaged in a variety of activities aimed at enhancing my skills and knowledge in Python development:

- Participated in workshops and training sessions to deepen my understanding of Python programming, web development technologies, and software engineering practices.
- Collaborated with fellow interns and mentors to brainstorm ideas, troubleshoot issues, and iteratively develop solutions for the assigned projects.
- Conducted research and self-study to explore advanced topics in Python development, including best practices, design patterns, and optimization techniques.

## 2 ORGANIZATION PROFILE

### OVERVIEW

I Choose **RankBook Learning and Software Solutions Pvt. Ltd. Mysore** for my internship program because I wanted to gain practical knowledge on **Front End technologies**. I joined **RankBook Learning and Software Solutions Pvt. Ltd. Mysore** to get exposed to the real world of EdTech and software development and to have first-hand experience on the same since I am a student of **Computer Science**. I wanted to know how business firms use digital marketing and what role it plays in the growth and development of business activities.

The firm's headquarters is situated on the Third Floor, Sandesh Arcade, Bake Point Circle, Saraswathi Puram, Mysore, that occupies around 3600 sqft of office premises. It has offices in Hassan, Chikamagalur and Bangalore.

### BACKGROUND

Rankbook is the pioneer in the domain of software training and placement of candidates. Rankbook is founded on the vision of "realization of achievement potential".

RankBook is an organization committed to the Ed-Tech and Job-Tech space. In line with our vision and mission, we aim to empower the lives of students based in Tier-II and Tier-III towns by upskilling in modern technological and entrepreneurial domains and benefit from these programs to become a productive and proactive part of the corporate space. Through rigorous and immersive training along with simulated real-life technical exposure through live projects, we train the candidate to be among the most fulfilled and develop their all- round capability as well.

Rank Book learning and Software Solutions has redefined the process of recruitment to a predictably accurate process with defined parameters for matching job skills of potential candidates with the job profiles of local and international companies. We as a placement agency provide job opportunities for skilled, semi-skilled and unskilled workers.

We are a team of professionals from different domains like Engineering, HR, BFSI, Manufacturing etc. Our services include software development & training, training on Business English, Soft skills etc, and Placement Service

Our focus area has been Tier-2 & Tier-3 cities and rural areas where corporates are yet to reach the untapped potential of trained candidates. So we aim at these target areas and help students of different streams including Engineering, Graduation, Diploma and ITI.

We hope to help the Dreamers Do and achieve their true potential.



## NATURE OF THE BUSINESS

RankBook Operates in the domains of EdTech, SkillTech and JobTech. We are focused on improvement of candidates from tier-II and tier-III and rural places.

The nature of RankBook as an EdTech (Educational Technology), SkillTech and Job-Tech company can vary widely depending on its specific focus, target audience, and the problems it aims to address within the education sector. Here are some common characteristics and areas of focus for EdTech companies:

**Online Learning Platforms:** Many EdTech startups develop platforms for online courses, tutorials, and educational content. These platforms often incorporate features such as video lectures, interactive quizzes, and discussion forums to enhance the learning experience.

**Personalized Learning:** Some companies focus on leveraging technology to personalize learning experiences for students. This may involve adaptive learning algorithms that tailor content and pacing to individual student needs and learning styles.

**Skill Development:** EdTech startups often target specific skill areas, such as coding, language learning, or STEM (Science, Technology, Engineering, and Mathematics) subjects, providing interactive tools and resources to help users develop these skills.

**Education Analytics:** Another area of focus is education analytics, where companies develop tools to collect and analyze data on student performance and engagement. This data can be used to identify areas for improvement, track progress, and inform instructional decisions.

**Virtual Reality (VR) and Augmented Reality (AR):** Some EdTech companies explore the use of VR and AR technologies to create immersive learning experiences. These technologies can simulate real-world environments, allowing students to engage with content in new and interactive ways.

**Teacher Support and Professional Development:** EdTech startups may also develop tools and resources to support teachers in lesson planning, classroom management, and professional development. These can include platforms for sharing lesson plans, collaborative tools for teachers, and online training courses.

**Early Childhood Education:** Some companies focus on providing educational resources and tools for young children, including interactive games, storytelling apps, and multimedia content designed to support early learning and development.

**Education Accessibility:** Accessibility is a crucial focus for many EdTech companies, with efforts to make educational resources and platforms more inclusive for students with disabilities or diverse learning needs.

Overall, the nature of a new EdTech company often revolves around leveraging technology to improve and enhance various aspects of the educational experience, from K-12 and higher education to professional development and lifelong learning.

## VISION

"Help dreamers do". We aim to bridge the gap between academic and industry by providing skill development, management and placement. For realization of true potential.

## MISSION

To Provide skill development and placement services to candidates from tier-2/cities.

## QUALITY POLICY

### Values

Our core values are driven by a desire to improve life, achieve engineering excellence, operate with the highest standards of integrity, expand access to our services and employ a diverse workforce that values collaboration.

### Ethics

Integrity, honesty, and fairness towards our candidates, parents, companies and other stakeholders in matters of content creation, content delivery and output oriented edTech along with financial value for all is our moral compass.

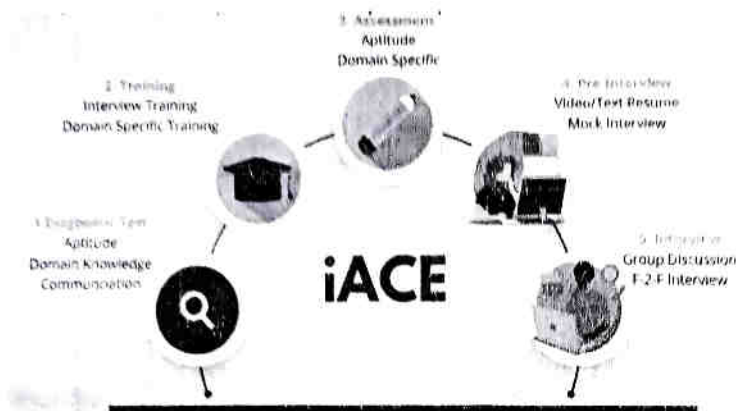
### Quality

There is no shortcut to happiness and quality requires time. Quality does not come cheap or abruptly. But delivering within the stipulated time is our commitment with the best deliverables.

### Innovation

We develop and apply world-class technology. We listen, learn, and seek out the best ideas. We attack complacency and continually improve. Our LMS platform, our Web and Mobile App is best-in-class and used to store and deliver quality content.

## WORKFLOW MODEL (END TO END)



## PRODUCTS / SERVICES PROFILE

### Overview

RankBook is a leading EdTech company dedicated to revolutionizing education through innovative technology solutions. Our mission is to empower learners, educators, and institutions worldwide by providing cutting-edge tools and resources to enhance the teaching and learning experience.





## SERVICES

1. **Learning Management System (LMS):** Our comprehensive Learning Management System offers a centralized platform for schools, universities, and corporate training programs to manage courses, deliver content, track progress, and facilitate communication between students and instructors.
2. **Interactive Courseware:** We develop engaging and interactive digital courseware across various subjects and grade levels. Our courseware integrates multimedia elements, simulations, and assessments to create immersive learning experiences that cater to diverse learning styles.
3. **Virtual Classroom Solutions:** RankBook offers virtual classroom solutions that enable real-time collaboration and interaction between teachers and students, regardless of geographical barriers. Our platform supports live video conferencing, chat functionalities, screen sharing, and whiteboarding tools for interactive lessons.
4. **Adaptive Learning Technologies:** Leveraging the power of our LMS and Test Platform, our adaptive learning technologies personalize the learning journey for each student. Through data-driven insights and algorithms, we dynamically adjust course content and pacing to meet the unique needs and proficiency levels of individual learners.
5. **Assessment and Analytics:** Our assessment tools provide educators with powerful insights into student performance and comprehension. From formative assessments to summative evaluations, RankBook offers customizable assessment options along with detailed analytics to track progress, identify areas for improvement, and inform instructional decisions.
6. **Professional Development Resources:** We offer professional development resources and training modules for educators to enhance their teaching practices and leverage technology effectively in the classroom. Our workshops, webinars, and certification programs cover topics such as digital pedagogy, instructional design, and educational technology integration.
7. **Parental Engagement Platform:** RankBook recognizes the importance of parental involvement in supporting student learning. Our parental engagement platform facilitates communication between parents and teachers, provides access to student progress reports, and offers resources for at-home reinforcement of learning concepts.

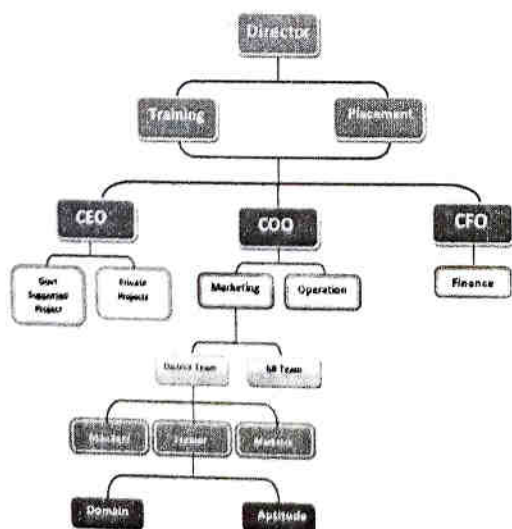
## KEY FEATURES

- User-friendly interfaces for seamless navigation and usability.
- Customization options to tailor solutions to the specific needs of educational institutions.
- Mobile compatibility for anytime, anywhere access to learning resources.
- Robust security measures to safeguard sensitive data and ensure user privacy.
- Ongoing customer support and professional development opportunities for users.

## CLIENTELE

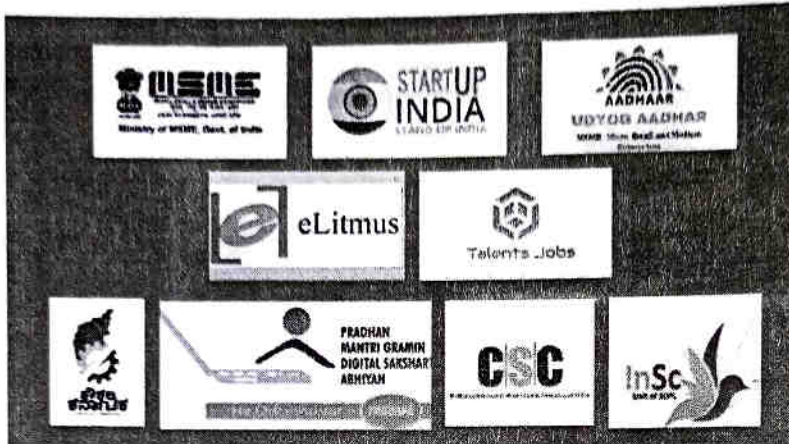
- K-12 schools
- Higher education institutions
- Corporate training programs
- Government agencies
- Non-profit organization

## ORGANIZATION STRUCTURE



## ACHIEVEMENT/AWARDS

RankBook has been receiving accolades and partnerships from clientele and corporations.



## FUTURE GROWTH AND PROSPECTS

The future growth and prospects of a Rankbook as a SkillTech company is quite promising, given the increasing demand for upskilling and reskilling in today's rapidly evolving job market. Here are some factors that contribute to the potential growth and prospects of a SkillTech company:

1. **Rising Demand for Skills:** With the advent of automation, AI, and other technological advancements, the skills required in the workforce are constantly evolving. SkillTech companies can capitalize on this by providing relevant and up-to-date training programs to individuals and businesses seeking to acquire new skills or upgrade existing ones.
2. **Lifelong Learning Trend:** There's a growing recognition of the need for lifelong learning to stay competitive in the job market. SkillTech companies can cater to this trend by offering flexible and accessible learning solutions that allow individuals to acquire new skills at their own pace and convenience.
3. **Corporate Training Market:** Businesses are increasingly investing in employee training and development to enhance productivity, innovation, and employee retention. SkillTech companies can tap into this market by offering customized training solutions tailored to the specific needs of organizations across various industries.
4. **Remote Work and Online Learning:** The shift towards remote work and online learning, accelerated by the COVID-19 pandemic, has created a significant opportunity for SkillTech companies. These companies can leverage technology to



deliver high-quality training and education remotely, reaching a global audience without the constraints of physical location.

5. **Technology Integration:** SkillTech companies can differentiate themselves by leveraging emerging technologies such as artificial intelligence, augmented reality, and virtual reality to create immersive and interactive learning experiences. These technologies can enhance engagement, retention, and the effectiveness of training programs.
6. **Partnerships and Collaborations:** Collaborating with educational institutions, corporations, and industry partners can help SkillTech companies expand their reach, access new markets, and stay abreast of industry trends and demands.
7. **Continuous Innovation:** In a fast-paced and dynamic industry, continuous innovation is crucial for staying ahead of the competition. SkillTech companies that invest in research and development to develop cutting-edge learning solutions and adapt to evolving market needs are likely to experience sustained growth.

Overall, the future prospects for a RankBook as a SkillTech company appear promising, driven by the increasing demand for skills development in the workforce, the growing importance of lifelong learning, and the opportunities presented by technological advancements and changing work dynamics.

## 3 WEEKLY OVERVIEW OF INTERNSHIP ACTIVITIES

1 <sup>st</sup> WEEK	DATE	NAME OF THE TOPIC/MODULE COMPLETED
	11-03-24	Introduction to Python syntax and variables.
	11-03-24	Introduction to Python Data types and Operators.
	12-03-24	Python Conditions and If statements, While and For Loops.
	12-03-24	Data structures: Lists, Tuples.
	13-03-24	Data structures: Set, Dictionary.
	13-03-24	Basic Programs in Python.

2 <sup>nd</sup> WEEK	DATE	NAME OF THE TOPIC/MODULE COMPLETED
	25-03-24	Python Functions, Modules, Scope.
	26-03-24	Python Math, Dates, Json, PIP.
	26-03-24	Python User Input and File Handling.
	27-03-24	Introduction to NumPy, Random and ufunctions.
	01-04-24	Introduction to Pandas and Seaborn.
	02-04-24	Python Matplotlib library.

<b>3rd WEEK</b>	DATE	NAME OF THE TOPIC/MODULE COMPLETED
	08-04-24	Introduction to Data Analysis and Quiz.
	15-04-24	Mini Project on Data Analysis.
	16-04-24	Introduction to Tkinter.
	17-04-24	Explanation on Tkinter widgets and Images.
	22-04-24	Tkinter Advance.
	23-04-24	Application on Tkinter (Mini projects): Building Simple GUI Calculator. A GUI to shut down, Restart, and Logout from PC.

<b>4th WEEK</b>	DATE	NAME OF THE TOPIC/MODULE COMPLETED
	24-04-24	Image Encryption and Decryption using Tkinter.
	24-04-24	Introduction to Flask.
		Mini Project on Flask.



## 4 MINI – PROJECT

During their tenure at RankBook Learning and Software Solutions Pvt. Ltd, interns were immersed in a multifaceted learning experience that extended beyond the confines of their primary projects. Recognizing the importance of practical application and continuous skill enhancement, interns were encouraged to undertake additional modules and mini projects to broaden their horizons in software development.

Engaging in mini projects is a fantastic way to solidify your Python knowledge. These projects act as practical exercises that take you beyond memorization and into real-world application. By working on mini projects, you'll learn by doing experiment with libraries and functions, and gain valuable experience troubleshooting errors. Completing these projects also provides a confidence boost and a portfolio piece to showcase your skills. The beauty of mini-projects is their accessibility - they're smaller, less time-consuming, and perfect for beginners. You can find or create projects that match your current skill level and gradually increase the complexity as you progress, making Python learning enjoyable and rewarding.

One significant endeavor undertaken by interns was the Data Analysis and Building GUI Application. The mini-project provides valuable insights into user listening habits, popular genres, and artist trends based on Spotify data analysis. It demonstrates the potential of data-driven approaches to understand music consumption patterns and inform personalized recommendations.

Tkinter provides a powerful and beginner-friendly way to build graphical user interfaces (GUIs) for Python applications. With just a few lines of code, you can create a window, add interactive elements like buttons and text boxes, and arrange them to suit your application's needs. Tkinter uses layout managers to position the elements, and you can define functions to handle user interactions with the GUI elements. This makes Tkinter a great tool for prototyping GUIs or building simple user-friendly applications. Building a calculator GUI application with Tkinter lets you create a user-friendly interface for performing calculations.

## **4.1 Spotify Data Analysis using NumPy, Pandas and Matplotlib**

During my internship at RankBook Learning and Software Solutions Pvt. Ltd, I had the opportunity to work on various projects aimed at enhancing my skills in python. One of the notable projects I undertook was the Data Analysis using various python Libraries. This project provided me with valuable hands-on experience in analyzing data and to know more about libraries in python.

### **4.1.2 Project Overview:**

Analyzing Spotify data offers a wealth of insights into music consumption patterns, user preferences, and industry trends. By delving into user behavior, analysts can uncover peak listening times, favored genres, and popular playlists, informing strategies for both artists and advertisers. Moreover, tracking streaming numbers enables artists to gauge their audience's engagement, identify which songs resonate most, and refine their marketing efforts accordingly.

### **4.1.3 Objective:**

The objective of analyzing the Spotify dataset is to examine the data thoroughly and give the best driven outputs. Below are the following objectives which are aimed to achieve:

- The objective for data analytics is to derive meaningful and actionable insights that can be used to enhance various aspects of the Spotify platform.
- To augment the user experience.
- To escalate the business operations.

### **4.1.4 Tools and Libraries Used:**

**Jupyter Notebook:** Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations, and narrative text.

Why Jupyter Notebook?

1. Interactive Computing: Jupyter Notebook allows for an interactive computing environment where you can run code cells one at a time.

2. **Narrative and Documentation:** It supports Markdown cells, enabling you to add narrative text, explanations, equations, and documentation alongside your code.
3. **Visualization:** Jupyter Notebook integrates seamlessly with data visualization libraries like Matplotlib, Seaborn, and Pyplot, making it easy to create and display charts, graphs, and other visualizations within the notebook.
4. **Multi-Language Support:** While it's widely used for Python, Jupyter Notebook also supports other programming languages like R and Julia.
5. **Data Exploration:** You can load datasets, manipulate data, and visualize results in real time, allowing for a deep understanding of your data.

**NumPy:** NumPy is a fundamental library for scientific computing in Python. You can use NumPy to perform numerical computations and manipulate arrays efficiently. In Spotify data analysis, NumPy can be used for tasks like data manipulation, mathematical operations, and array-based computations.

**Pandas:** Pandas is a powerful library for data manipulation and analysis. It provides data structures like Data Frame and Series, which are well-suited for handling structured data. In Spotify data analysis, you can use Pandas to load Spotify datasets, clean and preprocess the data, perform exploratory data analysis, and manipulate datasets for further analysis.

**Matplotlib:** Matplotlib is a popular plotting library in Python. It provides a wide range of functionalities for creating static, interactive, and publication-quality plots. In Spotify data analysis, you can use Matplotlib to visualize various aspects of the data, such as distribution of streaming counts, time series of listening habits, and geographic patterns of music preferences.

**Seaborn:** Seaborn is a statistical data visualization library built on top of Matplotlib. It provides a high-level interface for creating attractive and informative statistical graphics. In Spotify data analysis, you can use Seaborn to create more complex and visually appealing plots, such as heatmaps, pair plots, and categorical plots, to gain deeper insights into the data.



### 4.1.5 Execution steps and Result analysis

#### 1. Collecting Data sets:

You can collect the datasets from open sources. Here we collected datasets from Kaggle website.

<https://www.kaggle.com/datasets/geomack/spotifyclassification>

#### 2. Importing Libraries:

We've imported four libraries for analyzing the dataset i.e., NumPy, Pandas, Matplotlib and Seaborn. NumPy used for numerical computations. Pandas are used for manipulation of data. And, finally Seaborn & Matplotlib used for visualization purpose.

*#Importing necessary Libraries for Data Manipulation & Visualization*

```
import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
```

#### 3. Loading Data Set:

We've used `read_csv()` function from Pandas library to load the dataset into the program. Loading the data is an important step before starting the analysis, dataset is the source of this exploratory data analysis.

*#Loading datasets for analysis of Tracks*

```
df_tracks = pd.read_csv('features.csv', encoding='cp1252')
df_tracks.head()
```

## RANKBOOK LEARNING

Output:

	genre	artist_name	track_name	track_id	popularity	acousticness	danceability	duration_ms	energy	instrumentalness	key	liveness
0	Movie	Henri Salvador	C'est Beau de faire un Show	0BRQ06ga9RACKyDlgefgWV	0	0.611	0.389	59373	0.910	0.000	C#	0.3465
1	Movie	Martin & les tées	Pierdu d'avance (par God Emakleh)	0BRyC1NwEOOusyehmKudP	1	0.246	0.580	137373	0.737	0.000	F#	0.1510
2	Movie	Joseph Williams	Don't Let Me Be Lonely Tonight	0CoSDzoNlKGRs124s9uTVy	3	0.952	0.663	170267	0.131	0.000	C	0.1030
3	Movie	Henri Salvador	Dis-moi Monsieur Gordon Cooper	0GedTVms2BwZ007K6mVt	0	0.703	0.240	152427	0.326	0.000	C#	0.0985
4	Movie	Fabien Natal	Ouverture	0lus8pMROH4EPvSHITQK	4	0.950	0.334	82625	0.225	0.123	F	0.2020

## 4. Analyzing the Dataset:

We've used `info()` function to know the datatype, no. of columns memory usage of dataset in the program.

*#Viewing no. of rows & columns and also checking whether they are null or not*  
`df_tracks.info()`

Output:

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 232725 entries, 0 to 232724
Data columns (total 18 columns):
#   Column                Non-Null Count  Dtype
---  ---
0   genre                  232725 non-null object
1   artist_name            232725 non-null object
2   track_name             232725 non-null object
3   track_id               232725 non-null object
4   popularity              232725 non-null int64
5   acousticness            232725 non-null float64
6   danceability            232725 non-null float64
7   duration_ms            232725 non-null int64
8   energy                  232725 non-null float64
9   instrumentalness        232725 non-null float64
10  key                     232725 non-null object
11  liveness                232725 non-null float64
12  loudness                232725 non-null float64
13  mode                    232725 non-null object
14  speechiness            232725 non-null float64
15  tempo                   232725 non-null float64
16  time_signature          232725 non-null object
17  valence                 232725 non-null float64
dtypes: float64(9), int64(2), object(7)
memory usage: 32.0+ MB
```

## 5.Sorting According to the Metrics:

We've used sort values () function, in which we pass the parameter popularity and ascending = True, so that sorting would be done in ascending order.

*#Sorting: Least Popular Songs on spotify*

```
sorted_df = df_tracks.sort_values('popularity', ascending = True).head(10)
sorted_df
```

Output:

	genre	artist_name	track_name	track_id	popularity	acousticness	danceability	duration_ms	energy	instrumentalness	key	liv
0	Movie	Henn Salvador	C'est beau de faire un Show	0BRj08ga9RKCkQDqefpVW	0	0.5110	0.389	99373	0.9100	0.000000	C#	f
74954	Children's Music	Sing n Play	See, See My Playmate	3WaCwvpGoxLEkFm06cpZO5	0	0.1390	0.558	160487	0.4390	0.006400	D	f
74956	Children's Music	Children Songs Company	By the God Instrumental	5yDehr9ccZ63vBO8hZXFcK	0	0.2130	0.736	212547	0.4480	0.821000	D	f
74959	Children's Music	Children Songs Company	Interruption Please - Instrumental	6NEULw7AmTOAYRunPWcFm	0	0.0131	0.639	184000	0.8440	0.085700	A#	f
74961	Children's Music	Children Songs Company	Breeze	6v128eNn1A79yFIKGvqLz	0	0.0280	0.607	147653	0.5540	0.000000	A	f
74962	Children's Music	Children Songs Company	Woodland	7qR2PWbDeuhh1Vzd0anb25	0	0.9950	0.529	266067	0.1540	0.414000	B	f
74963	Children's Music	Children Songs Company	Cool Me - Instrumental	0v3O8RYUailKTJvg4KCST	0	0.2500	0.623	350080	0.4710	0.931000	A#	f
74964	Children's Music	Sing n Play	The Tortoise and the Hare	0cX193r5y87RipaZnH8Pq	0	0.4960	0.563	201382	0.3480	0.000000	D	f
86153	Movie	Bruno Pelletier	Lié par le sang	3G0GWe14FvMxvOKE4LHq	0	0.0294	0.656	278027	0.6940	0.000017	A	f
74966	Children's Music	Children Songs Company	Forsaken	1fRNu87x1qvxiUsEXXy9k	0	0.9640	0.429	120387	0.0382	0.000000	B	f

## 6. Applying Descriptive Statistics:

We've used describe () function to get the descriptive statistics of the data that is present in dataset. It returns values like Mean, Standard Deviation, Minimum, Maximum etc.

*#Applying descriptive statistics on dataset*

```
df_tracks.describe().transpose()
```



Output:

	count	mean	std	min	20%	50%	75%	max
popularity	232725.0	41.127502	18.189948	0.00000	20.0000	43.000000	55.0000	100.000
acousticness	232725.0	0.368660	0.354768	0.00000	0.0375	0.232000	0.7220	0.996
danceability	232725.0	0.654364	0.185608	0.05090	0.4350	0.571000	0.6920	0.989
duration_ms	232725.0	235422.339306	118935.909289	15387.00000	182857.0000	220427.000000	265788.0000	5552917.000
energy	232725.0	0.570958	0.263460	0.00002	0.3950	0.605000	0.7870	0.999
instrumentalness	232725.0	0.148301	0.302708	0.00000	0.0000	0.000044	0.0358	0.999
liveness	232725.0	0.215009	0.108273	0.00887	0.0974	0.128000	0.2640	1.000
loudness	232725.0	-9.569885	5.998204	-52.45700	-11.7710	-7.762000	-5.5010	3.744
speechiness	232725.0	0.120765	0.185518	0.02220	0.0367	0.050100	0.1050	0.987
tempo	232725.0	117.666585	30.898907	30.37900	82.9590	115.778000	139.0540	242.903
valence	232725.0	0.454917	0.280065	0.00000	0.2370	0.444000	0.6800	1.000

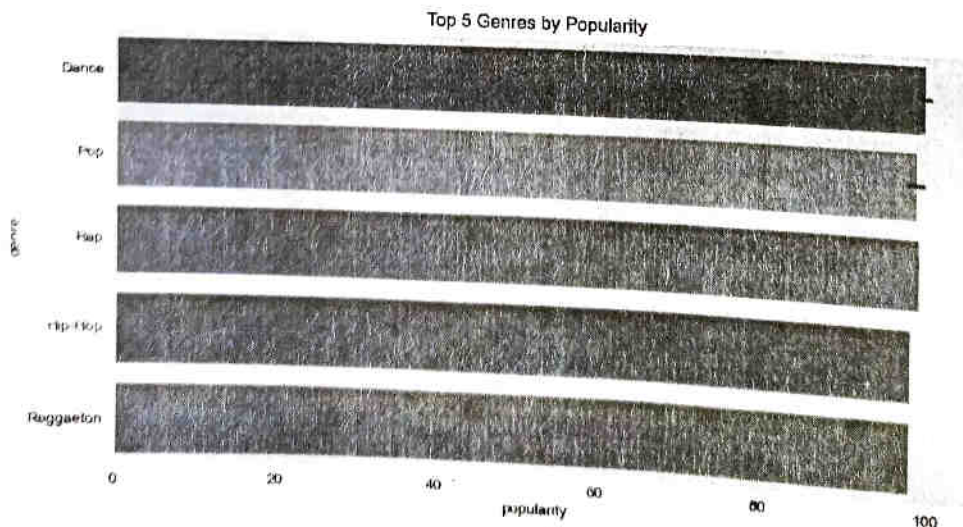
## 7. Bar Plot:

We've used `barplot()` function from the Seaborn library to visualize the correlation between Genres & Popularity parameter of the dataset.

# Plotting: Bar Plot between Popularity & Genres (out of Top 10 in Dataset)

```
sns.set_style(style="darkgrid")
plt.figure(figsize=(10,5))
famous = df_genre.sort_values("popularity", ascending=False).head(10)
sns.barplot(y="genre", x="popularity", data=famous).set(title="Top 5 Genres by Popularity")
```

Output:



## 4.2 Building Simple GUI Calculator using Tkinter

Python offers multiple options for developing a GUI (Graphical User Interface). Out of all the GUI methods, Tkinter is the most used method. It is a standard Python interface to the Tk GUI toolkit shipped with Python. Python with Tkinter outputs the fastest and easiest way to create GUI applications. Creating a GUI using Tkinter is an easy task.

To create a Tkinter:

Importing the module – tkinter

Create the main window (container)

Add any number of widgets to the main window.

Apply the event Trigger on the widgets.

### 4.2.1 Code snippet:

```

1 # Python program to create a simple GUI
2 # calculator using Tkinter
3
4 # Import everything from tkinter module
5 from tkinter import *
6
7 # globally declare the expression variable
8 expression = ""
9
10 # function to update expression
11 # in the text entry box
12 def press(num):
13     # point out the global expression variable
14     global expression
15
16     # concatenation of string
17     expression = expression + str(num)
18
19     # update the expression by using set method
20     equation.set(expression)
21
22
23 # function to evaluate the final expression
24 def equalpress():
25     # try and except statement is used
26     # for handling the errors like zero
27     # division error etc.
28
29     # Put that code inside the try block
30     # so that any error generated is
31     # handled
32     try:
33         global expression
34
35         # eval function evaluate the expression
36         # and str function convert the result
37         # into string
38         total = str(eval(expression))
39
40         equation.set(total)
41
42         # initialize the expression variable
43         # to empty string
44         expression = ""
45
46     # if error is generated then handle
47     # by the except block
48

```

```

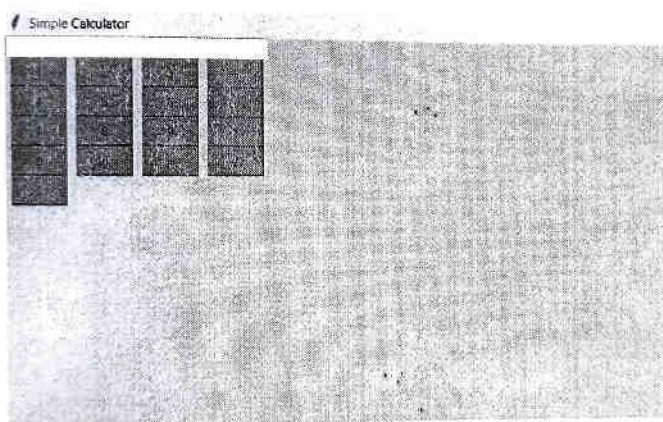
47 # This is to generate root window
48 # In the except block
49 except:
50
51     equation.set("error!")
52     expression = ""
53
54 # This is to add the contents
55 # of text entry box
56 def clear():
57     global expression
58     expression = ""
59     equation.set("")
60
61 # This is to create
62 if __name__ == "__main__":
63     # create a GUI window
64     gui = Tk()
65
66     # set the background colour of GUI window
67     gui.configure(background="light green")
68
69     # set the title of GUI window
70     gui.title("Simple Calculator")
71
72     # set the configuration of GUI window
73     gui.geometry("270x150")
74
75     # StringVar() is the variable class
76     # to create an instance of this class
77     equation = StringVar()
78
79     # create the text entry box for
80     # showing the expression
81     expression_field = Entry(gui, textvariable=equation)
82
83     # grid method is used for placing
84     # the widgets at respective positions
85     # in table like structure
86     expression_field.grid(columnspan=4, ipadx=70)
87
88     # create 8 buttons and place at a particular
89     # location inside the root window
90     # when user press the button, the command or
91     # function affiliated to that button is executed
92
93
94 button1 = Button(gui, text='1', fg='black', bg='red',
95                 command=lambda: press(1), height=1, width=7)
96 button1.grid(row=2, column=0)
97
98 button2 = Button(gui, text='2', fg='black', bg='red',
99                 command=lambda: press(2), height=1, width=7)
100 button2.grid(row=2, column=1)
101
102 button3 = Button(gui, text='3', fg='black', bg='red',
103                 command=lambda: press(3), height=1, width=7)
104 button3.grid(row=2, column=2)
105
106 button4 = Button(gui, text='4', fg='black', bg='red',
107                 command=lambda: press(4), height=1, width=7)
108 button4.grid(row=3, column=0)
109
110 button5 = Button(gui, text='5', fg='black', bg='red',
111                 command=lambda: press(5), height=1, width=7)
112 button5.grid(row=3, column=1)
113
114 button6 = Button(gui, text='6', fg='black', bg='red',
115                 command=lambda: press(6), height=1, width=7)
116 button6.grid(row=3, column=2)
117
118 button7 = Button(gui, text='7', fg='black', bg='red',
119                 command=lambda: press(7), height=1, width=7)
120 button7.grid(row=4, column=0)
121
122 button8 = Button(gui, text='8', fg='black', bg='red',
123                 command=lambda: press(8), height=1, width=7)
124 button8.grid(row=4, column=1)
125
126 button9 = Button(gui, text='9', fg='black', bg='red',
127                 command=lambda: press(9), height=1, width=7)
128 button9.grid(row=4, column=2)
129
130 button0 = Button(gui, text='0', fg='black', bg='red',
131                 command=lambda: press(0), height=1, width=7)
132 button0.grid(row=5, column=0)
133
134 plus = Button(gui, text='+', fg='black', bg='red',
135               command=lambda: press('+'), height=1, width=7)
136 plus.grid(row=5, column=3)
137
138 minus = Button(gui, text='-', fg='black', bg='red',
139                command=lambda: press('-'), height=1, width=7)
140 minus.grid(row=5, column=3)

```



```
143 multiply = Button(gui, text='*', fg='black', bg='red',  
144                     command=lambda: press('*'), height=1, width=7)  
145 multiply.grid(row=3, column=1)  
146 divide = Button(gui, text='/', fg='black', bg='red',  
147                     command=lambda: press('/'), height=1, width=7)  
148 divide.grid(row=3, column=1)  
149 equal = Button(gui, text='=', fg='black', bg='red',  
150                     command=equalpress, height=1, width=7)  
151 equal.grid(row=3, column=2)  
152 clear = Button(gui, text='clear', fg='black', bg='red',  
153                     command=clear, height=1, width=7)  
154 clear.grid(row=3, column=1)  
155 Decimal = Button(gui, text='.', fg='black', bg='red',  
156                     command=lambda: press('.'), height=1, width=7)  
157 Decimal.grid(row=3, column=0)  
158 # start the gui  
159 gui.mainloop()
```

### Output:



## **CERTIFICATE OF INTERNSHIP**

DATE: 22-MAY-2024

This is to certify that **Mr. Mahadevappa R**, student of **Sarada Vilas College Mysore**, has successfully completed the internship By **RankBook Learning and Software Solutions Pvt. Ltd.** in “ **Python**” for 90 hours from **March 2024 to April 2024**.

During the internship program he/she had been exposed to different processes and was found diligent, hardworking and inquisitive.  
We wish him/her success in future endeavors.

**YOUR GATEWAY TO SUCCESS**

**Be the Jashnah**

*Nagesh. M*

**Mr. Nagesh M**

**Internship Head, RankBook**



## **CERTIFICATE OF INTERNSHIP**

DATE: 22-MAY-2024

This is to certify that **Mr. Sagar R M**, student of **Sarada Vilas College Mysore**, has successfully completed the internship By **RankBook Learning and Software Solutions Pvt. Ltd.** in “**Python**” for 90 hours from **March 2024 to April 2024**.

During the internship program he/she had been exposed to different processes and was found diligent, hardworking and inquisitive.  
We wish him/her success in future endeavors.

**YOUR GATEWAY TO SUCCESS**

**Be the Jashnah**

*Nagesh. M*

**Mr. Nagesh M**

**Internship Head, RankBook**





From,  
Shilpashree N  
Assistant Professor and Head  
Department of Computer Science  
Sarada Vilas College Mysuru

To,  
The Principal  
Sarada Vilas College  
Mysuru

Respected Madam,

Sub: Seeking permission to send students of B.Sc(Hon's) for internship.

With request to above mentioned subject, I kindly seek your permission to send the B.Sc(Hon's) students to complete their internship.

Thanking You,

Date: 13<sup>th</sup> Feb 2024

Place: Mysuru

Your's Sincerely



**H.O.D**

Department of Computer Science  
Sarada Vilas College  
Mysore-570 004



**Dr. M Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College  
Krishnamurthy Nagar



**Sarada Vilas College, Mysuru**



# **AUTOMATED INTERVIEW PROCESS**

**A Internship Report**

**SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR**

**THE AWARD OF THE DEGREE**

**Of**

**B.Sc (Hon's)**

**in**

**Data Science and Artificial Intelligence**

**Submitted By –**

**Swaroop C (RBSD2031)**

**Under the Guidance of**

**Mr. MALLIKARJUNA G D**

**Senior Consultant**

**SNIPE TECH PVT LTD**

**#123, 70<sup>TH</sup> Cross, 2<sup>ND</sup> Floor, SVA Arcade, 5<sup>TH</sup> Block, Rajaji Nagara,  
Bengaluru-560010, Karnataka, India**

**2023-24**



**SNIPE TECH**  
**PRIVATE LIMITED**

29<sup>th</sup> March, 2024  
Bengaluru-10

INTERNSHIP COMPLETION LETTER

Swaroop C  
RBSD2031  
Sarada Vilas Education Institution  
3<sup>rd</sup> Cross Road, Krishnamurthy puram  
Mysuru-570004

Dear Swaroop,

Congratulations!

You have successfully completed Internship as a **Research Trainee Intern** in our Organization. As a result, you have earned professional knowledge into **Machine Learning, Python, Artificial Intelligence, Data Science and NLP** under the guidance of Mr. Mallikarjuna G D, Senior Consultant, during the period 3<sup>rd</sup> October, 2023 to 29<sup>th</sup> March, 2024.

During the period of his course program with us, he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We wish you every success in your life and career.

We Wish You All The Best.

Authorized Signatory



## ACKNOWLEDGEMENT

I would like to extend my heartfelt gratitude to all those who have been instrumental in making my project internship a rewarding and enriching experience.

First and foremost, we would like to express my sincere appreciation to my internship supervisor, Mr. Mallikarjuna G D for their invaluable guidance, mentorship, and unwavering support throughout this project. Your expertise, patience, and encouragement have been instrumental in shaping my understanding of “ Automatic Question Generation”, “ Web Scrapping”, and “Performance measure”.

And also thankful to the entire team for providing me with the opportunity to be a part of this dynamic and innovative environment. The exposure to real-world challenges and the collaborative atmosphere have been truly enlightening.

I extend my thanks to my colleagues and fellow interns for their camaraderie, assistance, and shared learning experiences. Your insights and teamwork have made this journey all the more fulfilling.

Lastly, I would like to acknowledge the support of my family and friends for their encouragement and belief in my abilities.

Date:

Place: Mysore

-Swaroop C

## **Executive Summary:**

This report provides a comprehensive overview of my internship at [Organization Name], where I focused on three main projects: Automatic Question Generation, Web Scraping, and Performance Tracking. Over the course of my internship, I engaged in various tasks that honed my technical and professional skills. This report highlights these tasks, the skills I acquired, the challenges I faced, and my overall contributions to the organization.

During my internship, I was tasked with developing a system for automatic question generation, creating efficient web scraping scripts to gather necessary data, and implementing a performance tracking system to monitor and analyze key performance indicators (KPIs). Each of these projects required a blend of theoretical knowledge and practical application, allowing me to enhance my understanding and capabilities in these areas.

## **Introduction :**

Snipe Tech is a prominent player in the technology industry, with a strong reputation for innovation, quality, and excellence. Founded in 2009, the company has steadily grown to become a leader in its field, offering a wide range of products and services that cater to diverse market needs. Over the years, Snipe Tech has built a reputation for leveraging cutting-edge technology and a talented workforce to deliver exceptional solutions to its clients.

Snipe Tech operates through several key departments, including Research and Development, IT, Marketing, and Data Analytics. Each department plays a crucial role in achieving the company's strategic goals. I was placed as a Research Trainee Intern in the Data Analytics department. This department is particularly vital as it provides actionable insights that drive decision-making processes across the organization. It focuses on analyzing large datasets to identify trends, optimize operations, and enhance overall business performance.

## **Objective :**

The primary objective of my internship was to engage in three critical projects: Automatic Question Generation, Web Scraping, and Performance Measurement. These projects were aligned with the company's goals to improve efficiency, automate processes, and enhance data-driven decision-making. My role was to apply theoretical knowledge in a practical setting, contributing to these projects while also gaining valuable industry experience.

**1. Automatic Question Generation:** Develop a system capable of generating relevant and contextually appropriate questions from textual data. This project aimed to reduce the manual effort required in educational content creation and improve the quality of generated questions.

**2. Web Scraping:** Create efficient web scraping scripts to gather data from various websites. This data would be used for market analysis, helping the company to understand market trends and customer behavior.



**3. Performance Measurement:** Implement a system for measuring and visualizing key performance indicators (KPIs). The goal was to provide real-time insights into the company's operations, aiding in strategic planning and performance optimization.

Throughout the internship, I had the opportunity to work with advanced tools and technologies such as Python, BeautifulSoup, Selenium, Tableau, and Power BI. This hands-on experience allowed me to apply my academic knowledge in real-world scenarios, develop new technical skills, and gain insights into industry best practices. The internship not only enhanced my technical proficiency but also improved my problem-solving abilities, communication skills, and teamwork capabilities.

By the end of the internship, I had successfully contributed to the completion of the three projects, providing valuable solutions that aligned with Snipe Tech's strategic objectives. This report details my journey, the methodologies employed, the challenges faced, and the outcomes achieved during this enriching experience.

This report details my journey, the methodologies employed, the challenges faced, and the outcomes achieved during this enriching experience. It provides a thorough account of how I applied my academic knowledge in real-world scenarios, developed new technical skills, and contributed to Snipe Tech's strategic objectives. The internship not only enhanced my technical proficiency but also provided valuable insights into industry best practices and professional growth.

## **Company Profile :**

SNIPE TECH PVT LTD Company formerly known as SNIPE IT SOLUTIONS established in 2009 is a pioneer in providing world Class Consulting Services in Enterprise Solutions for the Technology Solutions covering Embedded Systems and System Software to its Global Clientele.

Snipe Tech, is a professional, who provides expert advice in a particular domain or area of expertise such as IT.

SNIPE Tech is a Company known for various services such as Software Development, corporate training and for Hardware and Networking solutions. This is Indian based company stationed at Bengaluru.

It was established by Govindappa P D, who is a proprietor and well known for various administrative services having experience of 25 years.

## **Description of Internship :**

### **Internship Placement and Period:**

I was placed as a Research Trainee Intern in the Artificial Intelligence (AI) department at Snipe Tech. The internship period spanned from 3rd October, 2023 to 29th March 2024, during which I had the opportunity to immerse myself in various AI-driven projects and initiatives. This placement was crucial in providing me with a platform to apply my academic knowledge to real-world scenarios, thereby enhancing my technical and professional skills.



## **Tasks and Responsibilities:**

During my internship, I was entrusted with several key tasks and responsibilities that were integral to the success of the projects assigned to me. These included:

### **Automatic Question Generation:**

**Objective:** Develop a system capable of generating relevant and contextually appropriate questions from textual data.

**Responsibilities:** Research existing methodologies in natural language processing (NLP) and machine learning, design algorithms for question generation, implement and test the system, and refine the model based on feedback and performance metrics.

### **Web Scraping:**

**Objective:** Create efficient web scraping scripts to gather data from various websites for market analysis.

**Responsibilities:** Identify target websites, design and implement web scraping scripts using Python and tools like BeautifulSoup and Selenium, ensure data integrity and accuracy, and preprocess the collected data for analysis.

### **Performance Measurement:**

**Objective:** Implement a system for measuring and visualizing key performance indicators (KPIs) to provide real-time insights into the company's operations.

**Responsibilities:** Define relevant KPIs in collaboration with stakeholders, design and develop interactive dashboards using Tableau and Power BI, integrate data sources, and ensure the dashboards provide actionable insights.

### **Work Environment:**

The work environment at Snipe Tech was highly collaborative and conducive to learning and innovation. I was part of a dynamic team of professionals who were always willing to share their knowledge and provide guidance. The AI department fostered a culture of continuous improvement and encouraged creative problem-solving. I had access to state-of-the-art tools and technologies, which were essential for the successful execution of my projects.

### **Training and Development:**

Snipe Tech provided comprehensive training sessions that were instrumental in my professional development. These sessions covered various topics, including:

**Machine Learning and Artificial Intelligence:** Advanced techniques and best practices in developing and deploying machine learning models.

**Natural Language Processing (NLP):** In-depth understanding of NLP methodologies and their applications in question generation.

**Web Scraping Techniques:** Best practices for efficient and ethical web scraping, handling dynamic content, and ensuring data quality.

**Data Visualization:** Hands-on training in using Tableau and Power BI for creating interactive and insightful dashboards.

In addition to formal training sessions, I had the opportunity to participate in workshops and seminars conducted by industry experts. These events provided valuable insights into the latest trends and advancements in AI and data analytics.

### **Mentorship and Support:**

Throughout the internship, I received continuous support and mentorship from my supervisor and team members. Regular feedback sessions helped me stay on track and improve my performance. The collaborative environment and open communication channels made it easy to seek help and share ideas, contributing significantly to my learning experience.

### **Key Learnings and Outcomes:**

By the end of the internship, I had developed a strong foundation in AI and data analytics. I successfully completed the three main projects, which provided valuable solutions that aligned with Snipe Tech's strategic objectives. The internship experience not only enhanced my technical proficiency but also improved my problem-solving abilities, communication skills, and teamwork capabilities.

In summary, my internship at Snipe Tech was an enriching experience that provided me with the opportunity to work on meaningful projects, gain hands-on experience with advanced technologies, and develop skills that are crucial for my future career in AI and data analytics.

## **Projects and Assignments :**

### **1. Automatic Question Generation :**

The project aimed to develop a system capable of generating relevant questions from given text data.

#### **Contributions:**

- Designed algorithms to identify key sentences and generate corresponding questions.
- Implemented the system using Python and various NLP libraries like NLTK and SpaCy.
- Evaluated the system's performance and made iterative improvements.

#### **Outcomes:**

Successfully developed a system that generated relevant and contextually appropriate questions, significantly reducing the manual effort required in educational content creation.

### **2. Web Scraping :**

The project involved developing scripts to scrape data from multiple websites for market analysis purposes.

#### **Contributions:**

- Used BeautifulSoup and Selenium to scrape data efficiently.
- Handled dynamic content and ensured data accuracy.



- Cleaned and processed the scraped data for further analysis.

#### **Outcomes:**

Collected and processed large datasets that provided valuable insights into market trends and customer behaviors.

### **3.Performance Measurement**

The goal was to create a system for measuring and visualizing performance metrics.

#### **Contributions:**

- Developed interactive dashboards using data visualization tools such as Tableau and Power BI.
- Automated reporting processes to ensure real-time measurement of KPIs.
- Analyzed data to provide actionable insights.

#### **Outcomes:**

Enhanced the ability to measure and analyze performance metrics, leading to more informed decision-making and improved operational efficiency.

### **Skills and Knowledge Acquired :**

#### **Technical Skills:**

1. Advanced Python programming
2. Natural Language Processing (NLP)
3. Web Scraping techniques
4. Data Visualization and Dashboard Creation
5. Machine Learning Algorithms

#### **Soft Skills:**

1. Problem-solving and critical thinking
2. Effective communication and teamwork
3. Effective communication and team work
4. Time management and project planning

### **Challenges and Solutions :**

#### **Challenges Faced:**

- Handling large and unstructured datasets during web scraping.
- Ensuring the relevance and accuracy of automatically generated questions.



**Problem-Solving:**

- Utilized advanced scraping techniques and data cleaning methods to manage large datasets.
- Improved question generation algorithms by incorporating feedback loops and refining NLP models.

**Recommendations :****For the Organization:**

- Invest in more robust data processing infrastructure to handle increasing data volumes.
- Implement regular training sessions on the latest data analysis tools and techniques.

**For Future Interns:**

- Focus on understanding the fundamentals of data science and machine learning.
- Take advantage of mentorship opportunities and seek feedback regularly.

**Conclusion :**

My internship at Snipe Tech was an enriching and transformative experience that provided me with invaluable technical skills and professional growth. Engaging in projects such as Automatic Question Generation, Web Scraping, and Performance Measurement allowed me to apply my academic knowledge to real-world challenges, thereby deepening my understanding of AI and data analytics.

Through the Automatic Question Generation project, I learned the intricacies of natural language processing (NLP) and machine learning. Developing algorithms to generate relevant and contextually appropriate questions honed my skills in NLP and enhanced my ability to create intelligent systems that can automate complex tasks. This project underscored the importance of innovation and efficiency in educational content creation, highlighting how AI can transform traditional processes.

The Web Scraping project exposed me to the practicalities of data collection and preprocessing. Designing and implementing web scraping scripts using Python, BeautifulSoup, and Selenium was a challenging yet rewarding experience. I gained insights into handling dynamic web content, ensuring data integrity, and the ethical considerations surrounding web scraping. This project underscored the critical role of accurate and comprehensive data in market analysis and decision-making.

The Performance Measurement project was pivotal in understanding the significance of real-time data visualization and analysis. Using Tableau and Power BI, I developed interactive dashboards that provided actionable insights into the company's operations. This experience taught me the importance of defining relevant key performance indicators (KPIs), integrating data sources, and creating user-friendly visualizations that aid strategic planning and operational optimization.

Throughout the internship, I had the opportunity to work with advanced tools and technologies, which significantly enhanced my technical proficiency. I also developed important soft skills such as problem-solving, communication, and teamwork. Regular interactions with my mentors and team members, participation in training sessions, and feedback from stakeholders were instrumental in my professional development.

The challenges I encountered during the projects pushed me to think critically and creatively. Whether it was debugging complex code, refining algorithms, or ensuring data accuracy, each challenge was a learning opportunity that contributed to my growth as a budding AI professional. The supportive and collaborative work environment at Snipe Tech was crucial in helping me navigate these challenges successfully.

In conclusion, my internship at Snipe Tech was a deeply rewarding experience that equipped me with the skills and knowledge necessary to excel in the field of AI and data analytics. The practical experience, coupled with the guidance and mentorship I received, has prepared me well for future professional endeavors. I am grateful for the opportunity to contribute to Snipe Tech's strategic objectives and look forward to applying the insights and skills gained during this internship in my future career.



Shreyas Rao H Mohite  
Sarada Vilas College, Krishnamurthy Puram,  
Mysuru, Karnataka 570004

Date: April 21, 2023

Dear Shreyas Rao H Mohite,

It is our pleasure to formally take you onboard as a **Project Intern – ML Team**, with effect from **01/05/2023** and a monthly stipend of **Rs. 10,000/-** (Rupees Ten Thousand Only) for a period of three months. There will be an additional bonus of up to 50% of your fixed pay (i.e., INR 5000), subject to your contributions and performance during the internship program as evaluated by your project lead. During this program you will be provided with opportunities to contribute to the ongoing projects at Access 2 Justice and/or do the proof-of-concept (POC) on niche technologies. By the end of the program, you are expected to complete the project work assigned by your lead.

This offer is subject to your compliance with our terms & conditions of employment and/or association as suggested below, please go through the same and return the signed copy of this letter as a token of acceptance within two (2) working days failing which this offer letter will stand cancelled.

1. You will be required to display professionalism throughout your stay at Access 2 Justice
2. You will be required to sign an Non-Disclosure Agreement as per company terms
3. You are recommended not to take leaves during the internship program, however, under unavoidable circumstances, you shall notify your lead in advance

Our team at Access 2 Justice congratulates you on this new appointment. Please sign the duplicate copy of the offer and return to the **Manager - Human Resources**. At the time of joining, you are requested to submit a copy of your Aadhaar card and your PAN card.

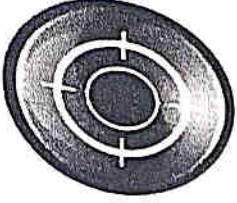
We welcome you to Access 2 Justice and look forward to a mutually beneficial association.

For Access 2 Justice:



Aathira Satish  
(Manager, Human Resources)





**SNIPETECH**  
**PRIVATE LIMITED**

29<sup>th</sup> March, 2024  
Bengaluru-10

**INTERNSHIP COMPLETION LETTER**

Nandish A M  
RBSD2018  
Sarada Vilas Education Institution  
3<sup>rd</sup> Cross Road, Krishnamurthy puram  
Mysuru-570004

Dear Nandish,

Congratulations!

You have successfully completed Internship as a **Research Trainee Intern** in our Organization. As a result, you have earned professional knowledge into **Machine Learning, Python, Artificial Intelligence, Data Science and NLP** under the guidance of Mr. Mallikarjuna G D, Senior Consultant, during the period 3<sup>rd</sup> October, 2023 to 29<sup>th</sup> March, 2024.

During the period of his course program with us, he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We wish you every success in your life and career.

We Wish You All The Best.



Authorized Signatory

# 123 | 2nd Floor | 70th Cross | 5th Block  
Rajajinagar | Bengaluru - 560 010.  
Karnataka | India.

CIN No. : U72900KA2018PTC109406

Web : [www.snipe.co.in](http://www.snipe.co.in)

E-mail : [hr@snipe.co.in](mailto:hr@snipe.co.in)

Strictly Private & Confidential



# PROJECT CERTIFICATE

This is to certify that

AJITH S

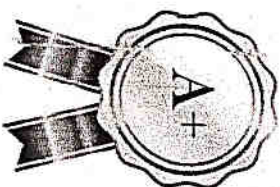
has undergone an internship training programme from

14/08/2023 to 16/10/2023

In the department of Programming and Development

Contriver, Mysuru. Under the guidance of M.S.Muktha

and the grade awarded to the intern for the internship project is



Sanjay B  
Chief Executive Officer



#startupindia



KBITSK-REGN/2019-20/1362



DIPP25172



KR22A00055 1



MYS-F325-2017-18





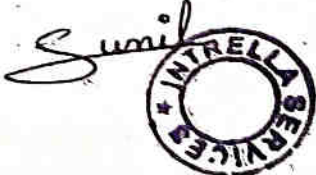
## **CERTIFICATE (TO WHOMSOEVER IT MAY CONCERN)**

This is to certify that Kum.Soundarya S bearing Reg: **RBSD2030** studying at **Sarada Vilas College** has successfully completed their internship on domain Machine Learning on project named "**AI Virtual mouse using hand gesture**" in our organization **Intrella Technologies and Software Services Pvt. Ltd.** during the period of **27th January 2024** to **27th April 2023** under the guidance of **Mr. Sunil Kumar N.**

During the above period, we found him sincere and hard working and he has taken proper initiative and efforts towards completing his tasks.

**"WE WISH HER ALL THE BEST FOR HER FUTURE CAREER"**

Warm Regards,  
Sunil  
Managing Director



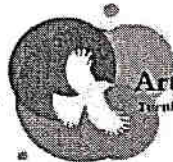
Authorized signature



# ARTSY TECHNOLOGIES®

#10, 2<sup>nd</sup> main Gangothri layout  
Mysuru-570023, Karnataka, India

Department of Department of product designing and development



Artsy Technologies  
Turning Dreams Into Digital Reality

## CERTIFICATE OF INTERNSHIP

This is to Certify that

**Sheela Shree S**

This is to certify that Sheela Shree S Reg no. RBSD2027 has successfully completed an internship in the field of Data Science at ARTSY TECHNOLOGIES from 27-01-2024 to 25-04-2024.

She has exhibited a strong analytical mindset, a proactive approach to problem-solving. Her contributions have been instrumental in the success of various projects.

Bhuvan S Biradar  
CEO

27-04-2024



**WEBBERRS LABS TECHNOLOGIES LLP**

**INTERNSHIP COMPLETION CERTIFICATE**

**MR. Bhuvan Biradar**

**HAS COMPLETED THE INTERNSHIP IN R&D(AI&ML) FROM 2 SEPT 2023 TO December 2, 2023**

SHIVANAND A PAIL

CEO, WEBBERRS LABS TECHNOLOGIES LLP

04-12-2023

Date

devtown

## CERTIFICATE OF INTERNSHIP COMPLETION

This Certification is proudly presented to :

**PRARTHANA.S**

For successfully completing 4-months internship  
as Data Scientist, working on multiple industry  
level projects.



**Shaurya Sinha**  
Co-Founder



**10th Oct. 2022 - 25th Jan. 2023**  
Duration

Scan the QR code to verify



<https://www.devto.in/verify/Prarthana.S>

[www.devto.in](http://www.devto.in)

We strive to cultivate a change in the current learning strategies of students and incorporate a reasonable methodology to make our interns future-prepared with a good knowledge of practical experience by making them create projects in their respective fields. We believe that you will appreciate the learning excursion and shape your future with us.



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# Cognizant



**Forage**

Inspiring and empowering  
future professionals

# Shijin

## Artificial Intelligence Job Simulation

### Certificate of Completion

August 24th, 2023

Over the period of August 2023, Shijin has completed practical tasks in:

- Exploratory Data Analysis
- Data Modeling
- Model Building and Interpretation
- Machine Learning Production
- Quality Assurance

A handwritten signature in black ink, appearing to read 'Tom Brunskill'.

**Tom Brunskill**  
CEO, Co-Founder of  
Forage

From,

Dr. Devika. M  
Head, Department of Botany  
Sarada Vilas College  
Mysuru

to  
SVC

To,

The Principal  
Sarada Vilas College  
Mysuru

SARADA VILAS EDUCATIONAL INSTITUTIONS	
No. 935	Date: 9/10/2023
PRESIDENT	
HON. SECRETARY	<i>[Signature]</i>
ADMINISTRATIVE OFFICER	3
MANAGER	12

Respected Madam,

Sub: "Permission to take students of First semester for a visit to CFTRI, Mysuru and Honganahalli water treatment plant, KRS, Mysuru"

With respect to the above cited subject, I request you to kindly permit the students of First year B.Sc. (BZ) to carry out the visit to the CFTRI, Mysuru and Honganahalli water treatment plant, KRS Mysuru as prescribed in the syllabus by the University of Mysore. A total of 17 students will be part of the visit on 11-10-2023 (Wednesday) accompanied by 4 faculties. The list of students and accompanying faculty is attached with this letter. Kindly oblige to our request.

*Permitted to take  
Students  
10/10/23*

*List of students*

Thanking you

Date: 09-10-2023  
Place: Mysuru

Yours sincerely *[Signature]*  
Head of the Department of Botany  
Sarada Vilas College  
Mysore

*Forwarded to Hon. Secretary  
for kind approval as it is  
mandatory as per the University syllabus*  
*[Signature]*  
9/10/23

## Department of Botany

**List of First semester students participating in Field visit to CFTRI and  
Honganahalli Water purification unit on 11-10-2023**

Sl.No	Student Name	Signature
1	Bhuvana D B	Bhuvana D B
2	Karthik Dattatreya Bhat	Karthik D Bhat
3	Srikanta N	Srikanta N
4	Vidya K R	Vidya K R
5	Ranjitha C	Ranjitha C
6	Abhishek C P	Abhishek C P
7	Ruthu H K	Ruthu H K
8	Surya D	Surya D
✓ 9	Likith H	Likith H
10	Druva rani D	Druva rani D
✓ 11	Renuka Prasad	Renuka Prasad
12	Keerthana T	Keerthana T
13	Manasa H S	Manasa H S
✓ 14	Yogesh T	Yogesh T
✓ 15	Manju L	Manju L
✓ 16	Preethi N S	Preethi N S
17	Chethan Raj K S	Chethan Raj K S

**Accompanying staff**

**Capt. R A Manjunath, Department of Microbiology and Biotechnology**

**Tribhuvan K R, Department of Biotechnology**

**Abhilash H S, Department of Biotechnology**

**Yashwanth V M, Department of Botany**



## SARADA VILAS COLLEGE, MYSURU

### DEPARTMENT OF BOTANY

### REPORT ON VISIT TO CFTRI

The department of Botany had organized a visit to Central Food Technological Research Institute, Mysuru on 11<sup>th</sup> October 2023 for I semester students of B.Sc. Botany and Zoology Course as prescribed in the curriculum by the university of Mysore.

Central Food Technological Research Institute (CFTRI), Mysuru (A constituent laboratory of Council of Scientific and Industrial Research(CSIR), New Delhi) came into existence during 1950 with the great vision of its founders, and a network of inspiring as well as dedicated scientists who had a fascination to pursue in-depth research and development in the areas of food science and technology. The institute comprises of 14 departments all of which are involved in the research work related to food processing and its preservation.

The prime objective of the visit is to get exposure to the students in the area of research in the institutes of such kind and also to gain the knowledge of technologies involved in the food processing and preservation. The students visited few departments in the campus where they observed certain equipment and instruments involved in food processing techniques and also learned regarding the pivotal role of microbes in processing certain foods.

They were also educated about food adulteration, the harmful preservatives and additives which are added to the processed foods, which may even cause several fatal diseases like cancer. They had a look on certain food products which are exclusively prepared and processed in CFTRI and also visited *Spirulina* cultivation unit knowing about the processes involved in the mass cultivation of *Spirulina* which is protein substitute to overcome the deficiency of proteins.

Visits of Such kind help students to understand the importance of food industries and their research, the significance of microbes in day to day life and also the knowledge of nutraceuticals.

Meanwhile we also visited Hongahalli water treatment plant located near KRS village, Mandya dist. on the same day to help the students to know regarding various steps and processes involved in the treatment of water from various sources of river Kaveri basin which is made potable

  
Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Mysuru

**SARADA VILAS COLLEGE, MYSURU**

**DEPARTMENT OF BOTANY**

**STUDY TOUR-2023-24**

**VISIT TO CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSURU**



**PURPOSE OF VISIT: TO STUDY THE ROLE OF MICROBES IN FOOD PROCESSING**

**DATE: 11<sup>th</sup> OCTOBER 2023**

  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru



# **SARADA VILAS COLLEGE**

**2023 - 2024**



## **REPORT ON VISIT TO CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE (CFTRI) AND HONGALLI WATER TREATMENT PLANT**

### **SUBMITTED TO**

Department of Botany  
Sarada Vilas College Mysuru

### **SUBMITTED BY**

Manasa.H.S





DEPARTMENT OF BOTANY ,  
SARADA VILAS COLLEGE,  
MYSORE.

CERTIFICATE

This is to certify that .....MANASA.H.S..... has been part of the study report to Botany concerned Institutes and has been completed the Study Report in Botany Practical as prescribed by the University of Mysore for the students of first year, First Semester students for the academic year 2023-2024.

Register no: U.O.I.B.G.23.50002

Date:

*Yashwanth V.M.* 19/05/23  
Signature of the teacher in charge

*[Signature]*  
Signature of HOD of the Department  
Head of the Department of Botany  
Sarada Vilas College  
Mysore

Date: 07-11-2023

Place: Mysuru

From,

Dr. Devika. M

Head, Department of Botany

Sarada Vilas College

Mysuru

TO  
SV ✓

To,

The Principal

Sarada Vilas College

Mysuru

SARADA VILAS EDUCATIONAL INSTITUTIONS®	
No. 1059	Date: 9/11/2023
PRESIDENT	
HON. SECRETARY	✓
ADMINISTRATIVE OFFICER	3
MANAGER	H

Respected Madam,

Sub: Seeking permission to take students of 5th semester for two days visit for Botanical Survey of India and Botanical garden Ooty Tamil Nadu.

With reference to the above subject I hereby bring to your kind notice that III B.Sc. (BZ&BC) students should be taken for field study to update their knowledge in field of Botanical Science and specimen collection as a part of their curriculum prescribed by the University of Mysore. Students are supposed to submit a report on the visit and five sheets of herbaria for which University has allotted 10 marks. Hence I request you to permit 25 students of 5th semester (BZ & BC) and staff members of Dept. of Botany to accompany the students on 16<sup>th</sup> and 17<sup>th</sup> of November 2023. It would be appreciated if you accept our request and grant permission. I have enclosed the list of students and accompanying faculty along with this letter

Thanking you

Yours sincerely

Forwarded to Hon. Secretary  
for kind approval

Permitted  
B  
11/11/23

  
Head of the Department of Botany  
Sarada Vilas College  
Mysore

  
Principal  
Sarada Vilas College,  
Krishnamurthyapuram, Mysuru.

**SARADA VILAS COLLEGE, Mysuru**  
**V SEMESTER STUDENT LIST (BC & BZ)**

Sl. No.	Roll No.	Reg. No	Name	Combination
1	21141	U01BG21S0094	HANUMANTHA D	B&C
2	21142	U01BG21S0069	LOHITH H C	B&C
3	21143	U01BG21S0095	PRASAD K S	B&C
4	21144	U01BG21S0105	SACHIN D S	B&C
5	21145	U01BG21S0011	SRUJAN KUMAR M R	B&C
6	21146	U01BG21S0071	SUCHAN M N	B&C
7	21147	U01BG21S0054	SUDEEP H M	B&C
8	21148	U01BG21S0082	SUMANTH H V	B&C
9	21149	U01BG21S0084	ASHWATH K A	B&Z
10	21151	U01BG21S0009	CHAITHRA K	B&Z
11	21152	U01BG21S0078	CHITHRA M	B&Z
12	21154	U01BG21S0008	DEVANAMPRIYA D	B&Z
13	21155	U01BG21S0047	HARSHA S	B&Z
14	21156	U01BG21S0077	PRAJWAL S RAJ	B&Z
15	21157	U01BG21S0079	PREETHAM S RAJ	B&Z
16	21159	U01BG21S0061	RAHUL N S	B&Z
17	21160	U01BG21S0101	RAVIKUMAR N	B&Z
18	21161	U01BG21S0033	SANJAY M	B&Z
19	21162	U01BG21S0065	SUDARSHAN H V	B&Z
20	21163	U01BG21S0038	SUDEEPNAYAK M	B&Z
21	21164	U01BG21S0016	AKASH S	B&C
22	21165	U01BG21S0041	ARJUN K	B&C
23	21166	U01BG21S0015	NANDAN B N	B&C
24	21167	U01BG21S0075	PRAVEEN R	B&C
25	21202	U01BG21S0110	VARUN N M	B&C

**Names of accompanying faculty**

**Dr. M Devika** (Not yet finalized)

**Mr. Yashwanth V M**

**Mr. Rajashekar B H**

*Dr. M Devika*  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthyapuram, Mysuru



SARADA VILAS COLLEGE, MYSURU  
DEPARTMENT OF BOTANY  
VISIT TO BSI, COIMBATORE ON 16TH AND 17TH NOVEMBER 2023  
STUDENT ATTENDANCE

Sl. No.	Roll No.	Reg. No	Name	Combination	Signature
1	21142	U01BG21S0069	LOHITH H C	B&C	Lohith
2	21143	U01BG21S0095	PRASAD K S	B&C	P. Prasad K S
3	21144	U01BG21S0105	SACHIN D S	B&C	Sachin D S
4	21145	U01BG21S0011	SRUJAN KUMAR M R	B&C	Srujan
5	21146	U01BG21S0071	SUCHAN M N	B&C	Suchan
6	21147	U01BG21S0054	SUDEEP H M	B&C	Sudeep H M
7	21151	U01BG21S0009	CHAITHRA K	B&Z	Chaithra K
8	21152	U01BG21S0078	CHITHRA M	B&Z	Chithra M
9	21154	U01BG21S0008	DEVANAMPRIYA D	B&Z	Devanampriya D
10	21156	U01BG21S0077	PRAJWAL S RAJ	B&Z	Prajwal S Raj
11	21157	U01BG21S0079	PREETHAM S RAJ	B&Z	Preetham S Raj
12	21159	U01BG21S0061	RAHUL N S	B&Z	Rahul N S
13	21160	U01BG21S0101	RAVIKUMAR N	B&Z	Ravikumar N
14	21161	U01BG21S0033	SANJAY M	B&Z	Sanjay M
15	21162	U01BG21S0065	SUDARSHAN H V	B&Z	Sudarshan H V
16	21163	U01BG21S0038	SUDEEPNAYAK M	B&Z	Sudeepnayak M
17	21164	U01BG21S0016	AKASH S	B&C	Akash S
18	21165	U01BG21S0041	ARJUN K	B&C	Arjun K
19	21166	U01BG21S0015	NANDAN B N	B&C	Nandan B N
20	21167	U01BG21S0075	PRAVEEN R	B&C	Praveen R
21	21202	U01BG21S0110	VARUN N M	B&C	Varun N M

ACCOMPANYING FACULTY

Sl.No.	Name	Signature
1	Yashwanth V M	Yashwanth V M
2	Rajashekar B H	Rajashekar B H



**SARADA VILAS EDUCATIONAL INSTITUTIONS(R)**

**SARADA VILAS COLLEGE**

Krishnamurthypuram, Mysore – 570 004 Karnataka.

Affiliated to University of Mysore

Re accredited by NAAC with A grade (CGPA: 3.19)



**Dr. M. Devika, M.Sc, M.Phil, Ph.D**

**Principal**

Mobile No: 9880024483

Date: 15-11-2023

To,

Dr. M U Sharief

Scientist- 'F' & Head of Office

Southern Regional Centre

Botanical Survey of India

T N A U Campus, P.O. Lawley Road, Coimbatore

**Sub:** Requesting to permit our students of V Semester to visit BSI

With reference to the above subject I hereby bring to your kind notice that, III B.Sc. V semester students should be taken for field study to update their knowledge in the field of Botanical Science and specimen collection as a part of their curriculum prescribed by the University of Mysore. Hence I request you to permit 25 students accompanied by two faculty members to visit your institution on 16<sup>th</sup> November 2023. It would be appreciated if you accept our request and grant permission.

Thanking you

Yours faithfully

**Dr. M Devika**  
M.Sc, M.Phil, Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram

## SARADA VILAS COLLEGE, MYSURU

### DEPARTMENT OF BOTANY

#### REPORT ON VISIT TO BSI AND OOTY BOTANICAL GARDEN

The department of Botany had organized a visit to Botanical Survey of India, Coimbatore and Government Botanical Garden Ooty on 16<sup>th</sup> and 17<sup>th</sup> November 2023 for V semester students of B.Sc. Chemistry, Botany and Zoology Course as prescribed in the curriculum by the University of Mysore.

The Botanical Survey of India (BSI) was established in 1890 with the objectives of exploring the plant resources of the country and identifying plant species with economic virtue. In 1954, the Government re-organized the BSI with the objectives of (1) undertaking intensive floristic surveys and collecting accurate and detailed information on the occurrence, distribution, ecology and economic utility of plants in the country; (2) collecting, identifying and distributing materials that may be of use to educational and research institutions; and (3) acting as the custodian of authentic collections in well planned herbaria and documenting plant resources in the form of local, district, state and national flora. The Headquarters of BSI is located in Kolkata, although our visit was planned to the regional center located in the city Coimbatore, Tamil Nadu.

The visit was planned and executed with the view to provide students a better knowledge of floristic resources across the nation, and to study distribution and preservation of plant specimens in a scientific manner which is being done in BSI. The visit also helped the students about the current research status in the stream of plant systematics which would help them in perusing their higher studies. During the visit students observed various kinds of plant specimens which are well maintained and arranged in a hierarchical manner, methods and techniques of preparing herbaria, herbaria collections which are arranged according to the Bentham and Hooker System of Classification. This helped the students to prepare herbaria by their own and submit which was a part of practical component. Visit to the BSI was a fruitful journey where students gained the practical knowledge of plant specimens and their applications in the current era of research which would motivate them to continue their studies in the field of Plant Science.

As a part of our visit to BSI we had also visited Botanical garden at Ooty which is spread over 22 hectares dividing different sections comprising of various plant communities such as ornamentals, pines, herbs, succulents, medicinal plants, orchids and so on... which are named scientifically. Students observed different plant groups we guided them about their distribution habitat, morphological and taxonomical features. Since Ooty is a place which is rich in floristic diversity, other than the plants in Government Botanical Garden, Students also observed plant in and around Ooty, Collected few of them, preserved them, and few were pressed to prepare herbarium.

  
Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Vishnupuram, Mysuru

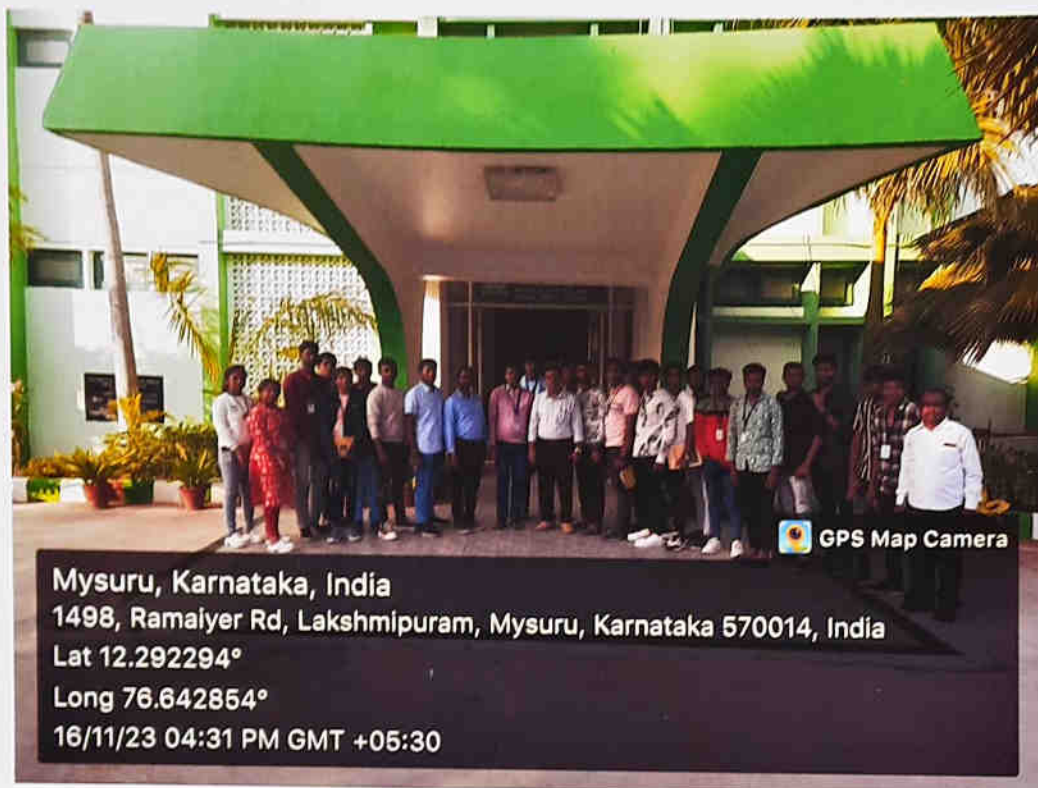


**SARADA VILAS COLLEGE, MYSURU**

**DEPARTMENT OF BOTANY**

**STUDY TOUR-2023-24**

**VISIT TO BOTANICAL SURVEY OF INDIA, COIMBATORE**



**PURPOSE OF VISIT: OBSERVATION OF PLANT SPECIMENS AND LEARNING**

**METHODS OF HERBARIUM PREPARATION**

**DATE OF VISIT: 16<sup>TH</sup> AND 17<sup>TH</sup> NOVEMBER 2023**

**Sr. M Devika**

M.Sc., M.Phil., Ph.D

Principal

Sarada Vilas College,

Krishnamurthypuram, Mysuru

**UNIVERSITY OF MYSORE**  
**SARADA VILAS COLLEGE**  
**KRISHNAMURTHYPURAM, MYSURU**  
**DEPARTMENT OF BOTANY**  
**REPORT ON VISIT TO BOTANICAL SURVEY OF  
INDIA, TNAU AND OOTY, TAMIL NADU**



**SUBMITTED BY**

**NAME: LOHITH. H.C**

**REG.NO. U01BG21S0069**

**SARADA VILAS COLLEGE, MYSURU**

**SUBMITTED TO:**


**DEPARTMENT OF BOTANY**

**SARADA VILAS COLLEGE, MYSORE**

**SARADA VILAS COLLEGE**  
**MYSURU**  
**DEPARTMENT OF BOTANY**  
**CERTIFICATE**

This is to certify that MR/MS. Lohith H. C

Has participated in the Botany field visit and submitted field report as a practical fulfillment of 3<sup>rd</sup> year B.Sc., Vth semester Botany practical examination prescribed by the University of Mysore for B.Sc. degree course during the year **2023-2024**.

  
Signature of Batch in charge

  
Signature  
Head of the Department of Botany  
Sarada Vilas College  
Mysore



From,  
Dr. Devika. M  
Head, Department of Botany  
Sarada Vilas College  
Mysuru

20-03-2024

Mysuru

To,  
The Principal  
Sarada Vilas College  
Mysuru  
Respected Madam,

Sub: Permission to take students for a visit to Kukkarahalli Lake

The University of Mysore has prescribed the second semester students of B.Sc. Botany/Zoology course for a field trip to local areas to study the flora and update their knowledge in the field of Botanical science. Hence I request you to permit 16 students and two accompanying staff of our department to go for the visit on 24<sup>th</sup> March 2024.

Thanking you

yours sincerely



Head of the Department of Botany  
Sarada Vilas College  
Mysore

Sl.No	Student Name	Signature
1	Bhuvana D B	Bhuv D B
2	Karthik Dattatreya Bhat	KDB.
3	Srikanta N	Sri Kantam N
4	Vidya K R	Vidya K.R
5	Ranjitha C	Ranjitha.C
6	Abhishek C P	Abhishek C.P
7	Ruthu H K	Ruthu H K
8	Surya D	Surya.D
✓ 9.	Likith H	Likith.H
10	Druva rani D	Druva rani D
✓ 11	Renuka Prasad	<del>Renuka Prasad</del>
12	Keerthana T	Keerthana T
13	Manasa H S	Manasa.H.S
✓ 14.	Yogesh T	Y
✓ 15.	Manju L	Manju.L
✓ 16	Preethi N S	Preethi.N.S
17	Chethan Raj, K.S	Chethanraj.K.S

**SARADA VILAS COLLEGE, MYSURU**  
**DEPARTMENT OF BOTANY**  
**REPORT ON VISIT TO KUKKARAHALLI LAKE TO STUDY**  
**ALGAL BLOOMS**

A visit to Kukkarahalli Lake on 24<sup>th</sup> March 2024 was organized by the Department of Botany for II semester students to study algal blooms which is a part of their curriculum prescribed by the University of Mysore.

We visited the lake along with 16 students of II semester in the morning. We assembled near the entrance of the lake by 6'o clock in the morning and took a walk around the lake. The lake was sparsely covered by algal blooms due to heavy rainfall. We assisted the students in identifying algal blooms and explained them about harmful aspects of algal blooms. The lake water where the dense algal blooms were observed was collected for further observation in the laboratory which helps the students to know about the algal communities that are responsible for causing blooms.

Our visit to Kukkarahalli Lake was not only circumscribed to the study of algal blooms we also made observations on different hydrophytes growing in the lake, and different species of higher plants which made us to briefly study the vegetation of Kukkarahalli Lake. Students also collected some hydrophytes like *Pistia*, *Eichhornia*, *Azolla* from the lake to preserve them in the department museum.

  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College  
Ichamurthunuram, Mys

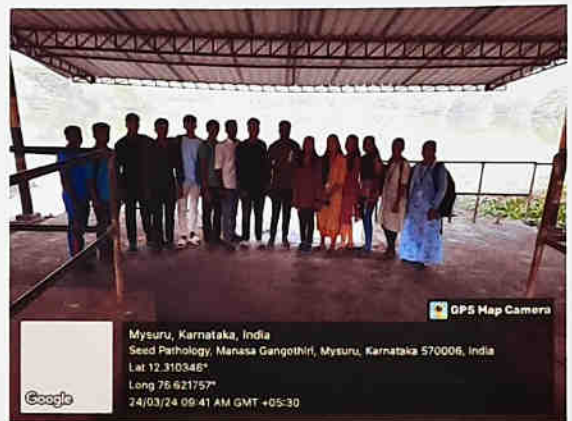


**SARADA VILAS COLLEGE, MYSURU**

**DEPARTMENT OF BOTANY**

**STUDY TOUR-2023-24**

**VISIT TO KUKKARAHALLI LAKE, MYSURU**

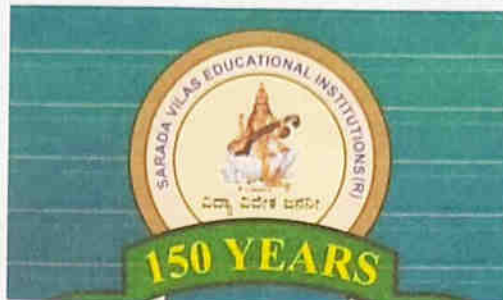


**PURPOSE OF VISIT: TO STUDY ALGAL BLOOMS**

**DATE OF VISIT: 24<sup>th</sup> MARCH 2024**

**Dr. M Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru

# SARADA VILAS COLLEGE MYSURU



## "VISIT TO KUKKARAHALLI LAKE FOR OBSERVATION OF ALGAL BLOOMS"



SUBMITTED TO,  
DEPARTMENT OF BOTANY  
SARADA VILAS COLLEGE  
MYSURU

SUBMITTED BY,  
Abhishek. c.p.  
2<sup>nd</sup> sem (B12)  
Sarada Vilas college  
Mysuru

## CERTIFICATE

This is to certify that Abhishek. c.p. has successfully completed the field visit to khukarahalli lake for observation of algal blooms and submitted the report as a partial fulfillment of 1<sup>st</sup> B.Sc. 2<sup>nd</sup> semester Botany practical examination during the year 2023-24.

Yashwanth. v.v.

  
Head of the Department of Botany  
Sarada Vilas College  
Mysore



From,

15-03-2024

Dr. Devika . M  
Head, Department of Botany  
Sarada Vilas College  
Mysuru

To.

The Principal  
Sarada Vilas College  
Mysuru.

Respected Madam,

Sub: Permission to take VI semester students for a visit to Department of Biotechnology, Manasagangothri, Mysuru.

With reference to the above subject I hereby bring to your good notice that, The University of Mysore has prescribed sixth semester Botany students of B.Sc. (BZ/ BC) course to visit a plant tissue culture laboratory to know about the techniques and methods involved in plant tissue culture and submit report for the same at the time of practical examination. Hence I request you to permit 25 students and two faculty of the respective department to accompany the students to visit the department on 18<sup>th</sup> of March 2024.

I would be appreciated if you accept the proposal and grant us the permission.

I have enclosed the list of students and accompanying faculty.

Thanking you,

Yours sincerely,



Head of the Department of Botany  
Sarada Vilas College  
Mysore

Phone : 0821 - 2332479

Fax : 0821 - 2330221

Sarada Vilas Educational Institutions (R.)



# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru - 570 004

(Affiliated to the University of Mysore)

Reaccredited by NAAC with A grade (CGPA : 3.19)

E-mail : principal@saradavilas.com Website : www.saradavilas.com



**Dr. M. Devika**, M.Sc., M.Phil., Ph.D.

**Principal**

Mobile : 9880024483

15-03-2024

To,

The Chairman  
DoS in Biotechnology  
Manasagangothri  
Mysuru

Respected Sir,

Sub: Permission to visit the Department of Biotechnology.

With reference to above cited subject, The University of Mysore has prescribed the Sixth semester Botany students of B.Sc., (BZ/BC) course to visit a Plant Tissue Culture lab to update their knowledge in the field of Biotechnology. Hence I request you to permit 25 students and 2 accompanying staff of our college to visit the Department of Biotechnology.

It would be appreciated if we could be granted permission on 18th of March 2024 in the afternoon session.

Thanking you,

Yours sincerely,

**Dr. M Devika**

M.Sc., M.Phil., Ph.D.

**Principal**

Sarada Vilas College,  
Krishnamurthypuram, Mysuru

**SARADA VILAS COLLEGE, Mysuru**  
**DEPARTMENT OF BOTANY**  
**VI SEMESTER STUDENT LIST (BC & BZ)**

Sl. No.	Roll No.	Reg. No	Name	Combination	Signature
1	21141	U01BG21S0094	HANUMANTHA D	B&C	
2	21142	U01BG21S0069	LOHITH H C	B&C	Loth H.C
3	21143	U01BG21S0095	PRASAD K S	B&C	Prasad K.S
4	21144	U01BG21S0105	SACHIN D S	B&C	Sachin D.S
5	21145	U01BG21S0011	SRUJAN KUMAR M R	B&C	Srujan M.R
6	21146	U01BG21S0071	SUCHAN M N	B&C	Suchan M.N
7	21147	U01BG21S0054	SUDEEP H M	B&C	Sudeep H.M
8	21148	U01BG21S0082	SUMANTH H V	B&C	Sumanth H.V
9	21149	U01BG21S0084	ASHWATH K A	B&Z	Ashwath K.A
10	21151	U01BG21S0009	CHAITHRA K	B&Z	Chaitra K
11	21152	U01BG21S0078	CHITHRA M	B&Z	Chitra M
12	21154	U01BG21S0008	DEVANAMPRIYA D	B&Z	Devanampriya D
13	21155	U01BG21S0047	HARSHA S	B&Z	Harsha S
14	21156	U01BG21S0077	PRAJWAL S RAJ	B&Z	
15	21157	U01BG21S0079	PREETHAM S RAJ	B&Z	
16	21159	U01BG21S0061	RAHUL N S	B&Z	Rahul N.S
17	21160	U01BG21S0101	RAVIKUMAR N	B&Z	Ravi Kumar N
18	21161	U01BG21S0033	SANJAY M	B&Z	Sanjay M
19	21162	U01BG21S0065	SUDARSHAN H V	B&Z	Sudarshan H.V
20	21163	U01BG21S0038	SUDEEPNAYAK M	B&Z	Sudeep Nayak M
21	21164	U01BG21S0016	AKASH S	B&C	Akash S
22	21165	U01BG21S0041	ARJUN K	B&C	Arjun K
23	21166	U01BG21S0015	NANDAN B N	B&C	Nandan B.N
24	21167	U01BG21S0075	PRAVEEN R	B&C	Praveen R
25	21202	U01BG21S0110	VARUN N M	B&C	

**Names of accompanying faculty**

**Dr. M Devika**

**Mr. Yashwanth V M**

**Mr. Rajashekar B H**



**SARADA VILAS COLLEGE, MYSURU**

**DEPARTMENT OF BOTANY**

**REPORT ON VISIT TO DEPARTMENT OF STUDIES IN  
BIOTECHNOLOGY, MANASAGANGOTTHRI, UNIVERSITY OF  
MYSORE, MYSURU**

The department of Botany had organized a visit to Department of studies in Biotechnology, Manasagangothri, University of Mysore, Mysuru on 18<sup>th</sup> March 2024 for VI semester students of B.Sc. Chemistry, Botany and Zoology Course as prescribed in the curriculum by the University of Mysore.

The visit was organized by the department with the intention of providing knowledge of techniques involved in Biotechnology. During the Visit students observed different kinds of equipment which are used in the plant tissue culture processes, they learned about the methods of plant tissue culture, preparation of tissue culture media, steps involved in inoculation of explant, sterilization techniques, gel docking methods, electrophoresis and so on...

The visit to the department of Biotechnology aided the students in learning about the opportunities in the area of research in Life Sciences

  
Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthyvaram Mysuru

**SARADA VILAS COLLEGE, MYSURU**

**DEPARTMENT OF BOTANY**

**STUDY TOUR-2023-24**

**VISIT TO DEPARTMENT OF STUDIES IN BIOTECHNOLOGY, MANASA  
GANGOTHRI, UNIVERSITY OF MYSORE, MYSURU**



**PURPOSE OF VISIT: TO STUDY THE TECHNIQUES OF PLANT TISSUE CULTURE**

**DATE OF VISIT: 18<sup>th</sup> MARCH 2024**

  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru

# SARADA VILAS COLLEGE

KRISHNAMURTHYPURAM, MYSURU

## DEPARTMENT OF BOTANY

REPORT ON VISIT TO DEPARTMENT OF  
BIOTECHNOLOGY

UNIVERSITY OF MYSORE



**Submitted by:**

Name: DEVANAMPRIYA D.

Reg no: UO1B62130008

Sarada Vilas College,

Mysuru

**Submitted to:**

Department of Botany

Sarada Vilas College,

Mysuru



SARADA VILAS COLLEGE

MYSORE

DEPARTMENT OF BOTANY

CERTIFICATE

This is to certify that MR/MS. *Devanampaiya D.*

Has participated in the Botany field visit and submitted field report as a practical fulfillment of 3<sup>rd</sup> year B.Sc., VI semester Botany practical examination prescribed by the University of Mysore for B.Sc. degree course during the year **2023-2024.**

*Yashwanth*  
Signature of Batch in charge

*[Signature]*  
Signature  
Head of the Department of Botany  
head of the department  
Mysore

From,  
Shakunthala  
Assistant Professor and Head  
Department of Zoology  
Sarada Vilas College  
Mysuru

To,  
The Principal  
Sarada Vilas College  
Mysuru

SARADA VILAS EDUCATIONAL INSTITUTIONS®	
No. 943	Date: 10/10/2023
PRESIDENT	
HON. SECRETARY	<i>[Signature]</i>
ADMINISTRATIVE OFFICER	<i>[Signature]</i>
MANAGER	<i>[Signature]</i>

Respected madam,

Sub: Seeking permission to take III year (V Semester) BZ students to "Sea Shell art Museum, Mysuru" on 13/10/2023, Friday.

I request you to permit all third year (V semester) BZ students accompanied by me to visit "Sea Shell art Museum, Mysuru on 13th October 2023. Guinness World Record Sea Shell Art Museum is one of a kind museum in Mysore located near Chamundi Hills just 3.5 KM from Mysore Palace. This museum houses the Guinness World Record Sea Shell Sculpture of Lord Ganesha along with various other sea shell artifacts and different art forms. In addition to exhibits made of shells and conchs here, a variety of beautiful artwork made of waste materials are displayed. I kindly request you to give permission to visit this museum. It would be a great learning experience.

Thanking you

Date - 09/10/2023

Place - Mysuru

*Permitted,*  
*Have you modalities,*  
*like how many, hours, transportation*  
*For*  
*10/10/23*  
*Head of the Dept. of Zoology*  
*Sarada Vilas College*  
*MYSORE*


*Don*  
*9/10/23*  
Principal  
Sarada Vilas College  
Mysore-570004

# SARADA VILAS COLLEGE, MYSURU

## DEPARTMENT OF ZOOLOGY

FIELD VISIT TO SEA SHELL ART MUSEUM AND KARANJI LAKE, MYSURU ON  
13/10/2023

Sl.No	REG.NO	NAME	SIGNATURE
1	U01BG21S0008	DEVANAMPRIYA D	Devanampriya D.
2	U01BG21S0009	CHAITHRA K	Chaithra K
3	U01BG21S0033	SANJAY M	Sanjay M
4	U01BG21S0038	SUDEEP NAYAK M	Sudeep nayak M
5	U01BG21S0047	HARSHA S	Harsha S
6	U01BG21S0061	RAHUL N.S	Rahul N.S
7	U01BG21S0065	SUDARSHAN H.V	Sudarshan H.V
8	U01BG21S0077	PRAJWAL S RAJ	Prajwal S Raj
9	U01BG21S0078	CHITHRA M	Chithra M
10	U01BG21S0079	PREETHAM S RAJ	Preetham S Raj
11	U01BG21S0084	ASHWATH K.A	Ashwath K.A
12	U01BG21S0101	RAVIKUMAR N	Ravikumar N

  
Head of the Dept. of Zoology  
Sarada Vilas College  
MYSORE

  
Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College  
Krishnamurthypuram, Mysuru.



## SARADA VILAS COLLEGE, MYSURU

### DEPARTMENT OF ZOOLOGY

#### Field Visit to Sea Shell Art Museum and Karanji Lake, Mysuru

Time: 9.00am

Date:13/10/2023

The field visit on October 13, 2023, marked an integral part of the academic journey for Final BSc (BZ) students from Sarada Vilas College accompanied by the two teaching faculties. The exploration unfolded in two phases - the first at the picturesque Karanji Lake and the second at the captivating Sea Shell Art Museum in Mysore. This report aims to provide a detailed account of the experiences and insights gained during this transformative educational expedition.

The day commenced at 9:30 am as students eagerly set foot on the lush grounds surrounding Karanji Lake, a natural haven nestled in the heart of Mysore.

Karanji Lake, situated in Mysore, is a serene water body surrounded by lush greenery, spanning over 90 acres, the lake is a haven for biodiversity, hosting various species of butterflies, migratory birds, and native waterfowl. Visitors can explore a well-maintained park, walkways, and boating facilities, creating a perfect blend of recreation and nature appreciation. The lake is also home to a butterfly park, housing a diverse array of butterfly species. Surrounded by verdant foliage, the lake's expansive beauty served as an ideal backdrop for students to delve into the intricacies of biodiversity. The tranquil environment of Karanji Lake provided an excellent opportunity for students to engage in the identification of various butterfly species. Armed with field guides and enthusiasm, they meticulously documented the diverse patterns and colors, gaining insights into the rich biodiversity thriving around the lake. Common sightings include the Plain Tiger (*Danaus chrysippus*), Blue Tiger (*Tirumala limniace*), Common Rose (*Pachliopta aristolochiae*), and Lime Butterfly (*Papilio demoleus*). Additionally, the lake's rich ecosystem attracts various skipper butterflies, swallowtails, and white butterflies.

Dedicated hours were spent observing avian fauna. From the graceful movements of native waterfowl to the migratory patterns of diverse bird species, students witnessed a dynamic ecosystem in action. Common sightings include native waterfowl such as ducks and geese, as well as migratory birds during certain seasons. Additionally, herons, egrets, kingfishers, and cormorants are often spotted around the lake's periphery. The experience allowed them to appreciate the interconnectedness of flora and fauna in this natural habitat.



Post-lunch, the group transitioned to the Sea Shell Art Museum, exploring its treasures from 2:00 pm to 5:00 pm.


The Sea Shell Art Museum in Mysore is a captivating institution known for its extensive collection of molluscan shell artefacts. Situated in a quaint setting, the museum showcases a diverse array of shells, ranging from intricately patterned specimens to rare and exotic finds. Each exhibit narrates a unique tale of marine wonder, providing visitors with insights into both the artistic and scientific aspects of shells.

Students immersed themselves in the curated exhibits, exploring the intricate world of molluscan shell artefacts. Each display narrated a unique story, showcasing not only the aesthetic appeal of shells but also their ecological importance. The museum visit provided a bridge between artistic expression and the scientific study of marine life. Typical molluscan species showcased in such museums might include various gastropods (snails and slugs), bivalves (clams, mussels, oysters), and cephalopods (squids, octopuses, nautilus). The exhibits could feature a wide range of these shells, each with unique shapes, sizes, and intricate patterns, providing visitors with a comprehensive view of molluscan diversity.

The field visit resulted in a wealth of insights for both students and faculty. The hands-on experience at Karanji Lake deepened the understanding of local biodiversity, while the Sea Shell Art Museum fostered an appreciation for the artistic and scientific facets of marine life. The identification of butterfly species and observation of avian fauna contributed to a holistic understanding of ecological systems.

In conclusion, the field visit to Karanji Lake and the Sea Shell Art Museum proved to be an invaluable educational experience. It served as a bridge between classroom theory and real-world observation, fostering a deeper connection with nature. The students' engagement with biodiversity at Karanji Lake and their exploration of the artistic wonders of the Sea Shell Art Museum enhanced their academic journey, leaving a lasting impact on their understanding of the natural world.

We express our sincere gratitude to Dr. M. Devika, Principal, Sarada Vilas College for facilitating this enriching field visit. Special thanks to the participating students for their enthusiasm and curiosity, and to the faculty members for their guidance and support throughout this transformative journey. The success of this educational expedition is a testament to the collaborative efforts of the entire academic community.

  
**Head of the Dept. of Zoology**  
**Sarada Vilas College**  
**MYSORE**

  
**Dr. M. Devika**  
**M.Sc., M.Phil., Ph.D.**  
**Principal**  
**Sarada Vilas College,**  
**Krishnawarthyapuram, Mysuru.**



**FIELD VISIT TO SEA SHELL ART MUSEUM AND KARANJI LAKE, MYSURU ON 13/10/2023**



8M2F+9M8, Sanmarga, Jockey Quarters, Mysuru, Karnataka 570011, India

Latitude  
12.30088036°

Longitude  
76.67406616°

Local 11:44:17 AM  
GMT 06:14:17 AM

Altitude 752 meters  
Friday, 13.10.2023



Inside of Karanji Lake, 8M2F+987, Jockey Quarters, Mysuru, Karnataka 570011, India

Latitude  
12.30186283°

Longitude  
76.67260999°

Local 11:22:55 AM  
GMT 05:52:55 AM

Altitude 748 meters  
Friday, 13.10.2023

*Signature*  
Head of the Dept. of Zoology  
Sarada Vilas College,  
MYSORE

*Signature*  
Dr. M Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru



# SARADA VILAS COLLEGE

Krishnamuthypuram , Mysuru



**SUBMITTED BY,**

**Name:** RAHUL N.S

**Reg.no:** UOLBh21S0061

**V SEM, 3<sup>rd</sup> B.Sc.**

VALUED 01.02.24  
1. K. S. R. S.  
2. S. S. S.  
EXAMINERS

**SUBMITTED TO ,**

**DEPARTMENT OF ZOOLOGY**

**SARADA VILAS COLLEGE, MYSURU.**

**SARADA VILAS COLLEGE**  
**MYSORE**  
**DEPARTMENT OF ZOOLOGY**  
**CERTIFICATE**

This is to certify that MR/MS. RAHUL . N . S .

Has participated in the Zoology field study and submitted field report as a practical fulfillment of 3<sup>rd</sup> year, Vth semester Zoology practical examination prescribed by the University of Mysore for B.sc degree course during the year **2023-2024.**



Signature of Batch in charge



Signature

head of the department  
**Head of the Dept. of Zoology**  
**Sarada Vilas College**  
**MYSORE**

From,  
Shakunthala  
Assistant Professor and Head  
Department of Zoology  
Sarada Vilas College, Mysuru

To,  
The Principal  
Sarada Vilas College  
Mysuru

Respected madam,

Sub: Request to permit the B.Sc. VI Semester students to attend an internship at  
RAMAKRISHNA HOSPITAL, MYSURU from 10/04/2024 to 14/04/2024 (30 Hours).

I request you to permit all VI semester BZ students (12) to attend an internship at RAMAKRISHNA HOSPITAL, MYSURU for the partial fulfillment of B.Sc. VI semester BZ course as prescribed by the University of Mysore, Mysuru. As per the schedule; the internship will run from 10/04/2024 to 14/04/2024 (30 Hours). It would be an absolute honor if the students are granted permission to work and learn under their guidance. It would be a great learning experience.


Thanking you

List of students


Sl.No.	REG. NO	NAME
1	U01BG21S0008	DEVANAMPRIYA D
2	U01BG21S0009	CHAITHRA K
3	U01BG21S0033	SANJAY M
4	U01BG21S0038	SUDEEP NAYAK M
5	U01BG21S0047	HARSHA S
6	U01BG21S0061	RAHUL N.S
7	U01BG21S0065	SUDARSHAN H.V
8	U01BG21S0077	PRAJWAL S RAJ
9	U01BG21S0078	CHITHRA M
10	U01BG21S0079	PREETHAM S RAJ
11	U01BG21S0084	ASHWATH K.A
12	U01BG21S0101	RAVIKUMAR N

Date:02/04/2024

Place - Mysuru

  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Kritchansur, Mysuru

Your's sincerely

  
**Head of the Dept. of Zoology**  
Sarada Vilas College,  
MYSORE



Phone : 0821 - 2332479

Sarada Vilas Educational Institutions (R.)

Fax : 0821 - 2330221



# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru - 570 004

(Affiliated to the University of Mysore)

Reaccredited by NAAC with A grade (CGPA : 3.19)

E-mail : principal@saradavilas.com Website : www.saradavilas.com



**Dr. M. Devika**, M.Sc., M.Phil., Ph.D.

Date: 04-04-2024

**Principal**

Mobile: 9880024483

Managing Director

Ramakrishna Hospital

Vidyaranyaapuram, Mysuru-570008

**Sub: Request for internship of B.Sc Degree Programme**

Respected Sir/Madam,

I am writing to request your esteemed hospital to provide internship facilities to students from our institution. The internship is mandated by the National Education Policy (NEP) curriculum of Zoology affiliated to University of Mysore. According to this curriculum, the students should undertake a minimum of 30 hours of internship to gain practical exposure and enhance their understanding of skillful practices. It is essential for their academic progression and to equip them with the necessary skills and knowledge required in their future endeavors.

I assure you that our students are well-prepared and eager to contribute positively to your hospital environment. They will approach their responsibilities with utmost professionalism, dedication, and respect for hospital protocols and regulations. Our students are committed to learning and will strive earnestly to fulfill all tasks assigned to them during the internship period.


To facilitate this request, I have enclosed the necessary documents, including resumes and identity cards of the students for your perusal. I kindly request you to consider our application and provide internship opportunities for 12 students (B.Sc Botany/ Zoology). Your cooperation in this matter would be greatly appreciated. Providing this opportunity will not only fulfill our academic requirements but also allow our students to gain invaluable real-world experience under the guidance of experienced professionals.

I look forward to a positive response and the opportunity to collaborate with your hospital for the benefit of our students.

Regards,

Enclosures:

1. List of selected students
2. Resumes

  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College  
K. Vidyaranya Puram, Mysuru

# SARADA VILAS COLLEGE, MYSURU


## DEPARTMENT OF ZOOLOGY

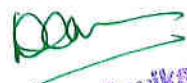
### INTERNSHIP PROGRAM

#### RAMAKRISHNA HOSPITAL, MYSURU

#### III YEAR B.SC. BZ

Sl. No.	REGISTER NUMBER	NAME	SIGNATURE
1	U01BG21S0008	DEVANAMPRIYA D	Devanampriya D.
2	U01BG21S0009	CHAITHRA K	chaithra. k.
3	U01BG21S0033	SANJAY M	Sanjay M.
4	U01BG21S0038	SUDEEP NAYAK M	Sudip. Nayak. M.
5	U01BG21S0047	HARSHA S	Harsha. S.
6	U01BG21S0061	RAHUL N.S	Rahul. N.S.
7	U01BG21S0065	SUDARSHAN H.V	Sudarshan H.V.
8	U01BG21S0077	PRAJWAL S RAJ	Prajwal S. Raj
9	U01BG21S0078	CHITHRA M	chithra. m.
10	U01BG21S0079	PREETHAM S RAJ	Preetham S. Raj
11	U01BG21S0084	ASHWATH K.A	Ashwath K.A.
12	U01BG21S0101	RAVIKUMAR N	Ravikumar. N.

  
Head of the Dept. of Zoology  
Sarada Vilas College  
MYSURU

  
Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Mysuru



# **SARADA VILAS COLLEGE**

**Krishnamurthypuram, Mysuru**



## **SUBMITTED BY:**

Name: CHETHRA. M

Reg. no: UO18A2150078

WISEM, 3<sup>rd</sup> B.Sc.

## **SUBMITTED TO :**


DEPARTMENT OF BOTANY/ZOOLOGY  
SARADA VILAS COLLEGE,  
MYSURU.


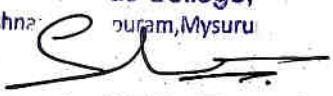


**SARADA VILAS COLLEGE**  
**MYSORE**  
**DEPARTMENT OF ZOOLOGY**  
**CERTIFICATE**

This is to certify that Mr /Ms. Chithra.M

has participated in the 30 hours of internship and submitted work report as a syllabus fulfillment of 3<sup>rd</sup> year, VIth semester prescribed by the University of Mysore for B.sc degree course during the year 2023-2024.

  
Dr. KV Lakshmi Devi  
Director, Ramakrishna Hospital  
Mysuru

  
Principal  
Sarada Vilas College  
Principal  
Sarada Vilas College,  
Krishna Nagar, Mysuru  
  
Head of The Department  
Department of Zoology  
Head of the Dept of Zoology  
Sarada Vilas College,  
MYSORE

From,  
Shakunthala  
Assistant Professor and Head  
Department of Zoology  
Sarada Vilas College, Mysuru

Date-31/05/2024

To,  
The Principal  
Sarada Vilas College  
Mysuru

Subject: Request for Field Visit to the Department Studies in Zoology and Genetics and Genomics, Manasagangothri, University of Mysore, Mysuru

Dear Madam,

I am writing to seek your permission to organize a field visit for the final year (BZ) students to the Department Studies in Zoology and Department Studies in Genetics and Genomics, Manasagangothri, University of Mysore, Mysuru on 1st June 2024.

The primary objective of this field visit is to expose our students to the advanced research facilities and academic environment at the University of Mysore. Such an experience will not only enhance their understanding of higher education but also motivate them to pursue further studies and research in the field of Zoology. Interaction with the faculty and students at the University of Mysore will provide our students with valuable insights into the latest developments and opportunities in Zoology.

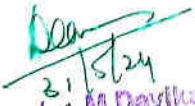
The visit will include a tour of the various laboratories, research units, and libraries, as well as discussions with professors and researchers. We believe that this exposure will significantly contribute to the academic and professional growth of our students, increasing a deeper interest in their subject and encouraging them to consider higher education as a viable and exciting option for their future.

I kindly request your approval and support for this educational field visit.

Yours sincerely,



Head of the Dept. of Zoology  
Sarada Vilas College  
MYSORE



21/5/24  
Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru

# SARADA VILAS COLLEGE, MYSURU

## DEPARTMENT OF ZOOLOGY

Field visit to DOS In Zoology and Genetics and Genomics  
Manasagangotri, University of Mysore, Mysuru

Date: 01/06/2024

Time: 10.00am

### III YEAR B.Sc BZ

Sl. No.	ROLL NO.	REG.NO	NAME	SIGNATURE
1	21154	U01BG21S0008	DEVANAMPRIYA D	Devanampriya D.
2	21151	U01BG21S0009	CHAITHRA K	Chaithra K.
3	21161	U01BG21S0033	SANJAY M	Sanjay M.
4	21163	U01BG21S0038	SUDEEP NAYAK M	Sudeep Nayak M.
5	21155	U01BG21S0047	HARSHA S	Harsha S.
6	21159	U01BG21S0061	RAHUL N.S	Rahul N.S.
7	21162	U01BG21S0065	SUDARSHAN H.V	Sudarshan H.V.
8	21156	U01BG21S0077	PRAJWAL S RAJ	Prajwal S Raj.
9	21152	U01BG21S0078	CHITHRA M	Chithra M.
10	21157	U01BG21S0079	PREETHAM S RAJ	Preetham S Raj.
11	21149	U01BG21S0084	ASHWATH K.A	Ashwath K.A.
12	21160	U01BG21S0101	RAVIKUMAR N	Ravikumar N.

  
Head of the Dept. of Zoology  
Sarada Vilas College  
MYSORE



## **SARADA VILAS COLLEGE, MYSURU**

### **DEPARTMENT OF ZOOLOGY**

#### **Field Visit Report**

#### **Department of Studies in Zoology and Department of Studies in Genetics and Genomics, Manasagangothri, University of Mysore, Mysuru**

On 1/06/2-024, the department of Zoology, Sarada Vilas College had the privilege of accompanying the final year BZ students on an educational visit to the Department of Studies in Zoology and the Department of Studies in Genetics and Genomics at Manasagangothri, University of Mysore, Mysuru.

We arrived at 10:00 AM and were warmly welcomed by Dr. S. Malini, the Chairperson of the Department of Studies of Genetics and Genomics. Dr. Malini's enthusiastic and knowledgeable approach immediately engaged the students, setting a positive tone for the visit.

Dr.S.S Malini began by addressing the students on the significance of pursuing higher education in Zoology and Genetics. She emphasized the numerous advantages of obtaining a master's degree and diploma courses, underscoring how these qualifications can significantly broaden career opportunities and enhance scientific understanding. Her talk highlighted the critical importance of advanced studies in these fields, encouraging students to consider further education as a pathway to achieving their career goals.

Following the introductory talk, Dr. Malini guided us through a detailed tour of the university's state-of-the-art laboratories. The first stop was the Stock Culture and Centre of Drosophila, where Dr. Malini provided an in-depth explanation of the role of Drosophila in genetic research. She explained that Drosophila is a crucial model organism due to its simple genetic structure and short life cycle, making it ideal for genetic studies. The Centre maintains various stock cultures used for both research and educational purposes, giving students a tangible understanding of practical genetics.

Next, we visited the research laboratory, where we observed ongoing genetic research projects. Dr. Malini provided insights into some of the current research topics and methodologies employed by the researchers. The students were particularly fascinated by the advanced techniques and equipment used in genetic analysis, which Dr. Malini explained in detail. This


segment of the tour offered students a glimpse into the real-world applications of their studies and the innovative research being conducted at the university.


Throughout the tour, Dr. Malini showcased the general facilities available to students and researchers, including advanced microscopes, genetic analysis tools, and other essential laboratory equipment. She highlighted how these facilities support both the educational and research missions of the department, ensuring that students have access to the resources they need to succeed in their studies and research endeavors.

Dr. Malini also discussed the importance of the genetics courses offered by the department, explaining how they are meticulously designed to impart essential skills and knowledge required for a successful career in genetics and related fields. She elaborated on the future prospects and expansive scope of the course, noting the growing opportunities in medicine, agriculture, and biotechnology. This part of the visit underscored the relevance and potential impact of genetic studies in various scientific and practical domains. A particularly engaging part of Dr. Malini's presentation was her discussion on the placement and internship opportunities available to students. She detailed how the University of Mysore's strong affiliations with various research institutes and industries facilitate excellent internship programs and job placements. This ensures that graduates are well-prepared to enter the professional realm with substantial experience and industry connections. Dr. Malini's emphasis on real-world applications and career readiness resonated deeply with the students, providing them with a clear understanding of the pathways available after their studies.

The field visit to the Department of Studies in Zoology and the Department of Studies in Genetics and Genomics at the University of Mysore was a profoundly enlightening experience for the final year BZ students at Sarada Vilas College. The insights provided by Dr. S. Malini were invaluable, offering students a comprehensive understanding of the importance of advanced studies and the myriad opportunities available in the field of genetics. This visit not only augmented the students' academic knowledge but also inspired many to consider pursuing further education and research in these dynamic scientific fields.

I would like to extend our heartfelt thanks to Dr. S. Malini for her time and for sharing her expertise with our students. Additionally, we express our gratitude to the University of Mysore for hosting us and providing an enriching educational experience.

  
Head of the Dept. of Zoology  
Sarada Vilas College  
MYSORE

  
Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru



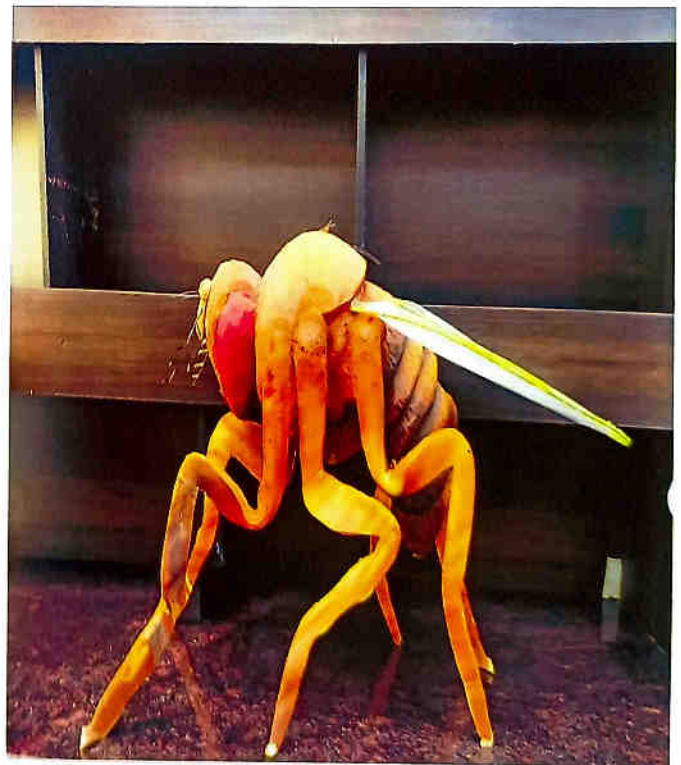
**FIELD VISIT TO DEPARTMENT OF STUDIES IN ZOOLOGY AND GENETICS AND GENOMICS  
UOM, MANASAGANGOTRI, MYSURU ON 01/06/2024**



8J8C+J6X, Manasa Gangothiri, Mysuru, Karnataka  
570006, India

Latitude  
**12.31659573°**  
Local 11:27:17 AM  
GMT 05:57:17 AM

Longitude  
**76.62072363°**  
Altitude 777 meters  
Saturday, 01.06.2024



*Head of the Dept. of Zoology  
Sarada Vilas College  
MYSORE*

**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru



# Department of Biochemistry

**SARADA VILAS COLLEGE**

Krishnamurthypuram, Mysuru-570004

Affiliated to University of Mysore

Re accredited by NAAC with A grade (CGPA: 3.19)

Date: 07/11/2023

Place: Mysuru

**From,**

Likith Clement  
Head of the Department  
Biochemistry  
Sarada Vilas College  
Mysore-570004

**To,**

The Principal  
Sarada Vilas College  
Mysore-570004

SARADA VILAS EDUCATIONAL INSTITUTIONS @  
No. 1060 Date: 9/11/2023  
PRESIDENT  
HON. SECRETARY  
ADMINISTRATIVE OFFICER  
MANAGER

Respected Madam,

**Sub: Permission to visit Triphase Pharmaceuticals**

With respect to the above subject, I request you to kindly permit the Final year BMBt Students to carry out the Institutional visit to the **Centre for Bio science and Nano science Research (CBNR) Coimbatore**, as a part of our study.

A total of 12 students will be a part of the visit on **16/11/2023**, accompanied by Suman and Likith Clement, Assistant professors, Dept of Biochemistry. The list of students is attached with this letter.

Kindly oblige to our request.

Thanking you

Yours faithfully

*Likith*

*Forwarded to Hon Secretary  
for kind approval*  
*Likith*  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru.

*Permitted  
11/11/23*

## LIST OF STUDENTS

Sl.No	Name	Phone numbers
1	Abhishek K	9108790967
2	Adarsh T.K	9108006200
3	Aishwarya K	9606276270
4	Chandan Kumar K.K	6360287768
5	Darshan N	7406757229
6	Kousalya S.C	9008502113
7	lakshmikantha K	7676162405
8	Raghava Raj S.G	7483043841
9	Rohith Kumara	9980725792
10	Sachin V.V	9380620796
11	Shambu Vaishnav	9945010070
12	Yashwanth M	9019796822

  
Principal  
Sarda Vilas College,  
Gishnahundi, Mysuru



**SARADA VILAS EDUCATIONAL INSTITUTIONS(R)**

**SARADA VILAS COLLEGE**

Krishnamurthypuram, Mysore – 570 004 Karnataka.

Affiliated to University of Mysore

Re accredited by NAAC with A grade (CGPA: 3.19)



**Dr. M. Devika, M.Sc, M.Phil, Ph.D**

**Principal**

Mobile No: 9880024483

Date: 15-11-2023

To,  
The Director,  
Centre for Bioscience and Nano science research,  
LT BYe pass road, Eachanari Post, Coimbatore.

**Sub:** Requesting to permit our students of V Semester to visit ~~BSI~~ <sup>CNBR</sup>

With reference to the above subject I hereby bring to your kind notice that, III B.Sc. V semester students should be taken for Industrial/ institutional visit to update their knowledge in field of Biochemical Science as a part of their curriculum prescribed by the University of Mysore. Hence I request you to permit 12 students accompanied by two faculty members to visit your institution on 16<sup>th</sup> November 2023. It would be appreciated if you accept our request and grant permission.

Thanking you

Yours faithfully

**Dr. M. Devika**  
M.Sc, M.Phil, Ph.D.  
Principal  
Sarada Vilas College  
Krishnamurthypuram



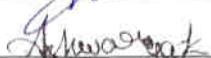








*Visited*

**Prof. Dr. R. Rajunathan, Ph.D., FSAB**  
Director & Research Supervisor  
Centre for Bioscience and Nanoscience Research  
Eachanari, Coimbatore - 641 021, Tamilnadu





**SARADA VILAS COLLEGE**  
**DEPARTMENT OF BIOCHEMISTRY**  
 Field visit on 16<sup>th</sup> and 17<sup>th</sup> of November 2023

**STUDENT LIST**

SL.No	Reg.No	Name	Signature
1	21168	Abhishek.K.L	
2	21169	Adarsh.T.K	
3	21195	Aishwarya.K	
4	21196	Chandan Kumar	
5	21197	Darshan.N	
6	21172	Kousalya.S.C	
7	21173	Lakshmikanth.K	
8	21176	Raghava Raj	
9	21200	Rohith Kumar	
10	21178	Sachin.V.V	
11	21180	Yashwanth.M	

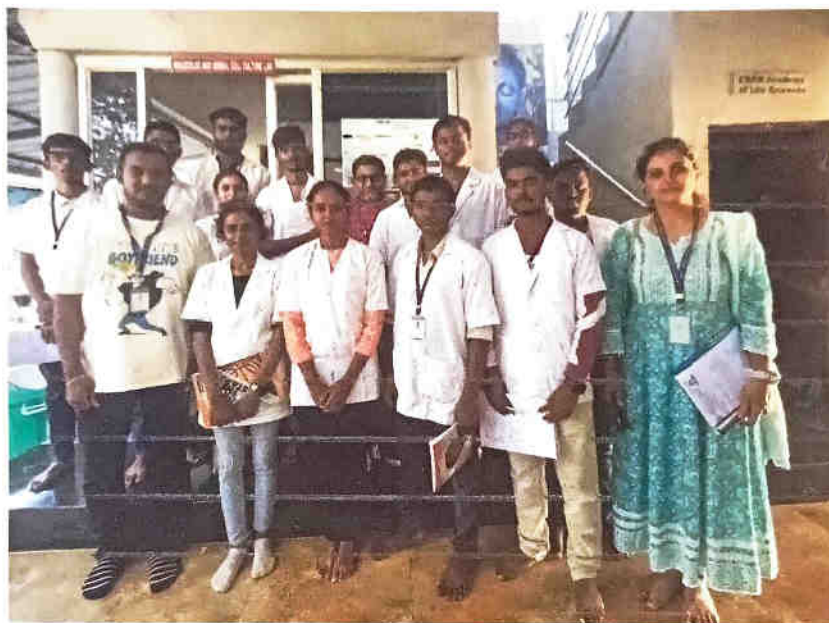
**FACULTY LIST**

SL.No	Name	Department	Signature
1	Mr. Likith Clement	Biochemistry	
2	Mrs.Suman Narayan	Biochemistry	

# SARADA VILAS COLLEGE

## DEPARTMENT OF BIOCHEMISTRY

### REPORT ON VISIT TO CENTER FOR BIOSCIENCE & NANOSCIENCE RESEARCH



Department of Biochemistry Sarada Vilas College, Mysuru had organised an Industrial visit to Center for Bioscience & Nanoscience Research, Coimbatore on 16<sup>th</sup> November 2023 for V semester students of B.Sc. Biochemistry course as prescribed in the Curriculum by the University of Mysore.

CBNR (Centre for Bioscience and Nanoscience Research) was founded in 2010 under Visalakshi Educational Trust, Coimbatore. The goal of CBNR is to render a common platform for the biologists to interact with each other mutual benefit and providing high quality research facilities in various disciplines of life sciences. Bridging the gap between Industry and academia is the focal point of all efforts at CBNR. Our key research area is Bio prospecting of polymer products based Nanoscience, Food Nano-biotech, Industrial Nanoscience and Agriculture and Medical Microbiology.

The prime objective of the visit is to get exposure to the students in area of the research and also the knowledge of techniques involved in Biochemistry and Food Microbiology. During the visit students observed different kinds of equipment which are used in nanoparticle research like Microprocessor UV- VIS Nanodrop Spectrophotometer, SDS-PAGE gel electrophoresis, gel docking methods, Sonicator. They also learned the preparation and storage of food in ways that prevents foodborne illness and so on...

The visit to the CBNR aided the students in learning about the opportunities in the area of research in Life Sciences.

**From,**

Head of the Department,  
Department of Biotechnology & Microbiology,  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru-04

**To,**

The Principal,  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru-04

to SVC

SARADA VILAS EDUCATIONAL INSTITUTIONS®	
No. 934	Date: 9/10/2023
PRESIDENT	
HON. SECRETARY <i>[Signature]</i>	
ADMINISTRATIVE OFFICER <i>[Signature]</i>	
MANAGER <i>[Signature]</i>	

**Subject:** "Permission to conduct Industrial Visit to CFTRI, Mysuru and Honganahalli Water Treatment Plant, KRS, Mysuru."

**Respected Madam,**

With respect to the above cited subject, I request you to kindly permit the students of **Fifth Semester, B.Sc. - MbBt, MbBc & BtBc**, to carry out the visit to the **CFTRI, Mysuru and Honganahalli Water Treatment Plant, KRS, Mysuru**, as per the Microbiology and Biotechnology syllabus requisite, under the guidelines of the University of Mysore.

A total of **29 students** will be part of the visit on **Wednesday 11/10/2023 (01 Day)**, accompanied by **4 assistant professors**. The list of students and accompanying faculty is attached with this letter. So I kindly request you to oblige to our request.

Thanking you,

Place: Mysuru

Date: 05/10/2023

*Permitted*  
*[Signature]*  
10/10/23

Your's faithfully,

*[Signature]*  
Head of the Department  
Department of Microbiology  
Sarada Vilas College, Mysuru

*permitted*

*Per*  
5/10/2023  
Secretary  
Department of Microbiology  
University of Mysore

*Forwarded this to Hon Secretary  
for kind approval as it is  
mandatory acc to the syllabus  
prescribed by the University*  
*[Signature]*  
7/10/2023



**From,**

Head of the Department,  
Department of Biotechnology & Microbiology,  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru-04

**To,**

The Principal,  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru-04

Subject: "Permission to conduct Industrial Visit to CFTRI, Mysuru and  
Honganahalli Water Treatment Plant, KRS, Mysuru."

**Respected Madam,**

With respect to the above cited subject, I request you to kindly permit the students of **Fifth Semester, B.Sc. - MbBt, MbBc & BtBc**, to carry out the visit to the **CFTRI, Mysuru and Honganahalli Water Treatment Plant, KRS, Mysuru**, as per the Microbiology and Biotechnology syllabus requisite, under the guidelines of the University of Mysore.

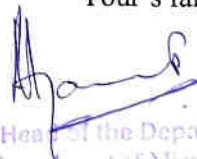
A total of **29 students** will be part of the visit on **Wednesday 11/10/2023 (01 Day)**, accompanied by **4 assistant professors**. The list of students and accompanying faculty is attached with this letter. So I kindly request you to oblige to our request.

Thanking you,

Place: Mysuru

Date: 05/10/2023

Your's faithfully,

  
Head of the Department  
Department of Microbiology  
Saradavilas College, Mysuru

*permitted*  
*Santhosh*  
*15/10/23*  
Principal  
Sarada Vilas College  
Krishnamurthypuram, Mysuru



SARADAVILASA EDUCATION TRUST (R)

**SARADA VILAS COLLEGE**

Krishnamurthypuram, Mysore – 570 004 Karnataka

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**Dr. M Devika .M Sc., M Phil.,Ph.D.**

**Principal**

**Mobile: 9880024483**

SVC/153/2023-24

Date: 05/10/2023

To,

**Executive  
Superintendent Engineer,  
Vani Vilas Water Works,  
Jayalakshimpuram, Mysuru.**



Respected Sir/Madam,

Sub: Request permission for Student Visit to Honganahalli Water treatment Plant, Mysuru.

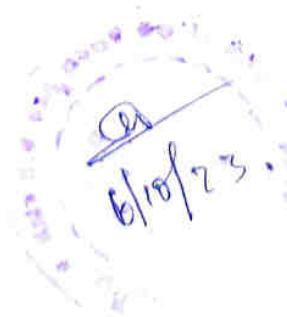
With respect to the above cited subject, we would like to request your permission to conduct student visit to **Honganahalli Water treatment Plant, Mysuru**. This visit is to meet the syllabus guidelines of the University of Mysore for **B.Sc. (UG) BMBt & CBZ Students**. The NEP Syllabus prescribes visit to industries/Institutions for an exposure to recent trends and applications in life sciences. Consequently the students would like to visit your institution on **Wednesday 11<sup>th</sup> Oct 2023**.

A total of **45 students** will be part of the visit, accompanied by **4 Assistant Professors**. The list of students and accompanying faculty is attached with this letter. Kindly oblige to our request.

Thanking you,

Place: Mysuru

Yours faithfully,



**Dr. M Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
**Sarada Vilas College,**  
Krishnamurthypuram, Mysuru

With Regards

Dr. Devika M.  
Principal  
Sarada Vilas College  
Krishnamurthypuram, Mysore - 570 004, Karnataka  
Phone: 0821 2330221 Mob: 9680024483

----- Forwarded message -----

From: Information Publicity <info@cftri.res.in>  
Date: Mon, Oct 9, 2023 at 12:35 AM  
Subject: Students visit to CFTRI-11th Oct. Confirmation  
To: principal <principal@saradavilas.com>  
Cc: Director CSIR CFTRI <director@cftri.res.in>, MFT Department <mandh@cftri.res.in>, Prakash Halami <prakashhalami@cftri.res.in>, PCBT Department <pcbt@cftri.res.in>, Vikas Singh Chauhan <vikas@cftri.res.in>

Dear Dr. Devika Madam,

Good afternoon and Greetings from CSIR-CFTRI!

Thanks for the mail letter to Our Director and with reference to your request letter to us, We welcome the visit of B Sc (BMBT&CBZ) students to our Institute and facilities at CSIR-CFTRI on 11th October ( Wednesday) 2023 at 11AM. Kindly keep up the date and time of the scheduled visit.

You may show a copy of this email to security at the Main gate (East gate, opposite to Railway Museum on the KRS Road).

The visit will be of a general nature and of about 2 hrs in duration. Please note we expect the visiting groups to respect the Institute's discipline.

I am marking a copy to Dr. Prakash M. Halami, Chief Scientist & Head, Microbiology & Fermentation Technology Dept. and Dr. Vikas Singh Chauhan, Chief Scientist & Head, PCBT Dept who will do the needful for visit and interaction with them.

I look forward to hearing from you for further confirmation.

Regards,

**Dr. Parigi Ramesh Kumar**

Dr. Parigi Ramesh Kumar  
Sr. Principal Scientist  
Technology Transfer & Business Development  
(Information & Publicity)  
CSIR-Central Food Technological Research Institute

Mysore-570026  
Tel: 0821-2515919, E-mail: [info@cftri.res.in](mailto:info@cftri.res.in)







SARADAVILASA EDUCATION TRUST (R)  
**SARADA VILAS COLLEGE**  
Krishnamurthypuram, Mysore – 570 004 Karnataka  
Affiliated to University of Mysore  
Re accredited by NAAC with A grade (CGPA: 3.19)



**Dr. M Devika .M Sc., M Phil.,Ph.D.**

**Principal**

**Mobile: 9880024483**

**SVC/154/2023-24**

**Date: 05/10/2023**

To,

The Director,

Central Food Technological Research Institute (CFTRI),  
Mysuru.

Respected Sir/Madam,

Sub: Request permission for Student Visit to CFTRI, Mysuru.

With respect to the above cited subject, we would like to request your permission to conduct student visit to **Central Food Technological Research Institute, Mysuru**. This visit is to meet the syllabus guidelines of the University of Mysore for **B.Sc. (UG) BMBt & CBZ Students**. The NEP Syllabus prescribes visit to industries/Institutions for an exposure to recent trends and applications in life sciences. Consequently the students would like to visit your institution on **Wednesday 11<sup>th</sup> oct 2023**.

A total of **45 students** will be part of the visit, accompanied by **4 Assistant Professors**. The list of students and accompanying faculty is attached with this letter. Kindly oblige to our request.

Thanking you,

Place: Mysuru




Yours faithfully,

  
**Dr. M Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru













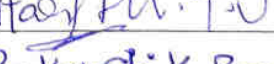
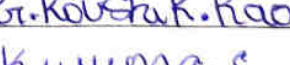
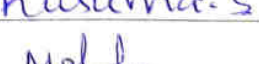

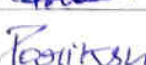
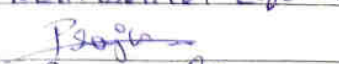



# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysore – 570 004 Karnataka

## List of accompanying faculty

Sl. No.	Faculty Name	Designation	Signature
1	Capt. R. A. Manjunath	HOD, Assistant Professor, Microbiology	
2	Mr. Tribhuvan K. R.	Assistant Professor, Biotechnology	
3	Mr. Abhilash H S	Assistant Professor, Biotechnology	

## Student Attendance List

Sl. No.	List of Students	Course	Combination	Signature
1	ABHISHEK K L	B.Sc.	BcBt	
2	ADARSH T K	B.Sc.	BcBt	
3	ANJU K S	B.Sc.	BcBt	
4	BINDU C	B.Sc.	BcBt	
5	KOUSALYA S C	B.Sc.	BcBt	
6	LAKSMIKANATHA K	B.Sc.	BcBt	
7	MONICA K	B.Sc.	BcBt	ABSENT
8	NISARGA K M	B.Sc.	BcBt	
9	RAGHAVA RAJ SG	B.Sc.	BcBt	
10	SACHIN V V	B.Sc.	BcBt	
11	SAMBHU VAISHNAV	B.Sc.	BcBt	
12	VINITH RAJ D	B.Sc.	BcBt	
13	YASHWANTH M	B.Sc.	BcBt	
14	HARSHITHA T U	B.Sc.	MbBt	
15	KOUSHIK RAO G	B.Sc.	MbBt	
16	KUSUMA S	B.Sc.	MbBt	
17	MAHESH	B.Sc.	MbBt	
18	MITHANGOWDA V J	B.Sc.	MbBt	
19	PARIKSITH C M	B.Sc.	MbBt	
20	PRAJWAL S	B.Sc.	MbBt	
21	PRAMODA D'S	B.Sc.	MbBt	
22	RAVIKUMARA S	B.Sc.	MbBt	

Sl. No.	List of Students	Course	Combination	Signature
23	SHIVARAJ S	B.Sc.	MbBt	Shivraj
24	SPOORTHY T	B.Sc.	MbBt	S-sathi
25	VASUNDARA M D	B.Sc.	MbBt	Vasu
26	AISHWARYA K	B.Sc.	MbBc	Aishwarya K
27	CHANDANKUMARA K K	B.Sc.	MbBc	Chandan K.K
28	DARSHAN N	B.Sc.	MbBc	Darshan
29	ROHITH KUMARA	B.Sc.	MbBc	Rohith



## Tour Visit

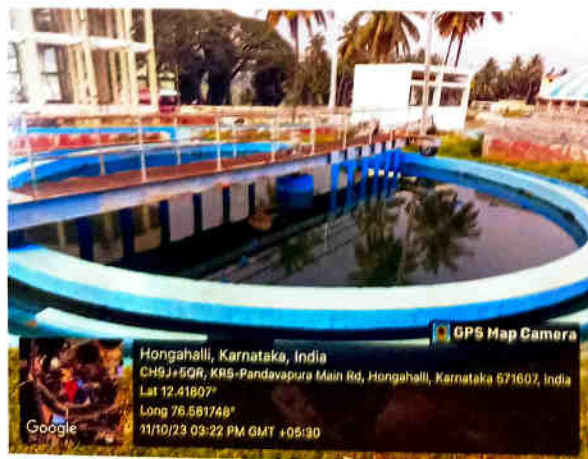
***"Central Food Technological Research Institute (CFTRI)", Mysuru on 11/10/2023***





## Tour Visit

**"Hongahalli Water Treatment Plant, KRS, Mysuru" on 11/10/ 2023**





## SARADA VILAS COLLEGE

Krishnamurthy Puram, Mysuru - 570 004, Karnataka

Affiliated to University of Mysore

Recognised by NAAC with "A" grade (CGPA: 3.19)



Date: 27/03/2024

**Dr. Devika M, M.Sc., M. Phil., Ph. D**  
**Principal**  
**Mob: 9880024483**

### TOUR VISIT REPORT

***"Mysore Milk Union Limited (MyMUL), Nandini Diary, Halanahalli Unit, Mysuru"***  
***on 26<sup>th</sup> March 2024***

The Department of Biotechnology & Microbiology of Sarada Vilas College organised an institutional visit to the ***"Mysore Milk Union Limited (MyMUL), Nandini Diary, Halanahalli Unit, Mysuru"*** on 26<sup>th</sup> March 2024 for the ***UG – Fifth semester, BMBt (B.Sc.) Students*** as part of the UOM syllabus (NEP) requisite.

A total of **28 students** were part of the visit along with **2 faculty members**. The students arrived at Nandini diary pre-noon, and were greeted and addressed by Mr. Santosh, staff of the mega diary complex. The students were taken through the different divisions of the facility such as milk procurement area, quality testing lab, primary and secondary milk process unit, storage silos, curdling & butter processing division, ghee production unit, quality assurance process, package units (regular & tetra pack), the freeze storage rooms and the steam boiler building. The students were instructed on the various facilities, instruments and resources used at each division and were educated on the formation of the Karnataka Milk Federation (KMF), and the establishment of the mega diary complex at Halanahalli, Mysuru. They were also thought of the various products produced and the farmer welfare programs and social projects of KMF.

  
**Head of the Department**  
**Department of Biotechnology & Microbiology**  
**Saradavilas College, Mysore**

  
**Dr. M. Devika**  
**M.Sc., M. Phil., Ph.D.**  
**Principal**  
**Sarada Vilas College**  
**Krishnamurthy Puram, Mysuru**



## Tour Visit

**"Mysore Milk Union Limited (MyMUL), Nandini Dairy, Halanahalli Unit, Mysuru" on  
26<sup>th</sup> March 2024**



  
Dr. M. Devika

M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru

**From,**

Head of the Department,  
Department of Biotechnology & Microbiology,  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru-04

**To,**

The Principal,  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru-04

**Subject:** "Permission to conduct Industrial Visit to MYMUL Siddhartha Nagar unit."

**Respected Madam,**

With respect to the above cited subject, I request you to kindly permit the students of **Sixth Semester, B.Sc. - MbBt, MbBc & BtBc**, to carry out the visit to the **"MYMUL Siddhartha Nagar unit,"** as per the Microbiology and Biotechnology syllabus requisite, under the guidelines of the University of Mysore.


A total of **29 students** will be part of the visit on **Tuesday 26/03/2024 forenoon**, accompanied by assistant professors Sri. Tribhuvan K R and Sri. Abhilash H S. The list of students is attached with this letter. So I kindly request you to oblige to our request.

Thanking you,


Place: Mysuru

Date: 11/03/2024

Your's faithfully,

  
**Head of the Department**  
Department of Microbiology  
Saradavilas College, Mysore

permitted

  
11/3/24  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College  
Krishnamurthypuram, Mysuru

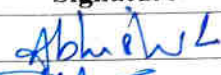



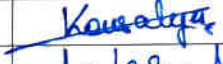
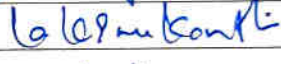




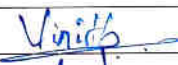
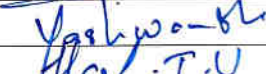








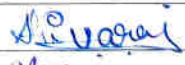
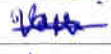
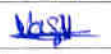
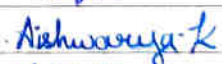

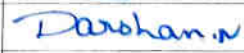
# SARADA VILAS COLLEGE


Krishnamurthypuram, Mysore - 570 004 Karnataka


## "MYMUL Siddhartha Nagar unit Visit"

Sl. No.	Faculty	Signature
1	Tribhuvan K R	
2	Abhilash H S	

### Student Attendance List

Sl. No.	List of Students	Course	Combination	Signature
1	ABHISHEK K L	B.Sc.	BcBt	
2	ADARSH T K	B.Sc.	BcBt	
3	ANJU K S	B.Sc.	BcBt	
4	BINDU C	B.Sc.	BcBt	
5	KOUSALYA S C	B.Sc.	BcBt	
6	LAKSMIKANTHA K	B.Sc.	BcBt	
7	MONICA K	B.Sc.	BcBt	
8	NISARGA K M	B.Sc.	BcBt	
9	RAGHAVA RAJ SG	B.Sc.	BcBt	
10	SACHIN V V	B.Sc.	BcBt	
11	SAMBHU VAISHNAV	B.Sc.	BcBt	
12	VINITH RAJ D	B.Sc.	BcBt	
13	YASHWANTH M	B.Sc.	BcBt	
14	HARSHITHA T U	B.Sc.	MbBt	
15	KOUSHIK RAO G	B.Sc.	MbBt	
16	KUSUMA S	B.Sc.	MbBt	
17	MAHESH	B.Sc.	MbBt	
18	MITHANGOWDA V J	B.Sc.	MbBt	
19	PARIKSITH C M	B.Sc.	MbBt	
20	PRAJWAL S	B.Sc.	MbBt	
21	PRAMODA D S	B.Sc.	MbBt	
22	RAVIKUMARA S	B.Sc.	MbBt	
23	SHIVARAJ S	B.Sc.	MbBt	
24	SPOORTHI T	B.Sc.	MbBt	
25	VASUNDARA M D	B.Sc.	MbBt	
26	AISHWARYA K	B.Sc.	MbBc	
27	CHANDANKUMARA K K	B.Sc.	MbBc	
28	DARSHAN N	B.Sc.	MbBc	
29	ROHITH KUMARA	B.Sc.	MbBc	

  
Head of the Department  
Department of Microbiology  
Saradavilas College, Mysore

  
Dr. M Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysore





Sarada Vilas Educational Institutions (R.)

Phone : 0821 - 2332479

Fax : 0821 - 2330221

# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru - 570 004

(Affiliated to the University of Mysore)

Reaccredited by NAAC with A grade (CGPA : 3.19)

E-mail : principal@saradavilas.com Website : www.saradavilas.com



**Dr. M. Devika**, M.Sc., M.Phil., Ph.D.

**Principal**

Mobile : 9880024483

Date: 30/03/2024

To.

District Health Officer,  
Mysuru District Hospital,  
Near Metagalli, Hebbal 1<sup>st</sup> Stage,  
Mysuru, Karnataka - 570016.

Respected Sir/Madam,

Sub: Request for permission to our Students to do internship.

With respect to the above cited subject, we would like to request you to conduct **internship program to B.Sc. Sixth Semester students**. This internship is to meet the syllabus requirement of the University of Mysore.

The NEP Syllabus prescribes a period of 6-7 days of internship, and submits a report with a certificate from your organisation recognising the student's tenure. Consequently **16 Biochemistry and 12 Microbiology students (total 28 students)** would like to partake in the internship program from **01<sup>st</sup> to 07<sup>th</sup> April 2024**. The list of students has also been attached. Kindly oblige.

Thanking you,

Place: Mysuru



Your's faithfully,

**Dr. M. Devika**

M.Sc. M.Phil. Ph.D.


Principal

**Sarada Vilas College,**

Krishnamurthypuram, Mysuru - 570 004

**Department of Microbiology & Biotechnology**  
**Sarada Vilas College, Mysore**  
 Internship held at District Hospital And Epidemic Disease Hospital., KRS Road Metagalli,  
 Mysuru  
 Date: 01-04-2024 to 08-04-2024 **ATTENDANCE** Time: 10Am to 4Pm

Sl. No	UUCMS Reg. No.	Name of the student	Combination	01-04-24	02-04-24	03-04-24	04-04-24	05-04-24	06-04-24	07-04-24	08-04-24	Percentage
1	U01BG21S0001	RAGHAVA RAJ S G	BT/BC	1	2	3	4	5	6	SUNDAY	7	100%
2	U01BG21S0002	SAMBHU VAISHNAV	BT/BC	AB	AB	AB	AB	AB	AB		AB	00
3	U01BG21S0005	KOUSHIK RAO G	BT/MB	1	2	3	4	5	6		7	100%
4	U01BG21S0007	ADARSH T K	BT/BC	1	2	3	4	5	6		7	100%
5	U01BG21S0022	LAKSMIKANTHA K	BT/BC	1	2	3	4	5	6		7	100%
6	U01BG21S0023	KOUSALYA S C	BT/BC	1	2	3	4	5	6		7	100%
7	U01BG21S0026	VASUNDHARA M D	BT/MB	1	2	3	4	5	6		7	100%
8	U01BG21S0031	SACHIN V V	BT/BC	1	2	3	4	5	6		7	100%
9	U01BG21S0036	MITHANGOWDA V J	BT/MB	1	2	3	4	5	6		7	100%
10	U01BG21S0037	RAVIKUMARA S	BT/MB	1	2	3	4	5	6		7	100%
12	U01BG21S0043	MAHESH	BT/MB	1	2	3	4	5	6		7	100%
13	U01BG21S0045	PRAMODA D S	BT/MB	1	2	3	4	5	6		7	100%
14	U01BG21S0049	YASHWANTH M	BT/BC	1	2	3	4	5	6		7	100%
15	U01BG21S0051	KUSUMA S	BT/MB	1	2	3	4	5	6		7	100%
16	U01BG21S0052	ANJU K S	BT/BC	1	2	3	4	5	6		7	100%
17	U01BG21S0056	BINDU C	BT/BC	1	2	3	4	5	6		7	100%
18	U01BG21S0057	PARIKSHITH CM	BT/MB	1	2	3	4	5	6		7	100%
19	U01BG21S0058	VINITH RAJ D	BT/BC	1	2	3	4	5	6		7	100%
20	U01BG21S0059	NISARGA K M	BT/BC	1	2	3	4	5	6		7	100%
21	U01BG21S0060	SPOORTHY T	BT/MB	1	2	3	4	5	6		7	100%
22	U01BG21S0067	PRAJWAL S	BT/MB	1	2	3	4	5	6		7	100%
23	U01BG21S0076	ABHISHEK K L	BT/BC	1	2	3	4	5	6		7	100%
24	U01BG21S0103	HARSHITHA T U	BT/MB	1	2	3	4	5	6		7	100%
25	U01BG21S0104	SHIVARAJ S	BT/MB	1	2	3	4	5	6		7	100%
26	U01BG21S0106	MONICA K	BT/BC	AB	2	2	3	4	5		6	87.5%
27	U01BG21S0003	DARSHAN N	MB/BC	1	2	3	4	5	6		7	100%
28	U01BG21S0004	AISHWARYA K	MB/BC	1	2	3	4	5	6		7	100%
29	U01BG21S0027	ROHIT KUMARA	MB/BC	1	2	AB	3	4	5		6	87.5%
30	U01BG21S0090	CHANDANKUMARA K K	MB/BC	1	2	3	4	5	6		7	100%

  
 Head of the Department  
 Head of the Department  
 Department of Microbiology  
 Saradavilas College, Mysore

  
 Principal/-  
 Principal  
 Sarada Vilas College  
 Mysore-570004



**Department of Microbiology & Biotechnology**  
**Sarada Vilas College, Mysore**  
 Internship held at District Hospital And Epidemic Disease Hospital., KRS Road Metagalli,  
 Mysuru

Date: 01-04-2024 to 08-04-2024

**ATTENDANCE**

Time: 10Am to 4Pm

Sl. No	UUCMS Reg. No.	Name of the student	Combination	01-04-24	02-04-24	03-04-24	04-04-24	05-04-24	06-04-24	07-04-24	08-04-24	Percentage
1	U01BG21S0001	RAGHAVA RAJ S G	BT/BC	1	2	3	4	5	6		7	100%
2	U01BG21S0002	SAMBHU VAISHNAV	BT/BC	AB	AB	AB	AB	AB	AB		AB	00
3	U01BG21S0005	KOUSHIK RAO G	BT/MB	1	2	3	4	5	6		7	100%
4	U01BG21S0007	ADARSH T K	BT/BC	1	2	3	4	5	6		7	100%
5	U01BG21S0022	LAKSMIKANATHA K	BT/BC	1	2	3	4	5	6		7	100%
6	U01BG21S0023	KOUSALYA S C	BT/BC	1	2	3	4	5	6		7	100%
7	U01BG21S0026	VASUNDHARA M D	BT/MB	1	2	3	4	5	6		7	100%
8	U01BG21S0031	SACHIN V V	BT/BC	1	2	3	4	5	6		7	100%
9	U01BG21S0036	MITHANGOWDA V J	BT/MB	1	2	3	4	5	6		7	100%
10	U01BG21S0037	RAVIKUMARA S	BT/MB	1	2	3	4	5	6		7	100%
12	U01BG21S0043	MAHESH	BT/MB	1	2	3	4	5	6		7	100%
13	U01BG21S0045	PRAMODA D S	BT/MB	1	2	3	4	5	6		7	100%
14	U01BG21S0049	YASHWANTH M	BT/BC	1	2	3	4	5	6		7	100%
15	U01BG21S0051	KUSUMA S	BT/MB	1	2	3	4	5	6		7	100%
16	U01BG21S0052	ANJU K S	BT/BC	1	2	3	4	5	6		7	100%
17	U01BG21S0056	BINDU C	BT/BC	1	2	3	4	5	6		7	100%
18	U01BG21S0057	PAKIKSHITH CM	BT/MB	1	2	3	4	5	6		7	100%
19	U01BG21S0058	VINITH RAJ D	BT/BC	1	2	3	4	5	6		7	100%
20	U01BG21S0059	NISARGA K M	BT/BC	1	2	3	4	5	6		7	100%
21	U01BG21S0060	SPOORTHY T	BT/MB	1	2	3	4	5	6		7	100%
22	U01BG21S0067	PRAJWAL S	BT/MB	1	2	3	4	5	6		7	100%
23	U01BG21S0076	ABHISHEK K L	BT/BC	1	2	3	4	5	6		7	100%
24	U01BG21S0103	HARSHITHA T U	BT/MB	1	2	3	4	5	6		7	100%
25	U01BG21S0104	SHIVARAJ S	BT/MB	1	2	3	4	5	6		7	100%
26	U01BG21S0106	MONICA K	BT/BC	AB	2	2	3	4	5		7	100%
27	U01BG21S0003	DARSHAN N	MB/BC	1	2	3	4	5	6		6	87.5%
28	U01BG21S0004	AISHWARYA K	MB/BC	1	2	3	4	5	6		7	100%
29	U01BG21S0027	ROHIT KUMARA	MB/BC	1	2	AB	3	4	5		7	100%
30	U01BG21S0090	CHANDANKUMARA K K	MB/BC	1	2	3	4	5	6		6	87.5%
				2	2	2	2	2	2		7	100%

SUNDAY

*[Signature]*  
 Head of the Department  
 Head of the Department  
 Department of Microbiology  
 Saradavilas College, Mysore

*[Signature]*  
 Principal/-  
 Principal  
 Sarada Vilas College  
 Mysore-570004



# **REPORT ON INTERNSHIP AT DISTRICT HOSPITAL METAGALLI, MYSURU**

**Submitted by,**

**RAGHAVA RAJ S G**

Reg. No.: U01BG21S0001

VI Semester Biotechnology & Biochemistry

Submitted in fulfilment of the requirement for the degree of

**BACHELOR OF SCIENCE (B.Sc.)**

During the Academic Year

**2023-24**



**SARADA VILAS COLLEGE**

**KRISHNAMURTHY PURAM**

**MYSURU**



(Govt.of Karnataka)

**OFFICE OF THE DISTRICT SURGEON**  
**DISTRICT HOSPITAL AND EPIDEMIC DISEASE HOSPITAL.,**  
**KRS ROAD, METAGALLI, MYSURU-570061**

Phone Number: 0821-2517555

Email ID: [mysoreds@gmail.com](mailto:mysoreds@gmail.com)

NO/DH & EDH/MYS/2024-25

Date: 24.04.2024

**CERTIFICATE**

This is to certify that Sri/ Smt **Raghav Raj S G** class of 3<sup>rd</sup> year B.SC  
student of Sarada Villas College, Mysuru is completed internship program in related to  
Microbiology /Biochemistry/ Pathology from 01.04.2024 to 08.04.2024 successfully

**District Surgeon**

**Disrict Hospital & Epidemic Diseases Hospital**  
**K.R.S.road, Metagalli, Mysuru-570016**



# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru – 570004

Re-accredited with 'A' Grade by NAAC (CGPA 3.19)

Affiliated to University of Mysore,

## CERTIFICATE

This is to certify that **Sri. Raghava Raj S G** has completed his Internship program during the period from **01/04/2024 to 08/04/2024** at the **District Hospital, Metagalli, Mysuru** in fulfilment of the requirement for the degree of Bachelor of Science (B.Sc.) prescribed under the NEP syllabus by the University Of Mysore for the students of VI Semester during the academic year 2023-24.

Register No.: **U01BG21S0001**

Date : 17/05/2024

Signature of the teacher in charge

Signature of Head of Department

**Likith Clement P M.Sc., B.Ed.**  
**Head of the Department**  
**Biochemistry**  
**Sarada Vilas College**  
**Mysuru - 570 004**

Sarada Vilas College  
Mysuru  
**VALUED**  
Examiners



# **Institution- Industry Interaction Programme**

04/04/2024

*For final year B.com  
students.*

## **Places of visit**

Government Cocoon market, Ramanagara  
Nandidni Hightech Mega Powder plant Chennapattana.

### **Co- ordinators**

Mr. Mallikarjunaradya HM

Mrs. Sowmya MA

### **Accompanying staff**

Mr. Mahendra BS

Mr. Rajkishore SN



**SARADA VILAS COLLEGE**  
(Affiliated to University of Mysore, Re-accredited by NAAC with 'A' grade)  
Krishnamurthipuram, Mysuru-570 004  
Department of Commerce and Business Administration



**Prof. Satyanarayana**  
**Dean**

**Contact No: +0821-2330049**  
**svccom17@gmail.com**

**Date : 20-03-2024**

**To,**  
**Principal**  
**Sarada Vilas College**  
**Mysuru**

Respected Madam,

**Subject: Requestion for permission to organise one day Industrial Visit  
for final year B.Com and BBA students in the month of April- 2024**

With reference to the above mentioned subject, we are planning to conduct an  
“**Institution-Industry interaction programme**” in the month of **April-2024** for final  
year B.Com and BBA students in and around Bengaluru.

The transportation and food facility will be facilitated by “**Barbie’s Dreams**” –  
**Industrial trip organiser**, Bangalore. The same organisation helped us in conducting  
such programmes in the previous year also. The proposed charges Rs. 1,000/- per student  
which includes breakfast, lunch, coffe/tea and transportation.

**Sri. Mallikarjunaradya HM and Smt. Sowmya M.A.** are assigned to take the  
responsibility of conducting Industrial Visit.

I kindly request your permission to get permission from the Industries and take our  
students for industrial intraction.

Thanking You,

With Regards,

*Satyanarayana*

*permitted*  
*Dean*  
*20/03/2024*



## SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru-576 004  
Department of Commerce and Business Administration  
PG Centre - M.Com

Prof. Satyanarayana  
Dean

Contact No: +91 94803 79192  
Email: [svccom17@gmail.com](mailto:svccom17@gmail.com)

Date : 20-03-2024

To

Deputy Director of Sericulture  
Govt. Cocoon Market  
Ramanagara

Dear Sir/Madam,

Sub: Permission for industrial Visit.

As part of curriculum of B.Com/BBA/M.Com course, University of Mysore, the students are requested to undertake industrial visit. We feel that it will be fruitful for the students to have a glimpse of industry for better appreciation of practical application theoretical concepts. We would like to send around 60 students accompanied by the staff of the college to visit the industry preferably in the first week of April, 2024.

I request you to kindly accord the necessary permission for the above visit and arrange for guiding the students.

We assure you that our students will observe the rules and regulation prescribed for the visitors and we will not disturb the functioning of the industry. We shall be grateful for favorable response.

Thanking you,

3rd, 4th, or 5th of April 2024

*Sd/-*

(copy 2 dates) 4/4/2024  
Visited Sir  
4/4/2024  
J. S. S. S.  
M. S. S.  
D. S. S.  
22/3/24





## SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru-570 004  
Department of Commerce and Business Administration  
PG Centre - M.Com

Prof. Satyanarayana  
Dean

Contact No: +91 94803 79192  
Email: [svccom17@gmail.com](mailto:svccom17@gmail.com)

Date : 20-03-2024

To

Director

Nandini Hitech powder plant

Dear Sir/Madam,

Sub: Permission for industrial Visit.

As part of curriculum of B.Com/BBA/M.Com course, University of Mysore, the students are requested to undertake industrial visit. We feel that it will be fruitful for the students to have a glimpse of industry for better appreciation of practical application theoretical concepts. We would like to send around 60 students accompanied by the staff of the college to visit the industry preferably in the first week of April, 2024.

I request you to kindly accord the necessary permission for the above visit and arrange for guiding the students.

We assure you that our students will observe the rules and regulation prescribed for the visitors and we will not disturb the functioning of the industry. We shall be grateful for favorable response.

Thanking you,

Htn & sm  
of Apr 2024

*[Signature]*



Students Visited  
on 4/4/24 to NHM plant.

*[Signature]*  
4/4/24

22/3/24

## Report on Industrial visit

Department of Commerce and Business Administration organised an **Institution-Industry interaction programme** for VI semester B.Com and BBA students on 04-04-2024 to **Government Cocoon market, Ramanagara**(a biggest cocoon market in Asia) and **Nandidni Hightech Mega Powder plant**( A unit of KMF), Chennapattana.



With the guidance of **Prof. Sathyanarayan**, Dean, Department of Commerce and Business Administration, Total **69 B.com students and 19 BBA students** along with **04 faculties** namely **Mr. Mallikarjunaradya HM and Mrs. Sowmya MA**, the Co-ordinators and **Mr. Mahendra and Mr. Rajkishore SN**, the accompanying staff, started from college premises in the morning 6.50 AM and took break for breakfast at Maharaja Restaurant, Mandya and reached Government Cocoon market, Ramanagara at 10 AM. The students were divided into 4 groups of 22 students each. They met different farmers and traders and did interaction about sericulture farming, duration of crop, land required, profit in the crop, online trading etc...

Later **Mr. kailashmoorthy, Sericulture officer**, explained the history of market, marketing methods and online trading. Students interacted well with him in order to get more knowledge and enjoyed the experience. After the interaction was over they left the place at 12 PM and reached Nandidni Hightech Mega Powder Plant, Chennapattana at 12.20 PM.

**Mr. Rakshith, Production Manager**, received our students and explained the history of KMF- its origin and growth. Further he also explained procurement process of milk. In karnataka, every day, 85 lakh litres of milk procured out of which 50 lakh litres is used for packet milk, 10 lakh litres is used to prepare curd, 10 to 15 lakh litres is used for preparation of Butter, Ghee, sweets and other products. The remaining 10 to 15 lakh litres will be powdered, he said. He also explained about the marketing techniques.

Further he took the students inside the production plant and explained the procedure of production of butter, Ghee and milk powder with live production respectively.

At around 2pm the visit was over and went for break to Udupi Upachar Restaurant, Bidadi and had lunch.

By 6 PM all the students and faculties reached the college premises safely. Finally the day ended with an exposure to understand the industries' nature and method of working.

co-ordinators

H.N.N.g.



Date: 05-04-2024

## Report on Industrial visit



CO-ordinators

H.N.N.G.

  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru



Sarada vilas College  
Department of Commerce and Business Administration  
Industrial visit 2023 - 2024

Sl. No	Student Names	Contact Number	Class	Signature
1	Vishwas M	8197562804	6th BBA	Vishwas M
2	Ravichandra N	8050083833	6th BBA	Ravichandra N
3	Bhanushree M	9606640192	6th BBA	Bhanushree M
4	Karthik Patel M	9483505594	6th BBA	Karthik Patel M
5	Vijay S	962343411	6th BBA	Vijay S
6	Mahadeva	8884668673	6th BBA	Mahadeva
7	Harsha K N	8495961076	6th BBA	Harsha K. N
8	Shashanka H M	7338343752	6th BBA	Shashanka H. M
9	Dhanuj Y	8310453266	6th BBA	Dhanuj Y
10	Kumarswamy S V	9380093831	6th BBA	Kumarswamy S. V
11	Suhas K	7406835483	6th BBA	Suhas K
12	Chandru B N	6363866826	6th BBA	Chandru B. N
13	Ranjini R	9900327986	6th BBA	Ranjini R
14	Suprith K P	7795516709	6th BBA	Suprith K. P
15	Nithish H M	9108089547	6th BBA	Nithish H. M
16	Mohammed Zain	8123177485	6th BBA	Mohammed Zain
17	Rani	7892924871	6th BBA	Rani
18	Pooja	6360898122	6th BBA	Pooja
19	Anub	8123124381	6th BBA	Anub
20	Praveen sharma	9632973196	6th Bcom A	Praveen sharma
21	Sindhu N	8710904897	6th Bcom A	Sindhu N
22	ShaShank K	9380142734	6th Bcom A	ShaShank K
23	Vaibhav manohar patil	8731254606	6th Bcom A	Vaibhav manohar patil
24	Shashanka K	9380487299	6th Bcom A	Shashanka K
25	Kusuma J	8660586782	6th Bcom A	Kusuma J
26	Pooja S	9591054010	6th Bcom A	Pooja S
27	Shivakumar patil	9741325110	6th Bcom A	Shivakumar patil
28	Darshan B	9620936948	6th Bcom A	Darshan B
29	Nandish K R	8296947050	6th Bcom A	Nandish K. R
30	Manoj c	6363294371	6th Bcom A	Manoj c
31	Thejas L	9741139379	6th Bcom A	Thejas L
32	Mahima patel G S	9619658372	6th Bcom A	Mahima patel G. S
33	Jayalakshmi C M	8971077848	6th Bcom A	Jayalakshmi C. M
34	Bharath P	9995540539	6th Bcom A	Bharath P
35	Raghavendra K	8184075934	6th Bcom A	Raghavendra K
36	Haripriya S	9110650471	6th Bcom A	Haripriya S
37	Bharath B		6th Bcom A	Bharath B
38	Gnaneshwari B	9611830409	6th Bcom A	Gnaneshwari B
39	Sanmathi R	8310479645	6th Bcom A	Sanmathi R

40	Bhaskara C	8088254908	6th Bcom A	Bhaskara
41	Avani S		6th Bcom A	
42	Amruthkumar H N		6th Bcom A	
43	Jashwantha R	7204761826	6th Bcom A	Jashwantha R
44	Abhishek M	8431848307	6th Bcom A	Abhishek
45	Niranjan S	8073636127	6th Bcom A	Niranjan S
46	Amrutha B J	9380898201	6th Bcom A	Amrutha
47	Likithesh M	7795276026	6th Bcom A	Likithesh M
48	Rahul E	9611744781	6th Bcom A	Rahul
49	Thushar S	0742480747	6th Bcom A	Thushar
50	Poojashree C	8431122767	6th Bcom A	Poojashree C
51	Deepak M D	9108669830	6th Bcom A	Deepak M D
52	Sushmitha S	8792068387	6th Bcom B	Sushmitha S
53	Monisha P	7975581059	6th Bcom B	Monisha P
54	Vinutha P	8431597006	6th Bcom B	Vinutha P
55	Sampritha	8217579714	6th Bcom B	Sampritha
56	Appu H C	9686762302	6th Bcom B	Appu H C
57	Asha C	8867413916	6th Bcom B	Asha
58	Suchitha M	9740874573	6th Bcom B	Suchitha M
59	Gagan B		6th Bcom B	
60	Vidyashree S	6364691066	6th Bcom B	Vidyashree S
61	Jatin R	9739500653	6th Bcom B	Jatin R
62	Prajwal M		6th Bcom B	
63	Abhishek B R	866041264	6th Bcom B	Abhishek
64	Abdulla Sait	9019213876	6th Bcom B	Abdulla Sait
65	Gowthama K	8970634358	6th Bcom B	Gowthama K
66	Rakshitha V	8197037493	6th Bcom B	Rakshitha V
67	Rakshitha B G	9902872046	6th Bcom B	Rakshitha B G
68	Prakruthi gowda A P	7411104863	6th Bcom B	Prakruthi
69	Yashaswini R	7795791943	6th Bcom B	Yashaswini R
70	Sanjay D P	7204607750	6th Bcom B	Sanjay D P
71	Aishwarya L	9113077096	6th Bcom B	Aishwarya L
72	Chandan M K	9164872218	6th Bcom B	Chandan M K
73	Bharath C R	7204279138	6th Bcom B	Bharath C R
74	Abhishek K M		6th Bcom B	
75	Likith M	6364157698	6th Bcom B	Likith M
76	Rajeshwari G	7975545098	6th Bcom B	Rajeshwari G
77	Jagadeesha T M	8869930497	6th Bcom B	Jagadeesha T M
78	Bishwal B A	9880658332	6th Bcom B	Bishwal
79	Pallavi R	9986453375	6th Bcom B	Pallavi R
80	Akshay R	7022212934	6th Bcom B	Akshay R
81	Suchith M	9036383198	6th Bcom B	Suchith M
82	Ajith S	9019062543	6th Bcom B	Ajith S
83	Vidyashree R	7795153509	6th Bcom B	Vidyashree R

84	Thanushree V	960674426	6th Bcom B	Thanushree V
<del>85</del>	<del>Gowtham R</del>	<del>---</del>	6th Bcom B	<del>---</del>
86	Poojashree C	6361465140	6th Bcom B	Poojashree C.
87	Anjushree	4795272169	6th Bcom B	Anjushree
88	Swaroop M B	0047411403621	6th Bcom B	Swaroop M B

89 Prajwal A.V. 886124642 6th e.com B Prajwal A.V

HMMQ

mbs..





# Internship Report



## "A Study on Marketing Strategies of Harshitha Recovery Agency"

**Thontadarya N S**

6<sup>th</sup> Sem. BBA.

U01BG21M0008

Guide

**Smt. USHA D M**

Asst. Professor

Dept. of Commerce & Business Administration

Submitted to

**University of Mysore**

In partial fulfilment of award of B.Com / BBA

Dept. of Commerce & Business Administration

**Sarada Vilas College, Mysuru**

**May 202**



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## SARADA VILAS COLLEGE

(Affiliated to University of Mysore, Re-accredited by NAAC with 'A' grade)

Krishnamurthipuram, Mysuru -570 004

Department of Commerce and Business Administration



### Certification

This is to certify that Ms. /Mr. Thontadarya N S  
Is a bonafide student of Department of Commerce and Business Administration  
Sarada Vilas College studying BBA final year in the academic year 2023-24. As  
a part of her/his final examination BBA he has prepared a internship report on  
"A Study on Marketing Strategies of Harshitha Recovery  
Agency in Mysore " under the guidance of USHA D M Assistant Professor  
Department of Commerce and Business Administration, Sarada Vilas College,  
Mysuru. I Certify that, this internship work is her original work and not  
presented to any other university or institution for award any degree/ diploma.

Dean

Prof. Satyanarayana,

Department of commerce and business Administration,  
Sarada Vilas College, Mysore.

Guide

Usha D M

Assistant Professor

Department of commerce and business Administration,  
Sarada Vilas College, Mysore.



## Internship Report



**"A Study on marketing and sales strategies of  
Hindustan springs manufacturing company"**

**Harsha. K.N**

6<sup>th</sup> Sem. BBA.

U01BG21M0009

Guide

**Smt. USHA.D.M**

Asst.Professor

Dept. of Commerce & Business Administration

Submitted to

**University of Mysore**

In partial fulfilment of award of B.Com / BBA

Dept. of Commerce & Business Administration

**Sarada Vilas College, Mysuru**

May 2023-24





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Krishnamurthipuram, Mysuru - 570 004

Department of Commerce and Business Administration



### Certification

This is to certify that Mr. HARSHA.K.N  
Is a bonafide student of Department of Commerce and Business Administration  
Sarada Vilas College studying BBA final year in the academic year 2023-24. As  
a part of her/his final examination BBA he has prepared a internship report on  
"Methods techniques and sales strategies" under the guidance of Usha.D.M  
Assistant Professor Department of Commerce and Business Administration,  
Sarada Vilas College, Mysuru. I Certify that, this internship work is his/her  
original work and not presented to any other university or institution for award  
any degree.

Dean

Prof. Satyanarayana,

Department of Commerce and Business Administration  
Sarada Vilas College, Mysore.

Guide

Usha .D.M

Assistant Professor

Department of Commerce and Business Administration,  
Sarada Vilas College, Mysore.



# HINDUSTAN SPRING MFG. CO. Unit - 1



QUALITY SPRING MANUFACTURERS

Ref. No.

Date :

HSMC / SVC /24-25/

April 20, 2024

To

The Department of Commerce & Business Administration  
Sarada Vilas College,  
Krishnamurthipuram, Mysuru - 570 004

Dear Sir,

Sub: Permission to carry out Internship work  
Ref: Your letter dated 22.03.2024

With reference to your above letter, we hereby give our consent to undergo the Internship  
in our works / office of your Final Year BBA student Mr.Harsha K.N bearing USN.No.  
U01BG21M0009 from 20.04.2024 to 20.05.2024.

Thanking You,

Yours faithfully,  
For Hindustan Spring Mfg.Co

  
Authorised Signature

HINDUSTAN SPRING MFG. CO.  
111 & 112, INDUSTRIAL ESTATE  
YADAVAGIRI MYSORE 570 020



# SARADA VILAS COLLEGE

(Affiliated to University of Mysore, Re-accredited by NAAC with 'A' grade)

Krishnamurthipuram, Mysuru-570 004

(Department of Commerce and Business Administration)

(PG Centre - M.Com)



Prof. Satyanarayana  
Dean

Contact No: +0821-2330049  
[syccom17@gmail.com](mailto:syccom17@gmail.com)

Date : 26-03-2024

To,  
Principal  
Sarada Vilas College  
Mysuru

Respected Madam,

**Subject: Requisition for permission to organise one day Industrial Tour  
for M.Com Final Year Students on 5<sup>th</sup> April, 2024.**

With reference to the above mentioned subject, we had sent requisition to 10 companies in and around Bengaluru, Mandya and Nanjangud. In response to our request for Industrial Visit, two companies have expressed their assent to take our students for visiting their organisation on **5<sup>th</sup> April 2024**. The names of the organisations are as below:

1. **Wonderblues Apparels Pvt Ltd Kengeri, Bengaluru** - Jeans Manufacturing Company, where students are exposed to an opportunity to learn process costing, Labour policies, HR Policies and logistics management.
2. **Government Cocoon Market, Ramanagara** - has expressed their willingness to allow our students for industrial interaction and share information regarding cocoon market and bidding system through a fully digitized system and auction process of the silk.
3. **Nandini Hi-Tech Mega Powder Plant (A Unit of KMF)** - is the first largest capacity milk powder plant using modern technology to produce different products and also explained about procurement, storage, finance and marketing activities in the plant.

The transportation and food facility will be facilitated by Barbie's Dreams - Industrial trip organiser, Bangalore charging 1,000/- per student which includes breakfast, lunch, coffee/tea and transportation.

**Smt. Pragathi K and Dr. Sameena Hanu** are assigned to take the responsibility of conducting Industrial Visit.

I kindly request your permission to take our students for industrial interaction.

Thanking You.

With Regards,

**Enclosures**

1. Copy of Quotation given by Barbie's Dream - Industrial Trip organiser
2. Company Permission Letter

(Copy of Quotation)  
2024-03-26





Sarada Vilas Educational Institutions \*

## SARADA VILAS COLLEGE

(Affiliated to University of Mysore, Re-accredited by NAAC with 'A' grade)  
Krishnamurthipuram, Mysuru -570 004

Department of Commerce and Business Administration  
PG Centre -M.Com



Prof. Satyanarayana  
Dean

Contact No: +0821-2330049  
[svccom17@gmail.com](mailto:svccom17@gmail.com)

Date : 04-04-2024

To,  
The Principal,  
Sarada Vilas College  
Mysuru

Respected Madam,

**Subject: Industrial Visit: Reg.**

**Ref:** Approval for organizing the Industrial Visit dated 20/03/2024.

With reference to the subject mentioned above, Industrial Visit for final year M.Com students has scheduled as per the plan. The date of Industrial Visit is on **5th April 2024. Tomorrow at 6.00am.** We are starting from the college with 51 students.

### Other Details

**Vehicle** : One bus with 55 capacity

**Faculty Co-Ordinators** : Mrs. Pragathi K.  
Dr. Sameena Banu

The list of students participating in Industrial Visit programme is enclosed.  
In this connection, I would like to seek your permission and best wishes for the program.

Thanking You,

With Regards,

*Satyanarayana*  
4.4.24.

*Dr. M. Devika*  
4/4/2024  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthipuram, Mysuru

To,

The Principal  
Sarada Vilas College  
Mysuru.

Respected Madam,

**Sub: Details about the Industrial Visit – reg.**

As discussed earlier and with your permission, the third semester M.Com students are visiting to the industries to support the classroom academic studies. The details are as under:

- |                                  |   |
|----------------------------------|---|
| 1. Date of Visit                 | : 5 <sup>th</sup> April, 2024   |
| 2. No. of students participation | : 59  |
| 3. Faculty In-charge             | : Mrs. Pragathi K. and Dr. Sameena Banu   |
| 4. Students Coordinators         | : Ms. Bhavana A.S and Mr. Vinu Christo T.P  |
| 5. Organizing Partner            | : Barbie Dreams Travel Partner  |
| 6. Starting Time                 | : 6:30 AM from SVC  |
| 7. Returning Time                | : 8:30 PM to SVC  |
| 8. Industries Visiting           | : 1. Govt. Cocoon Market, Ramanagara<br>2. Nandini Hi-Tech Mega Powder Plant (A Unit of KMF), Ramanagara.<br>3. Wonderblue Apparels Pvt. Ltd., Kengeri, Bengaluru |

The time to time update will be sent through WhatsApp. Further, we seek your best wishes to complete this programme successfully.

Yours' Sincerely



Dr. M. Davika  
10/04/2024

**Enclosures:**

1. The details of Scheduled time table of the visit
2. List of Students participating in the programme



Dr. M. Davika  
10/04/2024

Sarada Vilas College  
Department of Commerce, PG Centre – M. Com  
Industrial Visit - 2024

Scheduled Time Table  
5<sup>th</sup> April, 2024

Sl. No.	Time	Schedule
1.	06:30 am	Starting from SVC, Mysuru
2.	08:30 am	Breakfast
3.	9:30 am	Government Cocoon Market, Ramanagara
4.	12:00 pm	Nandini Hi-Tech Mega Powder Plant (A Unit of KMF), Ramanagara
5.	01:30 pm	Lunch Break
6.	02:30 pm	Wonderblue Apparels Pvt. Ltd., Kengeri, Bengaluru
7.	04:00 pm	Interaction with manager
8.	05:30 pm	Temple Visit
9.	08:30 pm	Arrival to SVC

*Satyam*  
Head  
Department of Commerce  
Sarada Vilas College  
Mysuru

*Com*  
Head  
Department of Commerce  
Sarada Vilas College  
Mysuru



Phone : 0821 - 2332479

Sarada Vilas Educational Institutions (R.)

Fax : 0821 - 2330221

# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru - 570 004

(Affiliated to the University of Mysore)

Reaccredited by NAAC with A grade (CGPA : 3.19)

E-mail : principal@saradavilas.com Website : www.saradavilas.com



Dr. M. Devika, M.Sc., M.Phil., Ph.D.

Principal

Mobile : 9880024483

Date: 20-03-2024

To,

HR Manager

Wonderbabe Apparel Pvt Ltd

B'lore

Dear Sir/Madam,

## Sub: Permission for industrial Visit.

As part of curriculum of M.Com course, University of Mysore, the students are required to undertake industrial visit. We feel that it will be fruitful for the students to have a glimpse of Administration System, Financial Management, Marketing Techniques, Human Resource Management and other aspects to match with the theoretical understanding of concepts in the class room.

I request you to kindly permit us to visit your esteemed organisation and help us to have an interaction with our students by your officers. Hope this would encourage our students in enriching their knowledge in the field of commerce and business administration. We would like to send 59 students accompanied by the two members of faculty to visit the industry preferably in the first week of April 2024.

We assure you that our students will abide by the rules and regulation prescribed by the institutions and we will not disturb the functioning of the industry. Since the visit is purely academic purpose.

We expect a positive response from your side and we will be grateful for your favourable response.

Thanking you,

5th April 2024

Factory Visited 5th April 2024

Poojashree  
05/04/24



Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College  
Krishnamurthypuram, Mysuru

Phone : 0821 - 2332479

Sarada Vilas Educational Institutions (R.)

Fax : 0821 - 2330221

# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru - 570 004

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Reaccredited by NAAC with A grade (CGPA : 3.19)

E-mail : principal@saradavilas.com Website : www.saradavilas.com



**Dr. M. Devika**, M.Sc., M.Phil., Ph.D.

**Principal**

Mobile : 9880024483

Date: 20-03-2024

To,

Deputy Director of Agriculture  
Ramanagara.

Dear Sir/Madam,

## Sub: Permission for industrial Visit.

As part of curriculum of M.Com course, University of Mysore, the students are required to undertake industrial visit. We feel that it will be fruitful for the students to have a glimpse of Administration System, Financial Management, Marketing Techniques, Human Resource Management and other aspects to match with the theoretical understanding of concepts in the class room. We would like to send 59 students accompanied by the two members of faculty to visit the industry preferably in the first week of April 2024.

I request you to kindly permit us to visit your esteemed organisation and help us to have an interaction with our students by your officers. Hope this would encourage our students in enriching their knowledge in the field of commerce and business administration.

We assure you that our students will observe the rules and regulation prescribed by the institutions and we will not disturb the functioning of the industry. It is purely academic purpose.

We expect a positive response from your side and we will be grateful for your favourable response.

Thanking you,



Visited on  
20.03.2024

*Devika*  
Dr. M. Devika  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru



**Industry-Institution Interaction Programme 2024 Report -A Visit to Government Cocoon Market, Ramanagara; Nandini Hi-Tech Mega Powder Plant; Ramnagara and Wonderblues Apparels Pvt Ltd Kengeri, Bengaluru.**

Sarada Vilas College, Department of Commerce – PG Centre M.Com planned to organise a one day Industry Institution Interaction program for final year M.Com Students, hence we took permission from Principal, SVC on 26<sup>th</sup> March, 2024 and we sent requisition to 10 companies in and around Bengaluru, Mandya and Nanjangud. In response to our request for Industrial Visit, three companies had expressed their assent to take our students for visiting their organisation on **5<sup>th</sup> April 2024**.

51 students from final year M.Com along with 2 member of faculty Mrs. Pragathi K. and Dr. Sameena Banu went to an industrial visit on 5<sup>th</sup> April, 2024.

On the day, all the final year M.Com students and members of the faculty were gathered in the college premises at 6.00 am. Dr. Devika M, Principal of Sarada Vilas College, Prof. Sathyanarayana, Dean, Department of Commerce and Business Administration and Dr. Jyothi A.N, Head of the Department of Commerce and Business Administration were also present, gave instructions to the students and wished everyone. The bus left the college premises at 6:30 am with two faculty members.

We took first break at 8:30 am in Mandya to have breakfast, packed back by 9:00 am and headed towards Cocoon market, Ramanagara. We all reached Government Cocoon Market, Ramanagara around 9:30 am and students were divided into 5 groups (10 students in each group). In each group, there were two student leaders. These groups are divided for the convenient interaction with the buyers as well as sellers.

A Cocoon market is a place where the buyers and sellers are required to transact cocoons by open auction/bidding through digitized system under the regulations of law. This is one of the largest cocoon markets in Asia. The students started to interact in the market and they received good response from buyers as well as sellers. The students were also more enthusiastic to know the process of bidding of cocoons in the market through a fully digitized system and they saw different types of cocoons (White Cocoons and Yellow Cocoons). They were noted some points regarding the transactions, all came with happy faces and all students finished their interaction by 10:30 am.





Later the students were moved to another unit 'Nandini Hi-Tech Mega Powder Plant' Ramanagara at 11:15. The Karnataka Milk Federation (KMF) is a dairy cooperative, which produces ghee, butter, curd, milk powder under the brand name Nandini. This is first largest capacity milk powder plant using modern technology to produce different products.

At the time of entering, the unit provides us a head cap to each students for the purpose of hygienic. Then we met, Mr. Rakshith, Production Manager of the unit. He took almost 45 minutes to explain about the whole process of the unit. He explained about the procurement, storage, finance and marketing activities. He had good interaction with our students and he answered to many questions of the students. After that, he took us to the unit and explained how to check quality of the product in the laboratory (Analytical Lab). Then he took us to various departments like Liquid Processing Lab, Powder Plant, Ghee Plant, Packing department to show how the raw materials are converting into finished products by using technology. All students had a good interaction with the production manager and the overall visit was very informative and satisfied. All came back the unit @12:45 pm.



Later we all went to lunch to Udipi Upahara Hotel, Bidadi, Bengaluru and we finished it by 2.00 pm. Then the students were move to another organisation 'Wonder Blues Apparels Pvt Ltd Kengeri, Bengaluru at 3.00 pm. It is a Jeans Manufacturing Company, we all got an opportunity to learn different process of jeans manufacturing like fabric receive, fabric unloading, and quality checking. We met HR manager and she explained the students regarding discipline actions followed by the students and also about the company. Then we divided the students into two groups, first group went to first process to last process and vice versa. Later, she took us to fabric section and one person explained fabric section flow chart and also explained about the conversion of raw materials into finished products. Then we went to fabric receiving section, fabric unloading section, washing section, fabric cutting section, stitching section, shading section, quality checking and finally the output section. All students were very happy to see the process of jeans manufacturing. We all took some photos and left the factory by 4.30 pm.



Later, we moved to a Krishna's temple, Mulur village and all spent almost 30 minutes time in the temple. Then we took a snack break at 5.00 pm. We started from Mulur village to Mysuru by 5.30 pm. The bus reached Mysuru by 7.45 pm and students were sent back to their places safely and the visit was successfully concluded.

*Satya*  
 Dean  
 Community Eng. Dept. Adara  
 Sankata Pitha College  
 Mysuru-576101

*Dr. M. Devika*  
 M.Sc., M.Phil., Ph.D.  
 Principal



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## **SARADA VILAS COLLEGE**

*Krishnamurthypuram, Mysore – 570 004 Karnataka*

*Affiliated to University of Mysore*

*Re accredited by NAAC with 'A' grade (CGPA: 3.19)*



**Dr. Devika M, M.Sc., M. Phil., Ph. D**  
**Principal**  
**Mob: 9880024483**

**Date: 16-07-2024**

**To,**  
**The Registrar Evaluation**  
**University of Mysore**  
**Mysuru**

**Respected Sir/ Madam,**

**Subject:** Submission of project reports of M. Com final year students for the academic year 2023-24.

I am here with submitting the project report of M.Com final year students which is the part of their final examination. The list of students who are appearing for project are attached with this letter.

This is for final valuation and future action.

Thanking You

  
**Principal**  
**Dr. M Devika**  
M.Sc., M. Phil., Ph.D.  
**Principal**  
**Sarada Vilas College,**  
Krishnamurthypuram, Mysur





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Dr. Devika M, M.Sc., M. Phil., Ph. D

Principal

Mob: 9880024483

**Details of Final Year M.Com Students for Project Submission**

Sl No.	Register No.	Name of the Student	Title Of the Project
1	P01BG22C012001	Keerthi T. S.	"Labour Challenges in Recycling of Waste Carton Boxes into Kraft Paper - A Case Study in Rajshil Paper Private Limited"
2	P01BG22C012002	Saran M.	"Comparative Study on Products of The Mortgage Loan Provided by Bank of Maharashtra, J.P Nagar Branch Mysuru"
3	P01BG22C012003	Keerthana M. U	"After Sales Service -Issues and Challenges Faced by Sangeeta Mobile Pvt Ltd"
4	P01BG22C012004	Vinay Kumar L.	"Employee Safety Measures in The Medical Service Organization with Reference A R Hospital, Mysuru"
5	P01BG22C012005	Sindhu U.P.	"A Study on Customer Satisfaction with Reference to Service Given by Arjun Motors Mysuru".
6	P01BG22C012006	Chaithra	"An Overview of Proportional Distribution of Loans and Advances to Different Proposes and To Analyze the Factor Influencing Its Growth at Navanagar Urban Co-Operative Bank (Head Office) K R Nagara"
7	P01BG22C012007	Priyanka Nimbalkar	"A Study on Impact of Heritage Values for The Sales of Cauvery Emporium Handicrafts Products with Special Reference to Mysuru City"
8	P01BG22C012008	Rajesha.B	"Navanagara Urban Co -Operative Bank -A Study on Influencing Factors for Change in Profit Position Over Last 5 Years. "
9	P01BG22C012009	Abhishek R.	Car Market Analysis: Sale Of Used Car Through True Value Market with Special Reference to The Best Cars Mysuru
10	P01BG22C012010	Kusumalatha M	"A Study on Customer Satisfaction Towards Gold Loan with Special Reference to Muthoot Fincorp Limited, Nanjangud"
11	P01BG22C012011	Harshitha T.J.	"Warranty And Guarantee - Impact on Selling the Product by Sri Srikanteshwara Tv Centre Nanjangud"
12	P01BG22C012012	Sundar N.	"Consumer Satisfaction to Words Shreya Fuel Station, Antharasanthe, H.D Kote, Mysuru"
13	P01BG22C012013	Karthik N.	Examining The Ways and Means of Building Brand Loyalty- A Case Study of Karnataka Soaps and Detergents Limited - With Special Reference To Mysore Sandal Soap

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Dr. Devika M, M.Sc., M. Phil., Ph. D

Principal

Mob: 9880024483

14	P011B0220 012014	Hemanth Kumar H S	Profitability Analysis of The Mysore Co-Operative Bank Ltd
15	P011B0220 012015	Chanthra E M	A Study on Effectiveness of Social Media Promotional Strategies Adopted By Puma With Reference To 'Vogue Clothing' Mysore
16	P011B0220 012016	Nagarathna	"Employee Absenteeism - Analysis of Cause and Effect in Bajajiya Automotive Industries Pvt Ltd"
17	P011B0220 012017	Mamatha M	"An Analytical Study of Brand Loyalty Towards Asian Paints with Special Reference to Customers of Mahuleshwara Paints and Hardware, Sargur."
18	P011B0220 012018	Siddaraju K S	"Issues And Challenges Faced in Transportation Service Through Digital Mode-A Case Study Analysis with Reference to Aroluka Technologies"
19	P011B0220 012019	Yathish H M	"Labour Turnover-An Analytical Study of Causes And Impact With Reference To Strategies Implemented By Ricolex Polymer Private Limited"
20	P011B0220 012020	Meghana G	"An Empirical Study on Employee Reaction Towards Incentives System Adopted by ITC Limited Fbd, Icmf Mysuru."
21	P011B0220 012021	Deekshitha S	"A Study of The Various Loans Offered by SBI And Analysis of Most Demanded Type of Loan in SBI Nagesonahalli Branch, Mandya District"
22	P011B0220 012022	Bhavana A S	"A Comparative Study on The Different Brands of Contact Lenses and Specticals Marketed by The Lenskart.Com Channandipuram, Mysuru"
23	P011B0220 012023	Karthik M	"A Study on Swot Analysis in Manufacturing Organisation with Special Reference to Creative Manufacture, Metagalli Mysuru"
24	P011B0220 012024	Dileep S	"A Study on Customer Satisfaction Towards Honda Dio Scooters"
25	P011B0220 012025	Rakeshitha J	"Customer Satisfaction of Two-Wheeler Hero Bikes - A Case Study of Dyuthi Motors Private Limited, Mysuru"
26	P011B0220 012026	Ganavi M	"Consumer Satisfaction - An Analytical Study of The Consumer of KFC Garuda Mall Branch Mysuru".
27	P011B0220 012027	Anjali M	"Organizational Behaviour - An Analysis of Mc Kinsey 7s - in Cramox Paper & Boards Pvt. Ltd."



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Dr. Devika M, M.Sc., M. Phil., Ph. D

Principal

Mob: 9880024483

28	P01BG22C012028	Preethi.N	"A Study on Advertising And Sales Promotion Strategies Adopted By Janani Automobiles Pvt Ltd Nanjangud"
29	P01BG22C012029	Amitha.C.M	"Evaluating Operational Efficiency in Government Girls Hostel - A Case Study of D Devaraj Urs Pg Girls Hostel Gayithripuram, Mysuru."
30	P01BG22C012030	Prashamsha.S.J	"Need For Micro Finance in The Present Scenario- Contribution by The Bharat Financial Inclusion Limited, Sakleshpura "
31	P01BG22C012031	Sahana K.S.	"An Analytical Study of Causes for Absenteeism - With Special Reference to Girish Exports 2, Chamaraajanagar"
32	P01BG22C012032	Karthik. K.A	"A Review of Past Four Years Profits and Profitability of Hitachi Energy India Limited"
33	P01BG22C012033	Pramod.M.S	"A Study on Marketing Strategies Adopted by Mahindra & Mahindra with Respect to Sinduja Tractors, Mysuru "
34	P01BG22C012034	Darshan M.	"An Analytical Study of Absenteeism in Padmini Aromatics Pvt. Ltd, Nanjangud"
35	P01BG22C012035	Himanth .A.S	"Consumer Preferences - An Analytical Study on The Preference of Consumer Over a Particular Vehicle to Buy from Sri Mallikarjuna Motors, Sakaleshapura"
36	P01BG22C012036	Anusha.N.B	"Comparative Study on Sales of Different Models of Two-Wheelers by Sri Lakshmi Motors (Authorised TVS Dealer) Nanjangud"
37	P01BG22C012037	Rakesh H. K	"An Analytical Study of The Work Style and Work Culture of Employees with A Focus the Service Industry with Of Reliance Jio Fiber"
38	P01BG22C012038	Sushma.S	"Marketing Strategy-A Study on Marketing Strategy Adopted By Gramox Paper & Boards Pvt Ltd".
39	P01BG22C012039	Vinu Christo. T.P	"Managerial Challenges Faced by Vishwas Engineers in Converting Stainless Steel Into Final Products (Tools) "
40	P01BG22C012040	Sachin .B.N	An Empirical Study On Sales Promotion Techniques Adopted To Promote The Solar Water Heater In Domestic Area By Eagle Technologies Mysuru
41	P01BG22C012041	Chikkaboregowda M.	An Analytical Study of Fast-Moving Product Other Than Milk Products
42	P01BG22C012042	Pavithra.R	"An Empirical Study on Employee Benefits Offered By Rajsriya Automotive Industries Pvt Ltd"





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**SARADA VILAS COLLEGE**

Krishnamurthypuram, Mysore – 570 004 Karnataka

Affiliated to University of Mysore

Re accredited by NAAC with 'A' grade (CGPA: 3.19)



Dr. Devika M, M.Sc., M. Phil., Ph. D

Principal

Mob: 9880024483

43	P01BG22C012043	Apsara.M.V	"Human Resources Strategies -A Study on Human Resources Practices Adopted In MSME Sector With Special Reference To Belaku Enterprises"
44	P01BG22C012044	Thanushree .A.R	A Study on The Distribution Channels - Challenges Faced by Milky Mist Products with Special Reference To Amma Agency.
45	P01BG22C012045	Mahadevaprasad .S	A Study on Brand Recognition with Reference to Bajaj Two-Wheeler Vehicles Mysuru
46	P01BG22C012046	Archana. S	"A Study on Customer Preference in Adopting Rental Bikes - A Case in Royal Brothers Bike Rentals Mysuru"
47	P01BG22C012047	Sunitha. H S	"An Analytical Study Of 4p's In Marketing. Products By Green's Super Market Nanjangud"
48	P01BG22C012048	Lokesh G	An Analytical Study On The Demand For The Products By Different Customer Segments Like Business Men, Agriculture, Domestic Users With Reference To Microtech Solutions Mysuru
49	P01BG22C012049	Akshatha.S Kumar	A Study on CSR Activities Of N. Ranga Rao And Sons And It's Impact Of Beneficiaries
50	P01BG22C012050	Maheshwari.S	"An Analysis Of Financial Performance With Focus On Capital Investment Of Chamul Ltd."
51	P01BG22C012051	Niritha .P	"MYMUL Product - A Study on The Fast-Moving Variety of Milk in Mysuru District"
52	P01BG22C012052	Hemanth .S R	"Business To Business Transaction And It's Challenges With Special Reference To Hindustan Spring Mfg. Co. Mysuru"
53	P01BG22C012053	Prema .K	"Women Enterprise -A Study On The Measures Taken By Shri Kshethra Dharmasthala Rural Development Project For The Development Of Women's With Special Focus On Hullahalli Sangha"
54	P01BG22C012054	Keerthi R.	"Vehicle Insurance- A Study On Issues And Challenges Faced By The Insurance Consultant of National Insurance Sakaleshapura"
55	P01BG22C012055	Akshitha .H.S	"A Study On Lending Methods And Its Purpose Of Borrower's With Special Reference To Bharat Finance Inclusion Ltd."
56	P01BG22C012056	Praveen	"A Study on Service Quality Offered by HDFC Bank to Its Customers A Case Study of KR Mohalla Branch, Mysuru"

# SARADA VILAS COLLEGE

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Dr. Devika M, M.Sc., M. Phil., Ph. D

Principal

Mob: 9880024483

57	P01BG22C012057	Rachana	"An Analytical Study of Fast-Moving Consumer Durables Product with Reference to Kalpatharu Time and Appliances KR Nagara"
58	P01BG22C012058	Pratham	"Employee Welfare - A Study on The Safety Measures, Incentives and Benefits to Employees Offered By Ashwini Hospital, Mysuru"
59	P01BG22C012059	Rakshitha K.	"Comparative Study on The Various Policies Offered By Lic For - Infant Age Group Between 0 To 11 With Special Reference To LIC Branch In Srirangapatna"

59  
16/7/2024

Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru

**A Project Report On**

**Car Market Analysis: Sale of Used Car through True Value Market with  
Special Reference to The Best Cars Mysuru**

**Submitted By**

**Abhishekh R**

Reg No: P01BG22C012009

P.G Centre – M.Com

Sarada Vilas College, Mysuru

**Internal Guide**

**Dr. Sameena Banu**

Assistant Professor

P.G Centre – M.Com

Sarada Vilas College, Mysuru

**External Guide**

**Mr. Mahesha R**

Owner

The Best Cars

Lakshmipuram Mysuru

**Submitted to**

**University of Mysore**

**In partial Fulfillment of award of Post Graduate Degree in Commerce**

**2023-2024**



Phone : 0821 - 2332479

Fax : 0821 - 2330221

Sarada Vilas Educational Institutions (R.)

# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru - 570 004

(Affiliated to the University of Mysore)

Reaccredited by NAAC with A grade (CGPA : 3.19)

E-mail : principal@saradavilas.com Website : www.saradavilas.com



**Dr. M. Devika**, M.Sc., M.Phil., Ph.D.

**Principal**

Mobile : 9880024483

## CERTIFICATE

This is to certify that **Mr. ABHISHEK R.** (Reg No. PO1BG22CO12009) is a bonafide student of PG Centre – M. Com, Sarada Vilas College, Studying M.Com final year in the academic year 2023-24. As a part of his final examination M. Com, he has prepared a project report on **“CAR MARKET ANALYSIS : SALE OF USED CAR THROUGH TRUE VALUE MARKET WITH SPECIAL REFERENCE TO THE BEST CARS MYSURU”** under the guidance of **Dr. Sameena Banu** Assistant Professor, PG Centre – M.Com, Sarada Vilas College, Mysuru. I certify that, this project work is his original work and not presented to any other university or institution for award of any Degree or Diploma.

Dean

Dean

Commerce and Busi, Admn  
Sarada Vilas College  
Mysuru-570 004

Principal

Dr. M. Devika  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Mysuru-570 004



*The Best Cars*

*YOUR JOURNEY START FROM HERE*

#876/8 (New No. 14), Vanivilas Road, Chamaraja Mohalla, Lakshmipuram Mysuru - 57004

Owner: Mahesha.R

Phone No: 80959 56505

### **CERTIFICATE**

This is to certify that **Abhishekh.R** (reg. no **P01BG22C012009**) **IV semester M.Com** student of Sarada Vilas College, PG Center, Mysuru, affiliated to University of Mysore has undergone the project titled **“CAR MARKET ANALYSIS: SALE OF USED CAR THROUGH TRUE VALUE MARKET WITH SPECIAL REFERENCE TO THE BEST CARS MYSURU”**. He has worked this project in the The Best Cars showroom, Mysuru.

We wish him all the success in future endeavour.

*A. Mahesha*  
*24/6/2024*  
**The Best Cars**  
# 876/8, (New No. 14),  
Vanivilas Road, Chamaraja Mohalla,  
Lakshmipuram, Mysuru-570 004

### Guide Certificate

I hereby declare that the project report entitled “**Car Market Analysis: Sale Of Used Car Through True Value Market With Special Reference To The Best Cars Mysuru**”, is an authentic record of the bonafide work carried out by **Mr. ABHISHEKH R (Reg. No. P01BG22C012009)** under my guidance and supervision. This report is prepared and submitted to the University of Mysore, Mysuru in partial fulfillment of the PG course in Commerce. He is a bonafide student of M.Com final year at Department of Commerce, PG Centre – M.Com, Sarada Vilas College in the year 2023-24. This report has not been published and submitted to any other university/institution for award of any degree or diploma.

Place: Mysuru

Date: 15/07/2024,

  
**Dr. Sameena Banu**

Assistant professor

PG centre M.Com

Sarada Vilas College, Mysuru



## Declaration

I am Abhishekh R, hereby declare that this project report on “**Car Market Analysis: Sale of Used Car through True Value Market with Special Reference to The Best Cars Mysuru**” submitted to the University of Mysore, in partial fulfillment of the requirement for the award of the Degree of Post-Graduation in Commerce. It is a record of original and independent project done during the academic year 2023-2024 under the supervision and guidance of **Dr. Sameena Banu**, Assistant Professor, PG Centre-M.Com, Sarada Vilas College, Mysuru and external assistance by **Mr. Mahesha R**, Owner of The Best Cars Showroom, Lakshmipuram, Mysuru. It has not formed the basis for the award of the Degree/Diploma/Associate ship or any other similar title to any candidate in any University.

*Abhishekh R*

**ABHISHEKH R**  
(P01BG22C012009)  
IV Sem – M.Com  
Sarada Vilas College  
PG Centre – M.Com  
Mysuru

**A Project Report On**

**“Navanagara Urban Co -Operative Bank-A study on Influencing factors for change  
in Profit Position Over last 5 years.”**

**Submitted By**

**Rajesha B**

**PO1BG22CO12008**

**PG Centre -M. Com**

**Sarada Vilas College, Mysuru**

**Internal Guide**

**Dr. Jyothi A N**

**Assistant Professor**

**Sarada Vilas College, Mysuru**

**External Guide**

**Mr. K.S. Pramod**

**Branch Manager**

**N.U.C Bank Hootagalli**

**Submitted To**

**University of Mysore**

**In partial fulfillment of award of Post Graduate Degree in Commerce**

**2023-24**

Sarada Vilas Educational Institutions (R.)

Phone : 0821 - 2332479

Fax : 0821 - 2330221

# SARADA VILAS COLLEGE

Krishnamurthypuram, Mysuru - 570 004

(Affiliated to the University of Mysore)

Reaccredited by NAAC with A grade (CGPA : 3.19)

E-mail : principal@saradavilas.com Website : www.saradavilas.com



**Dr. M. Devika**, M.Sc., M.Phil., Ph.D.

Principal

Mobile : 9880024483

## CERTIFICATE

This is to certify that **Mr. RAJESHA B.** (Reg No. PO1BG22CO12008) is a bonafide student of PG Centre – M. Com, Sarada Vilas College, Studying M.Com final year in the academic year 2023-24. As a part of his final examination M. Com he has prepared a project report on **“NAVANAGARA URBAN CO-OPERATIVE BANK - A STUDY ON INFLUENCING FACTORS FOR CHANGE IN PROFIT POSITION OVER LAST 5 YEARS”** under the guidance of **Dr. Jyothi A.N.** Assistant Professor, PG Centre – M.Com, Sarada Vilas College, Mysuru. I certify that, this project work is his original work and not presented to any other university or institution for award of any Degree or Diploma.

Dean

Dean

Commerce and Busi, Admn  
Sarada Vilas College  
Mysuru-570 004

Principal

M.Sc., M.Phil., Ph.D.

Principal

Sarada Vilas College,  
Krishnamurthypuram, Mysuru





**ನವನಗರ ಅರ್ಬನ್ ಕೋ-ಆಪರೇಟಿವ್ ಬ್ಯಾಂಕ್ ಲಿ.,**

**NAVANAGARA URBAN CO-OPERATIVE BANK LTD.,**

**ಮಾರಿಬಡಿ ರಸ್ತೆ, ಹೂಟಗಲ್ಲಿ - 570 018**

Date 02.01.2024

To,

Dean,

Commerce and Business Administration

W. P. J. College,

W. P. J. 570004

**TO WHOM SO IT MAY CONCERN**

It is to inform you that the letter dated 18.12.2023 seeking permission for your student Mr. Rajesha B, ID B 12C0008 to carry out project work has been accepted by us and allowed to do project in our place.

For Hootgalli

For the Navanagara Urban Co-Operative Bank Ltd

HOOTAGALLI

Branch Manager

Manager

2/1/2024

## GUIDE CERTIFICATE

I hereby declare that the project report entitled **“Navanagara Urban Co-Operative Bank -A Study on influencing factors for change in Profit position over last 5 years”**. is an authentic record of the bonafide work carried out by Mr. Rajesha B (Reg.No. P01BG22C012008), under my guidance and supervision. This report is prepared and submitted to University of Mysore, Mysuru in partial fulfillment of the PG course in Commerce (M. Com). He is a Bonafede student of M. Com final year at Department of Commerce, PG Centre-M. Com, Sarada Vilas College in the year 2023-24. This report has not been published and submitted to any other university/institution for award of any degree or diploma.

Place: Mysuru

Date: 15/7/24



Dr. Jyothi A.N

Assistant Professor  
Department of Commerce  
PG Centre -M. Com  
Sarada Vilas College  
Mysuru

## DECLARATION

I, **Rajesh B** hereby declared that this project Report on “**Navanagara Urban Co-Operative Bank -A study on Influencing factors for change in Profit Position Over last 5 years.**” Is an Submitted to the University of Mysore, in partial Fulfilment of the requirements for the award of the degree of post-Graduation in Commerce is a record of original and independent project done during the academic year 2023-24 under the supervision and guidelines of Dr. Jyothi A.N Assistant professor ,P.G Centre M.com Sarada Vilas College Mysuru and it has not formed the basis for the award of any Degree/diploma /associate Ship or any other similar tittle to any candidate in any university by Mr. Promod K S Branch Manager, Navanagara Urban Co -Operative ltd, hootgalli.



**Mr. Rajesh B**  
(P01BG22C012008)  
P.G Centre -M.Com  
Sarada Vilas College  
Mysuru



13<sup>th</sup> June 2024

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Nikhitha. M N is a bonafide student of Sarada Vilas College, Mysuru. Pursuing her M.sc in Chemistry.

She has undergone internship in our premises from 13.05.2024 to 13.06.2024. We also confirm that she has fulfilled her obligation to the project work entitled "ANALYTICAL INSTRUMENTATION" in our ADL & QC.

During her project period, we found her to be sincere and we wish her all the very best for her future.

This certificate is issued on her request.

**Your Sincerely  
For Cipla Ltd.**



**Rahul Parasar  
Site HR Head**



**Cipla Ltd.**

Virgonagar, Old Madras Road, Bangalore - 560 049, India  
P +91 80 46912363, 46912401

Regd. Office - Cipla House, Peninsula Business Park, Ganpatrao Kadam Marg, Lower Parel, Mumbai 400013, India  
P +91 22 24826000 F +91 22 24826120 W www.cipla.com E-Mail contactus@cipla.com Corporate Identity Number L24239MH1935PLC002380

From,  
Nikhitha M N  
II MSc (IV sem)  
PG Dept of Chemistry  
Saradavilas College  
Mysuru

To,  
The Principal  
Saradavilas College  
Mysuru

Through Co-ordinator, PG Dept. of Chemistry

Respected madam,

Sub: Seeking permission to do Internship

With reference to above, I am Nikhitha M N (IV sem) studying M Sc in PG Dept of chemistry I am interested to do Internship at Cipla Ltd. Virgonagar Bengaluru-49 so I kindly request you to give permission to do Internship from 13<sup>th</sup> May 2024 to 13<sup>th</sup> June 2024 ( for period of one month) at Cipla Ltd. Virgonagar Bengaluru-49

Thanking you

Date: 11 May 2024  
Place: Mysuru,

Yours obediently  
Nikhitha. M.N

Forwarded to the Principal  
for kind consideration B Je 11/5/24

Permitted

Kan  
11/5/24  
M Devika  
Principal  
Sarada Vilas College,  
Wichamunthipalaya, Mysuru

Phone: 0821-2332479, Fax: 0821-2330221

E- mail: [principal@saradavilas.com](mailto:principal@saradavilas.com)

website: [www.saradavilas.com](http://www.saradavilas.com)



**SARADA VILAS COLLEGE**  
Krishnamurthypuram, Mysore – 570 004 Karnataka  
Affiliated to University of Mysore  
Re accredited by NAAC with A grade (CGPA: 3.19)



**Dr.Devika M, M.Sc., M. Phil., Ph. D**  
Principal  
Mob: 9880024483

To  
HRD  
Mysore Analytical Services  
Mysuru-570026

**Date: 06/05/2024**

Dear Sir

**Subject:** Industrial internship for M.Sc. (CHEMISTRY) Students

With reference to above, we are sending below mentioned M.Sc. (CHEMISTRY) IV Semester students for internship from 08/05/2024 to 13-06-2026. I have instructed the students strictly to abide by the rules and regulations of your company during their stay at your esteemed company. Looking forward for your early reply.

Thanking you

Truly yours

  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru





**SARADA VILAS COLLEGE, MYSURU**

Krishnamurthypuram, Mysuru-570004 Karnataka  
Re accredited by NAAC with A grade (CGPA:3.19)



An Internship Project Report  
On

# **"ANALYTICAL INSTRUMENTATION"**

*Submitted in partial fulfillment for the award of degree of*

**MASTER OF SCIENCE  
In  
CHEMISTRY**

***Submitted By***

**GOVINDARAJU C  
(P01BG22S032006)**

**Internship carried out  
At**


**MYSORE ANALYTICAL SERVICE  
ROOPANAGAR, MYSURU-570026**




**POST GRADUATE DEPARTMENT OF STUDIES IN  
CHEMISTRY SARADA VILAS COLLEGE  
MYSURU-570004**

**CERTIFICATE**

Certified that the project work entitled "ANALYTICAL INSTRUMENTATION" has been successfully carried out by GOVINDARAJU C [P01BG22S032006] bonafide student of Sarada Vilas College, Mysore – 570004, in partial fulfillment of the requirements of degree of Master of Science in Chemistry in the University of Mysore during the academic year 2023- 2024. The project report has been approved as it satisfies the academic requirements with respect to the project work prescribed for Masters of Science in Chemistry.

  
-----  
**Head of M A S**  
**PROF. MAHESHA. V. M**  
Director and CEO  
Mysore Analytical Services

**MYSORE ANALYTICAL SERVICES**  
#520, Roopa Nagar  
Mysore - 570026

  
-----  
**Signature of HOD**  
**Dr. R. Gururaja**  
Adjunct Professor / Coordinator  
Professor & HOD  
Post-Graduate Department of Chemistry  
Sarada Vilas College, Mysore - 570004

**PROJECT WORK AT MYSORE ANALYTICAL  
SERVICE, MYSORE**



**AN INTERNSHIP PROJECT REPORT**

**ON**

**"ANALYTICAL INSTRUMENTATION"**

*Submitted in partial fulfillment of requirements for the award of the degree of  
Master of Science in Chemistry during the year 2023-2024*

**Submitted by**

**SINCHANA D S**

**REG NO: P01BG22S032005**

**Sarada Vilas College**

**Mysore**

**Under the Supervision of**

**Prof. MAHESHA V M**

**Director & CEO,**

**Mysore Analytical Service**

**Mysore**



**2023-2024**

**POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY**

**SARADA VILAS COLLEGE**

**UNIVERSITY OF MYSORE**

**Mysuru-570004**



**POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY**  
**SARADA VILAS COLLEGE**  
MYSURU-570004

**CERTIFICATE**

Certified that the project work entitled "ANALYTICAL INSTRUMENTATION" has been successfully carried out by **SINCHANA D S [P01BG22S032005]** bonafide student of **Sarada Vilas College, Mysore – 570004**, in partial fulfillment of the requirements of the degree of **Master of Science in Chemistry in the University of Mysore** during the academic year 2023-2024. The project report has been approved as it satisfies the academic requirements with respect to the project work prescribed for the **Masters of Science in Chemistry**.



Head of M A S

**MR. MAHESHA . V. M**

Director and CEO

Mysore Analytical Services

Mysore.



Signature of HOD

**DR. B. B. B. B. B.**

Adjunct Professor / Coordinator  
Professor & HOD  
Post-Graduate Department of Chemistry  
Dept. Of Chemistry  
Sarada Vilas College, Mysuru - 04  
Sarada Vilas College, Mysore

**MYSORE ANALYTICAL SERVICES**

**#520, Roopa Nagar**

**Mysore - 570026**

**PROJECT WORK AT MYSORE ANALYTICAL  
SERVICE, MYSORE**



**A INTERNSHIP PROJECT REPORT**

**ON**

**“ANALYTICAL INSTRUMENTATION”**

*Submitted in partial fulfillment of requirements for the award of degree of Master of  
Science in Chemistry during the year 2023-2024*

**Submitted by**

**MEGHA J U**

**P01BG22S032015**

**Under the Supervision of**

**Prof. MAHESHA V M**  
Director & CEO ,  
Mysore Analytical Service



**2023-2024**

**POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY**

**SARDA VILAS COLLEGE**

**UNIVERSITY OF MYSORE**

**Mysuru-570004**

**POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY**  
**SARDA VILAS COLLEGE**  
MYSURU-570004

**CERTIFICATE**

Certified that the project work entitled "ANALYTICAL INSTRUMENTATION" has been successfully carried out by **MEGHA J U [ P01BG22S032015 ]** bonafide student of **Sarda Vilas College , Mysore – 570004** , in partial fulfillment of the requirements of degree of **Master of Science in Chemistry in the University of Mysore** during the academic year 2023- 2024. The project report has been approved as it satisfies the academic requirements with respect to the project work prescribed for **Master of Science in Chemistry**.



Head of M A S

*PROF. MAHESHA . V. M*

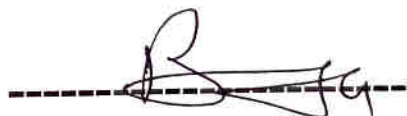
*Director and CEO*

*Mysore Analytical Services*

**MYSORE ANALYTICAL SERVICES**

**#520, Roopa Nagar**

**Mysore - 570026**



Signature of HOD

**DR. R. GURURAJ**

**Adjunct Professor & HOD**

**Post-Graduate Department of Chemistry**  
**Sarda Vilas College, Mysore**





**SARADA VILAS COLLEGE, MYSURU**

Krishnamurthypuram, Mysuru-570004 Karnataka  
Re accredited by NAAC with A grade (CGPA:3.19)



**An Internship Project Report  
On**

# **“ANALYTICAL INSTRUMENTATION”**

*Submitted in partial fulfillment for the award of degree of*

**MASTER OF SCIENCE  
In  
CHEMISTRY**

*Submitted By*

**NETHRAVATHI S  
(P01BG22S032010)**

**Internship carried out  
At**

**MYSORE ANALYTICAL SERVICE  
ROOPANAGAR, MYSURU-570026**



**POST GRADUATE DEPARTMENT OF STUDIES IN  
CHEMISTRY SARADA VILAS COLLEGE  
MYSURU-570004**

**CERTIFICATE**

Certified that the project work entitled "ANALYTICAL INSTRUMENTATION" has been successfully carried out by **NETHRAVATHI S [P01BG22S032010]** bonafide student of **Sarada Vilas College, Mysore – 570004**, in partial fulfillment of the requirements of degree of **Master of Science in Chemistry in the University of Mysore** during the academic year 2023- 2024. The project report has been approved as it satisfies the academic requirements with respect to the project work prescribed for **Masters of Science in Chemistry**.



Head of M A S

PROF. MAHESHA. V. M

Director and CEO

Mysore Analytical Services

**MYSORE ANALYTICAL SERVICES**

#520, Roopa Nagar

Mysore - 570026



Signature of HOD

**DR. R. GURURAJA**

Adjunct Professor / Coordinator

Professor & HOD

Post-Graduate Department of Chemistry  
Sarada Vilas College, Mysore

PROJECT WORK AT MYSORE ANALYTICAL  
SERVICE , MYSORE



A INTERNSHIP PROJECT REPORT  
ON

“ANALYTICAL INSTRUMENTATION”

*Submitted in partial fulfillment of requirements for the award of degree of Master of  
Science in Chemistry during the year 2023-2024*

Submitted by

PAVAN GOWDA S    P01BG22S032028

Under the Supervision of

Prof. MAHESHA V M  
Director & CEO ,  
Mysore Analytical Service



2023-2024

POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY

SARADA VILAS COLLEGE

UNIVERSITY OF MYSORE

Mysuru-570004



POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY  
SARADA VILAS COLLEGE  
MYSURU-570004

CERTIFICATE

Certified that the project work entitled "ANALYTICAL INSTRUMENTATION" has been successfully carried out by PAVAN GOWDA S [ P01BG22S032028 ] bonafide student of Sarada Vilas College , Mysore – 570004 , in partial fulfillment of the requirements of degree of Master of Science in Chemistry in the University of Mysore during the academic year 2023- 2024. The project report has been approved as it satisfies the academic requirements with respect to the project work prescribed for Masters of Science in Chemistry.



Head of M A S  
MR. MAHESHA . V. M  
Director and CEO  
Mysore Analytical Services

**MYSORE ANALYTICAL SERVICES**  
#520, Roopa Nagar  
Mysore - 570026



Signature of HOD  
DR. R. GURURAMA  
Adjunct Professor & HOD  
Post-Graduate Department  
Sarada Vilas College  
Mysore



# Sarada Vilas College, Mysuru

Krishnamurthypuram, Mysore - 570004 Karnataka  
Re accredited by NAAC with A grade ( CGPA : 3.19 )



Project Report submitted to the University of Mysore in partial fulfillment of the requirements for the award of Degree in

## MASTER OF GENERAL CHEMISTRY

### “Analytical Instrumentation”

**SUBMITTED BY:**

**NIKHITHA M N**

Reg No : P01BG22S032020

General Chemistry

University of Mysore,

Sarada Vilas College, Mysuru.

**UNDER THE GUIDANCE OF:**

**Dr. Nitesh Kanyawar**

**Head of ADL Department**

**Cipla Limited**

**Virgonagar , Bangalore – 560049**

## **CERTIFICATE**

This is to certify that Ms. Nikhitha M N with reg no: P01BG22S032020 II MSc General Chemistry has satisfactorily completed her internship under the guidance of **Dr. Nitesh Kanyawar, Head of ADL Department Cipla Ltd, Virgo Nagar, Bangalore,** and **Dr. R Gururaja, Professor, Sarada Vilas College,** as part of her academic year 2022-2024, in the partial fulfilment of the requirement for the award of the degree of Master of Science in General Chemistry.



**Dr. Nitesh Kanyawar**

**Head of ADL Department**

**Cipla Ltd**



**(Dr. R GURURAJA)**  
**Dr. R. Gururaja**

**Adjunct Professor / Coordinator**  
**Post-Graduate Department of Chemistry**  
**Sarada Vilas College, Mysuru, KA**



PROJECT WORK AT MYSORE ANALYTICAL  
SERVICE , MYSORE



A INTERNSHIP PROJECT REPORT  
ON

“ANALYTICAL INSTRUMENTATION”

*Submitted in partial fulfillment of requirements for the award of degree of Master of  
Science in Chemistry during the year 2023-2024*

Submitted by

JASON SAMUEL      P01BG22S032018

Under the Supervision of

Prof. MAHESHA V M  
Director & CEO ,  
Mysore Analytical Service



2023-2024

POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY

SARADA VILAS COLLEGE

UNIVERSITY OF MYSORE

Mysuru-570004

POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY  
SARADA VILAS COLLEGE  
MYSURU-570004

CERTIFICATE

Certified that the project work entitled "ANALYTICAL INSTRUMENTATION" has been successfully carried out by JASON SAMUEL [ P01BG22S032018 ] bonafide student of Sarada Vilas College , Mysore – 570004 , in partial fulfillment of the requirements of degree of Master of Science in Chemistry in the University of Mysore during the academic year 2023- 2024. The project report has been approved as it satisfies the academic requirements with respect to the project work prescribed for Masters of Science in Chemistry.



Head of M A S  
MR. MAHESHA . V. M  
Director and CEO  
Mysore Analytical Services

**MYSORE ANALYTICAL SERVICES**  
#520, Roopa Nagar  
Mysore - 570026



Signature of HOD

DR. R. GURURAJA  
Dr. R. Gururaja  
Adjunct Professor & HOD  
Post-Graduate Department of Chemistry  
Sarada Vilas College, Mysuru - 000

# PROJECT WORK AT MYSORE ANALYTICAL SERVICE , MYSORE



## A INTERNSHIP PROJECT REPORT

ON

## "ANALYTICAL INSTRUMENTATION"

*Submitted in partial fulfillment of requirements for the award of degree of Master of  
Science in Chemistry during the year 2023-2024*

### Submitted by

VINODA K M

P01BG22S032019

### Under the Supervision of

Prof. MAHESHA V M  
Director & CEO ,  
Mysore Analytical Service



2023-2024

POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY

SARADA VILAS COLLEGE

UNIVERSITY OF MYSORE

Mysuru-570004



**POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY**  
**SARADA VILAS COLLEGE**  
MYSURU-570004

**CERTIFICATE**

Certified that the project work entitled "ANALYTICAL INSTRUMENTATION" has been successfully carried out by **VINODA K M [ P01BG22S032019 ]** bonafide student of **Sarada Vilas College , Mysore – 570004** , in partial fulfillment of the requirements of degree of **Master of Science in Chemistry in the University of Mysore** during the academic year 2023-2024. The project report has been approved as it satisfies the academic requirements with respect to the project work prescribed for **Masters of Science in Chemistry**.



Head of M A S

MR. MAHESHA . V. M

Director and CEO

Mysore Analytical Services

**MYSORE ANALYTICAL SERVICES**

#520, Roopa Nagar

Mysore - 570026



Signature of HOD

**DR. R. GURURAJ**  
Adjunct Professor & HOD  
Post-Graduate Department of Chemistry  
Dept. of Chemistry  
Sarada Vilas College, Mysuru.

# PROJECT WORK AT MYSORE ANALYTICAL SERVICE , MYSORE



A INTERNSHIP PROJECT REPORT

ON

“ANALYTICAL INSTRUMENTATION”

*Submitted in partial fulfillment of requirements for the award of degree of Master of  
Science in Chemistry during the year 2023-2024*

Submitted by

CHETHUSH M

P01BG22S032004

Under the Supervision of

Prof. MAHESHA V M

Director & CEO ,

Mysore Analytical Service



2023-2024

POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY

SARADA VILAS COLLEGE

UNIVERSITY OF MYSORE

Mysuru-570004

POST GRADUATE DEPARTMENT OF STUDIES IN CHEMISTRY  
SARADA VILAS COLLEGE  
MYSURU-570004

CERTIFICATE

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Mysore - 570026



Signature of HOD

**DR. R. GURURAJA**  
Adjunct Professor & HOD  
Post-Graduate Department of Chemistry  
Sarada Vilas College, Mysuru - 570004



**TITLE:REPORT ON INDUSTRIAL VISIT**

**STUDENT NAME: LOHITH H.C (U01BG21S0069)**

**VI SEM B.Sc (C/B)**

**NAME OF TEACHER : KRISHNAMURTHY.H.R**

**Prof.NATARAJU**

**ACADEMIC YEAR : 2023-24**

**COLLEGE NAME : SARADA VILAS COLLEGE**

**ADDRESS: KRISHNAMURTHYPURAM, MYSURU**


# **DEPARTMENT OF CHEMISTRY**

**SARADA VILAS COLLEGE  
MYSORE**

## **CERTIFICATE**

This is to certify that the internship entitled visit to **SANDALWOOD OIL FACTORY** was successfully carried out by LOHITH H C a bonafide student of VI semester towards the partial fulfillment of Bachelor of Degree (B.Sc) during the year 2023-24. All the corrections/suggestions indicated have been incorporated in the report. The internship report has been approved as it satisfies the academic requirement in respect of internship work prescribed for the said degree.

  
Faculty Incharge

  
Head of the Department  
Department of Chemistry

# DECLARATION

I , the under mentioned ,solemnly declare that this internship report on industrial visit to 'SANDALWOOD OIL FACTORY'. Is submitted to the Department of Chemistry, Sarada Vilas College , Mysore. As partial fulfillment of the requirements for the Degree of Bachelor of Science . Further I hereby declare that this report on industrial visit is based on my observation and learning that I gained in the Industrial visit. This report on Industrial visit ,neither in whole, nor in part has been previously submitted for any degree.

Date:14/05/2024

Place:Mysuru



Signature of the Student

Lohith H.C

III B.Sc 'B' Section

S.V.C,Mysuru



# **ACKNOWLEDGEMENT**

Under the prescribed syllabus of University of Mysore , we the students of Bachelor of Science of sixth semester where required to have a industrial visit to explore our knowledge about the functioning of industries .It was our great pleasure to visit Sandalwood Oil Industry, Ashokapuram, Mysore to aquire the knowledge about the functioning.

We would like express our sincere thanks and gratitude to the Department of Chemistry, Sarada Vilas College for providing such a great opportunity to make ourselves more purposeful.

We would like to extend our gratitude to Dr. M Devika, Principal, Sarada vilas College and Krishnamurthy.H.R. Head of the Department of Chemistry for granting permission and for overall support.

Our heartfelt thanks to Mr. Krishnamurthy Assistant Professor and Mr. Nataraj Department of Chemistry, Sarada Vilas College for their support, interest and guidance during the entire Industrial visit with their suggestions and encouragement.

## VISIT TO SANDALWOOD OIL FACTORY MYSURU





## **INTRODUCTION**

### **A Fragrant Legacy: The Mysore Sandalwood Factory**

Nestled in the heart of Mysore, India, the Sandalwood Oil Factory stands as a testament to the region's rich history and fragrant heritage. Established in 1916 by the visionary King Krishnaraja Wodeyar, this factory played a pivotal role in transforming sandalwood, a precious and aromatic wood, into a globally recognized symbol of Mysore.

The factory's story is intertwined with the famed Mysore Sandal Soap. King Wodeyar, recognizing the potential of sandalwood oil, set up this factory alongside a soap factory in Bangalore to create a unique product. The resulting Mysore Sandal Soap, with its distinctive fragrance and luxurious lather, became an instant success, captivating users worldwide.

#### **A Glimpse into the Process**

The traditional methods employed at the factory add to its mystique. Sandalwood chips are meticulously distilled using steam, a process that carefully extracts the essence of the wood, capturing its captivating aroma. This fragrant oil forms the base for Mysore Sandal Soap and other prized sandalwood products.

#### **More Than Just Production**

While the factory's primary focus remains production, it also serves as a window into Mysore's cultural heritage. The meticulous process, the use of time-tested techniques, and the dedication to quality reflect the region's commitment to excellence.

#### **Visiting the Factory**

Traditionally, the factory has welcomed visitors to witness the sandalwood distillation process firsthand. However, recent information suggests that public access might be restricted due to the COVID-19 pandemic. It's advisable to check with the Karnataka State Soap & Detergent Limited (KSDL), the factory's current operator, for the latest updates on visiting hours.

#### **A Lasting Legacy**

The Mysore Sandalwood Factory continues to be a vital part of Mysore's identity. Its enduring legacy lies not just in the production of exquisite sandalwood products, but also in its preservation of a time-honored tradition and its contribution to Mysore's status as the "Fragrant City of India."



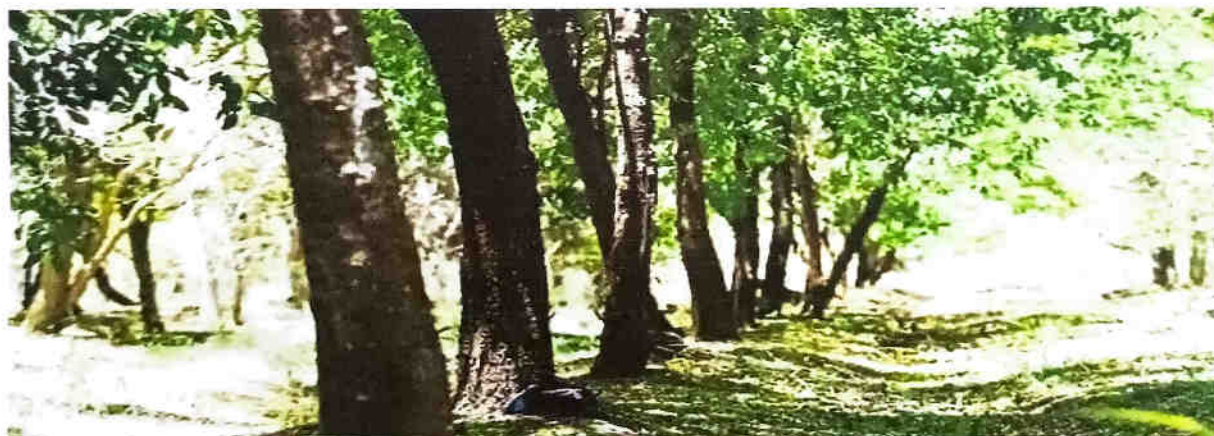
## The Fragrant Journey of Mysore Sandalwood Oil: From Forest to Flask

Mysore, a city in southern India, has been synonymous with sandalwood for centuries. Its rich, earthy aroma is a cornerstone of Indian culture and a valuable commodity worldwide. At the heart of this fragrant heritage lies the meticulous process of sandalwood oil extraction, a practice steeped in tradition and innovation.

### A Sustainable Approach: The Source

Sandalwood oil extraction in Mysore begins with a commitment to sustainability. The Government of Karnataka strictly controls the harvesting of sandalwood trees, ensuring their long-term survival. Mature trees are selected for felling, and only the heartwood, the most oil-rich part, is used for extraction.

Unfortunately, due to the sensitive nature of the information and the fight against illegal sandalwood trade, it's difficult to find publicly available photos of the harvesting process.





### Step 1: Chipping and Preparation

Once harvested, the sandalwood heartwood is cut into small, even-sized chips. Traditionally, this was done by hand using specialized tools. Today, some factories might utilize mechanized chippers to increase efficiency while maintaining chip size consistency.





## Proper Storage for Mysore Sandalwood: Ensuring Quality and Fragrance

Sandalwood, particularly the heartwood from mature trees, is a valuable commodity. To preserve its quality and the precious oil it contains, proper storage is crucial. Here's a detailed process for storing Mysore sandalwood:

### Preparation:

1. **Drying:** Ensure the sandalwood is completely dry before storage. Freshly cut wood contains moisture, which can lead to mold growth and degrade the oil. Allow the wood to air dry in a well-ventilated area with good air circulation, ideally for several weeks or months depending on the thickness.
2. **Cleaning:** Gently remove any dirt, debris, or bark remaining on the wood. Use a soft brush or a clean cloth to avoid damaging the surface.

### Storage Environment:

1. **Cool and Dry:** Store the sandalwood in a cool, dry place. Ideal temperatures range between 15-25°C (59-77°F). Avoid storing it in hot attics, damp basements, or areas with fluctuating temperatures.
2. **Darkness:** Direct sunlight can damage the wood and degrade the oil. Store the sandalwood in a dark location or use opaque containers for protection.
3. **Ventilation:** Maintain some level of air circulation to prevent moisture buildup. Avoid storing the wood in airtight containers for extended periods.

### Storage Methods:

1. **Logs and Large Pieces:** Store larger logs and thick pieces of sandalwood on raised platforms or wooden pallets. This allows for air circulation around the wood and prevents moisture accumulation.
2. **Chips and Smaller Pieces:** For chips and smaller pieces, use airtight containers made from wood, metal, or thick cardboard. Ensure the containers are completely dry before storing the sandalwood. Desiccant packets can be placed inside the container to absorb any excess moisture.
3. **Vacuum Sealing (Optional):** For extended storage or high-value sandalwood, consider vacuum sealing the container. This removes most of the air, further reducing the risk of moisture buildup and insect infestation.





## Step 2: The Steaming Vessel - The Alembic

The chipped sandalwood is loaded into a large vessel called an alembic. This traditionally copper-made pot has a distinctive shape, with a bulbous bottom where the wood is placed and a long, upward-sloping neck that leads to a condenser.



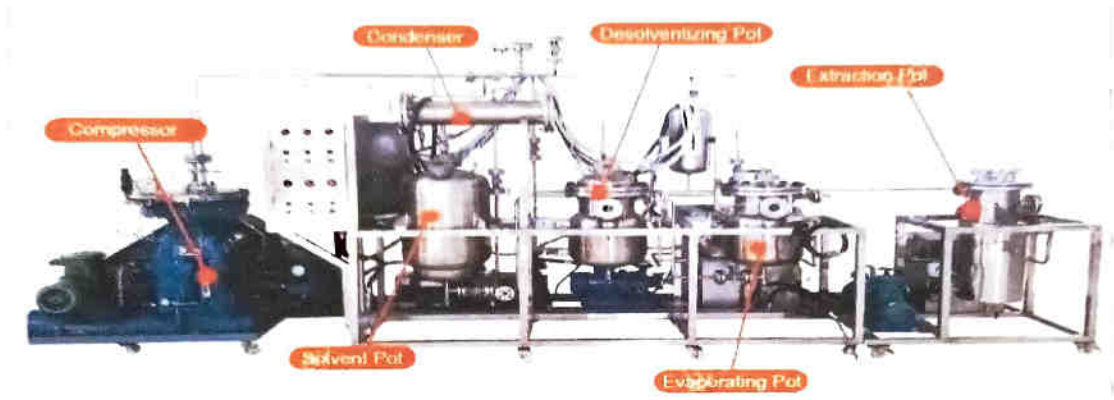
## Step 3: Steam Generation

Water is heated in a separate boiler, generating steam that travels through a pipe and enters the bottom chamber of the alembic. This steam gently permeates the sandalwood chips, carrying the volatile oil components upwards.



**Step 4: Condensation and Collection**

The oil-laden steam reaches the condenser, a long, coiled pipe typically made of copper and submerged in cold water. This temperature change causes the steam to condense back into liquid, separating the sandalwood oil from the water vapor.



**Step 5: Separation and Purification**

The condensed liquid, a mixture of sandalwood oil and water, flows through a separator. Since oil and water don't mix, they naturally separate, allowing the precious sandalwood oil to be collected. Further purification processes might be employed to remove any remaining impurities.



## **The Essence Captured: The Sandalwood Oil**

The final product is the highly sought-after sandalwood oil. This pale yellow liquid possesses a captivating aroma, woody, sweet, and with a touch of spiciness. It forms the base for Mysore Sandal Soap and other prized Indian perfumes and cosmetics.

## **A Legacy Preserved**

The traditional methods of sandalwood oil extraction in Mysore are a testament to the region's commitment to quality and heritage. While some factories might utilize modern chippers, the core process involving the alembic, steam distillation, and natural separation remains true to its time-honored roots.

## **Visiting the Factory (Update Needed)**

Traditionally, witnessing this fascinating process firsthand was possible by visiting the Mysore Sandalwood Factory. However, due to the COVID-19 pandemic and security concerns, public access might be restricted. It's advisable to contact the Karnataka State Soap & Detergent Limited (KSDL) for the latest information on visiting the factory.

## **The Allure of Mysore Sandalwood**

The meticulous extraction process in Mysore results in a highly prized sandalwood oil, renowned for its purity and captivating fragrance. This oil continues to be a cornerstone of Mysore's cultural and economic identity, solidifying the city's position as a global leader in the world of sandalwood.



**TITLE:REPORT ON INDUSTRIAL VISIT**

**STUDENT NAME: LOHITH H.C (U01BG21S0069)**

**VI SEM B.Sc (C/B)**

**NAME OF TEACHER : KRISHNAMURTHY.H.R**

**Prof.NATARAJU**

**ACADEMIC YEAR : 2023-24**

**COLLEGE NAME : SARADA VILAS COLLEGE**


**ADDRESS: KRISHNAMURTHYPURAM, MYSURU**


# **DEPARTMENT OF CHEMISTRY**

## **SARADA VILAS COLLEGE MYSORE**

### **CERTIFICATE**

This is to certify that the internship entitled visit to **SILK WEAVING FACTORY** was successfully carried out by LOHITH H C a bonafide student of VI semester towards the partial fulfillment of Bachelor of Degree (B.Sc) during the year 2023-24. All the corrections/suggestions indicated have been incorporated in the report. The internship report has been approved as it satisfies the academic requirement in respect of internship work prescribed for the said degree.

  
Faculty Incharge

  
Head of the Department

Department of Chemistry  
of chemistry  
Sarada Vilas College, Mysuru-4

# DECLARATION

I , the under mentioned ,solemnly declare that this internship report on industrial visit to 'SILK WEAVING FACTORY'. Is submitted to the Department of Chemistry, Sarada Vilas College , Mysore. As partial fulfillment of the requirements for the Degree of Bachelor of Science . Further I hereby declare that this report on industrial visit is based on my observation and learning that I gained in the Industrial visit. This report on Industrial visit ,neither in whole, nor in part has been previously submitted for any degree.

Date:14/05/2024

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Signature of the Student

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III B.Sc 'B' Section

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# ACKNOWLEDGEMENT

Under the prescribed syllabus of University of Mysore , we the students of Bachelor of Science of sixth semester where required to have a industrial visit to explore our knowledge about the functioning of industries .It was our great pleasure to visit Silk weaving factory , Mananthody road to aquire the knowledge about the functioning.

We would like express our sincere thanks and gratitude to the Department of Chemistry, Sarada Vilas College for providing such a great opportunity to make ourselves more purposeful.

We would like to extend our gratitude to Dr. M Devika, Principal, Sarada vilas College and Krishnamurthy.H.R. Head of the Department of Chemistry for granting permission and for overall support.

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## VISIT TO SILK WEAVING FACTORY, MYSURU





# INTRODUCTION

## *Woven Wonders: An Introduction to the Mysore Silk Factory*

Mysore, nestled amidst the verdant hills of Karnataka, India, boasts a rich heritage not just in sandalwood, but also in the art of silk weaving. The famed Mysore Silk Factory, established in 1912, stands as a testament to this exquisite tradition, captivating the world with its vibrant silks for over a century.

### **A Royal Beginning:**

The story of the Mysore Silk Factory unfolds with the vision of Krishnaraja Wodeyar IV, the Maharaja of Mysore. Recognizing the potential of silk weaving as a source of economic prosperity and artistic expression, he established the factory to cater to the royal family's needs and produce ornamental fabrics for the armed forces.

### **From Looms to Luxury:**

Initially equipped with just 10 looms, the factory gradually expanded, incorporating traditional techniques with modern advancements. Today, the factory boasts over 138 looms, skillfully operated by artisans who weave their magic with silk threads. The process, a mesmerizing display of human skill and artistry, involves intricate steps like warping, weft preparation, and weaving on the looms.

### **Beyond Borders:**

The Mysore Silk Factory's reputation transcended the royal court, captivating silk enthusiasts worldwide. Its exquisite sarees, with their intricate designs, vibrant colors, and luxurious textures, became synonymous with Mysore silk. From delicate florals to majestic paisley patterns, the sarees reflect a rich tapestry of cultural influences and design expertise.

### **More Than Just Sarees:**

While sarees remain a cornerstone of the factory's production, it caters to a wider audience. Kurtas, dhotis, shirts, and even ties are woven with the same dedication to quality and design. The factory also offers a variety of silk blends, making these luxurious fabrics more accessible.

### **A Glimpse into the Future:**

The Mysore Silk Factory continues to evolve, embracing sustainable practices and incorporating modern design elements while staying true to its time-honored traditions. Visitors can often witness the weaving process firsthand and experience the magic of silk creation.



## **The Silken Thread: A Journey from Worm to Wonder**

Silk, a fabric prized for its luxurious texture and shimmering beauty, has a fascinating story behind its creation. This report delves into the intricate process of silk production, from the humble beginnings with silkworms to the extraction of the delicate silk thread.

### **The Star of the Show: The Silkworm**

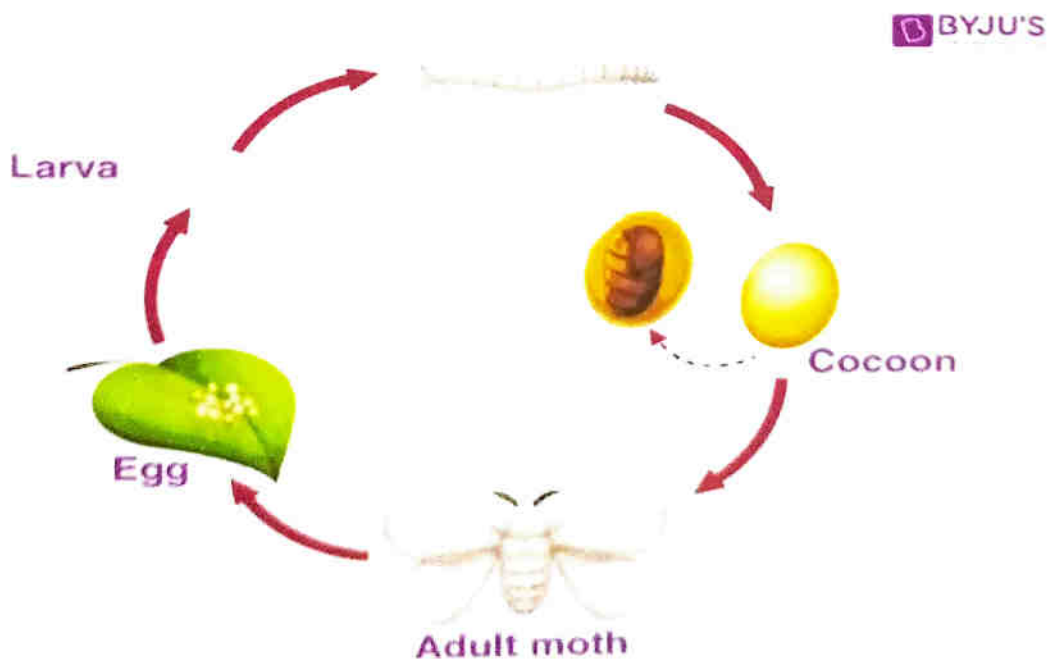
The key player in silk production is the silkworm, the larva of the *Bombyx mori* moth. These caterpillars are meticulously raised in controlled environments to ensure optimal silk production.



- **Diet of Champions:** Silkworms have a voracious appetite, feeding exclusively on mulberry leaves. The quality of these leaves directly impacts the health of the silkworms and the quality of the silk they produce. Mulberry plantations are often found near silk farms to ensure a steady supply of fresh leaves.



- **Life Cycle:** After hatching from eggs, silkworms spend most of their time eating, growing rapidly through several molting stages. Once they reach maturity, they begin the remarkable process of spinning their cocoon.





## The Art of Cocoon Spinning:

As the silkworm prepares for metamorphosis, it spins a remarkable cocoon around itself. This cocoon is made of a single, continuous filament of silk, a protein fiber produced by the silkworm's specialized glands.

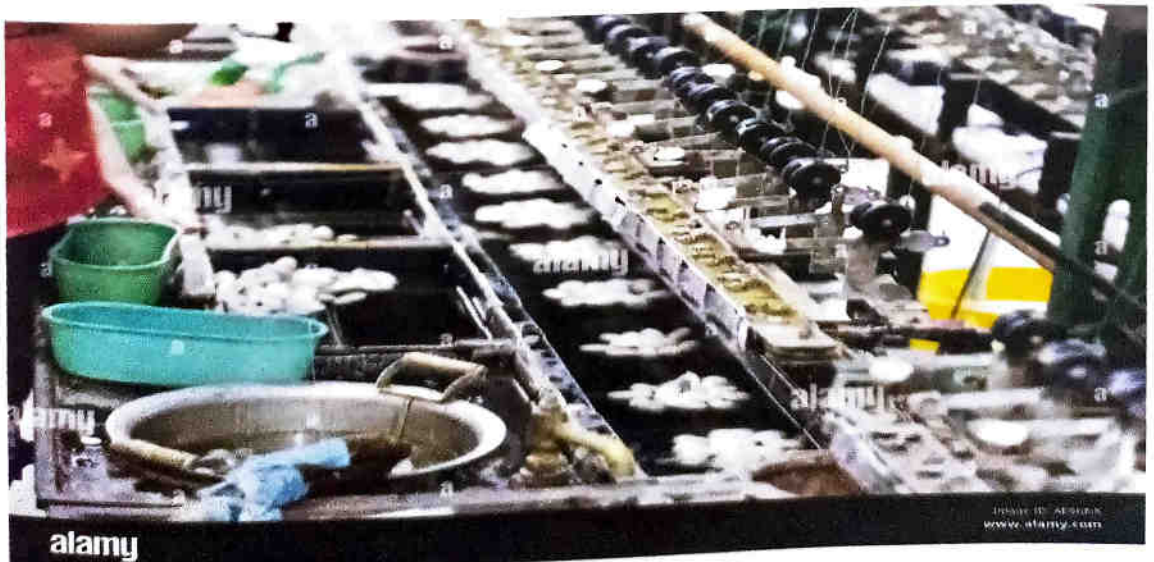
**The Spinning Process:** The silkworm sways its head in a figure-eight pattern, meticulously laying down silk fibers to create a strong and protective cocoon. This process can take several days to complete.



- **The Delicate Harvest:** Before the pupa inside the cocoon transforms into a moth, the cocoons are carefully harvested. Traditionally, this is done by hand to avoid damaging the delicate silk filament.

## From Cocoon to Thread: The Art of Extraction

The harvested cocoons undergo a crucial process called reeling to extract the silk thread.





- **Warm Water Bath:** The cocoons are placed in a warm water bath, softening the sericin, a glue-like protein that binds the silk fibers together.
- **Finding the End:** Skilled artisans use a fine brush to locate the loose end of the silk filament within the cocoon.
- **Reeling the Thread:** Multiple silk filaments from several cocoons are combined and drawn together to form a single, continuous thread. This process is often done with the help of a specialized reeling machine.

### The Final Touches

The raw silk thread is then processed further, undergoing procedures like degumming (removal of sericin) and dyeing to achieve the desired color and sheen.

- **Degumming:** This process removes the sericin, leaving behind the pure silk fiber. Degumming can be done using water or a mild chemical solution.



- **Dyeing:** Silk has a natural affinity for dyes, allowing it to be dyed in a vast array of vibrant colors.



### **A Legacy Woven in Silk**

The process of silk production is a delicate dance between nature and human expertise. From the meticulous care of silkworms to the skilled extraction of the silk thread, every step requires dedication and precision. The resulting fabric, a symbol of luxury and elegance, continues to captivate people worldwide.

### **From Silkworm to Saree: The Journey of a Thread**

The Mysore Silk Factory doesn't directly cultivate silkworms. However, the raw silk used in its production comes from the Ramanagara district, known for its high-quality silk cocoons. These cocoons undergo a meticulous process of extraction and preparation before reaching the factory.





### **A Tapestry of Designs:**

The factory's legacy lies not just in the quality of its silk but also in its stunning designs. From the timeless elegance of plain silk sarees to intricate motifs like zari (gold thread work), floral patterns, and geometric designs, the sarees cater to a wide range of tastes. The factory also produces other silk garments like kurtas, dhotis, shirts, and ties, offering a diverse collection of silk products.







### **Beyond Production: Innovation and Sustainability**

The Mysore Silk Factory, under the management of the Karnataka Silk Industries Corporation Limited (KSIC), embraces innovation while staying true to its traditions. It incorporates modern advancements in machinery and design elements to ensure efficiency and cater to contemporary preferences. Additionally, the factory prioritizes sustainable practices by promoting responsible sourcing and efficient resource utilization.

### **A Glimpse into the Factory**

Traditionally, the Mysore Silk Factory welcomed visitors to witness the weaving process firsthand. However, recent information suggests that public access might be restricted due to the COVID-19 pandemic. It's advisable to check with the KSIC for the latest updates on visiting hours.

### **A Legacy Woven in Gold:**

The Mysore Silk Factory transcends the realm of a mere production unit; it stands as a cultural icon. It embodies the rich heritage of Mysore, the dedication of its artisans, and the enduring allure of Indian silk. The factory's legacy continues to inspire designers, enthrall fashion enthusiasts, and adorn bodies in a vibrant display of artistic excellence.



**Additional Information:**

- **KSIC:** The Karnataka Silk Industries Corporation Limited (KSIC) is a government-owned corporation that manages the Mysore Silk Factory.
- **Mysore Silk Sarees:** Mysore silk sarees are renowned for their luxurious texture, intricate designs, and vibrant colors. They are a prized possession and a symbol of Indian craftsmanship.

## A Dazzling Conclusion: Our Visit to the Mysore Silk Factory

Our visit to the Mysore Silk Factory has been a truly captivating experience. We've witnessed firsthand the intricate process of transforming raw silk threads into breathtaking works of art the iconic Mysore silk sarrees.

While we might not have had the opportunity to directly observe the weavers at their looms due to current restrictions, the detailed explanations and demonstrations provided a fascinating glimpse into this age-old craft. **(If visits are allowed, you can replace the above sentence with)** Witnessing the skilled artisans meticulously operate the looms, their hands weaving magic with each thread, was a truly mesmerizing sight.

The dedication to quality and innovation at the factory is truly commendable. From the meticulous selection of raw silk to the intricate design process, every step reflects a deep respect for this traditional art form.

This visit has not only deepened our appreciation for the luxurious texture and vibrant colors of Mysore silk, but also instilled a newfound respect for the skilled artisans who continue to uphold this centuries-old tradition. The Mysore Silk Factory stands as a testament to Mysore's rich cultural heritage and its enduring role in the world of silk weaving.

Leaving the factory, we carry with us a dazzling memory and a newfound appreciation for the artistry that goes into creating these exquisite textiles. The legacy of Mysore silk, woven with passion and skill, continues to captivate hearts and adorn bodies in a tapestry of colors and textures for generations to come.



**Sarada Vilas Educational Institutions (R), Mysuru**  
**SARADA VILAS COLLEGE, MYSURU**

Krishnamurthypuram, Mysuru- 570004

**Department of Botany**

Minutes of meeting

Date: 01/09/23




Time: 10.30 to 11.00

Place: Botany Dept.

**Points discussed in the meeting:**

- Assignment of topics for Project works to the III semester students.
- Project topics related to the Plant Anatomy and Developmental Biology as prescribed in the syllabus.

**Members present:**

Sl. No	Name	Signature
1.	Dr. M. Devika, HoD & Principal	
2.	Mr. Yashwanth V M, Asst. Prof.	
3.	Mr. Rajashekar B H , Asst. Prof.	

  
**Head of the Department**

Head of the Department of Botany  
Sarada Vilas College  
Mysore

  
**Dr. M. Devika**  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru.

SARADA VILAS COLLEGE, MYSURU

DEPARTMENT OF BOTANY

III SEMESTER- TOPICS FOR PROJECT WORK 2023-24

TITLE OF THE PAPER: PLANT ANATOMY AND DEVELOPMENTAL BIOLOGY

SL. NO.	REG. NO.	NAME	TOPIC ASSIGNED	SIGNATURE
1.	U01BG22S0012	RAVIKUMAR V	Study of anatomy of selected Dicotyledonous plants	<i>Ravikumar V</i>
2	U01BG22S0014	SAGAR N M	Study of anatomy of selected Dicotyledonous plants	<i>Sagar N.M</i>
3	U01BG22S0015	DARSHINI C	Study of Pollen germination in different condition	<i>Darshini C</i>
4	U01BG22S0016	MANDARA N	Study of Pollen germination in different condition	<i>Mandara N</i>
5	U01BG22S0023	RAMYA C	Study of Pollen germination in different condition	<i>Ramya C.</i>
6	U01BG22S0028	DARSHAN S GANESHKAR	Study of Morphology of Pollen grains of different flowers	<i>Darshan S</i>
7	U01BG22S0029	SHEIK ABRAR	Study of anatomy of selected Dicotyledonous plants	<i>Sheik Abrar</i>
8	U01BG22S0035	PRASHANTH C P	Study of Pollen germination in different condition	<i>Prashanth cp</i>
9	U01BG22S0041	BHUVAN KUMAR V	Study of Morphology of Pollen grains of different flowers	<i>Bhuvan</i>
10	U01BG21S0055	DARSHAN R	Study of anatomy of selected Monocotyledonous plants	<i>Darshan R</i>

Teacher in charge:

Mr. Yashwanth V M

Mr. Rajashekar B H

Head of the Department

Head of the Department of Botany  
Sarada Vilas College  
Mysore

*Jr. M Devika*  
M.Sc., M.Phil., Ph.D.  
Principal  
Sarada Vilas College,  
Krishnamurthypuram, Mysuru

# SARADA VILAS COLLEGE

KRISHNAMURTHIPURAM, MYSURU

## STUDY OF POLLEN GRANS GERMINATION IN DIFFERENT CONDITIONS



### SUBMITTED BY:

DARSHINI C

MANDARAN

RAMYA C

PRASHANTH C. P

BSc (BZ), 3<sup>rd</sup> SEM

### SUBMITTED TO:

DEPARTMENT OF BOTANY

SARADA VILAS COLLEGE, MYSURU



## DECLARATION AND CERTIFICATE

I hereby declared that the report on mini project on **"POLLEN GRAINS GERMINATION IN DIFFERENT CONDITIONS"** Is a bonafide work done by me during the year 2023-2024 further certified that work presented in report is original and done according to the guidelines of Department of botany.

This is to certify that Darshini.C, Mandara.N, Ramya.c Prashanth.c.p, has successfully completed the project work on title **"POLLEN GERMINATION IN DIFFERENT CONDITIONS"** and submitted the report as a partial fulfillment of II B.Sc. III semester Botany practical Examination during the year 2023-2024.



Signature of batch in charge



Signature of HOD  
Head of the Department of Botany  
Sarada Vilas College  
Mysore

# Sarada Vilas College

Department of Computer Science

Mysuru - 570 004

## CERTIFICATE

Certified that this report titled "Distracted Driver Detection" is a bonafide record of project work done by Sri / Kum AMBUJA.R.S(RBSD2004) under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence) Of the University of Mysore

Signature of the Guide:

Nayana M  
31/07/2024

Signature:

H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysuru - 570 004  
Head of the Department  
with Seal

Examiners:

1. 

2. 

Date of Submission:

VALUED

March/October 19

(1) .....

(2) .....

Sarada Vilas College  
Mysuru

# Sarada Vilas College

Department of Computer Science

Mysuru - 570 004

## CERTIFICATE

Certified that this report titled "**Distracted Driver Detection**" is a bonafide record of project work done by Sri / Kum SAHANA.S(RBSD2026) under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence) Of the University of Mysore

Signature of the Guide:

Nagendra  
31/07/2024

Signature:

H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysuru - 570 004  
Head of the Department  
with Seal

Examiners:

1. 

2. 

Date of Submission:

VALUED	
March/October	19
(1)	
(2)	
Sarada Vilas College Mysuru	



**Sarada Vilas College**  
Department of Computer Science  
Mysuru -570 004

**CERTIFICATE**

Certified that this report titled "Automation Of Arbitrage" is a bonafide record of project work done by **Kum.Rakshitha K(RBSD2023)** under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc(Hon's) (Data Science & Artificial Intelligence ) of the University of Mysore.

**Signature of the Guide:**

*Nagendra M*  
31/07/2024

**Signature:**



**Head of the Department  
with Seal**

H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

**Examiners:**

1. H-S Nagalakshmi
2. Akshay H L

**Date of Submission:**

# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “Integrated Agricultural Solutions” is a bonafiderecord of project work done by Sri / Kum Manoj Kumar G M (RBSD2016) under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon’s)(Data Science & ArtificialIntelligence) Of the University of Mysore



Signature of the Guide:

Nayal. M  
30/07/2024

Signature:

H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysore-570-004  
with Seal

Examiners:

1. 
2.  H-L

Date of Submission:

VALUED  
March/October 19\_\_\_\_  
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(2) \_\_\_\_\_  
WERS  
Sarada Vilas College  
Mysore

# Sarada Vilas College

Department of Computer Science

Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “**Distracted Driver Detection**” is a bonafide record of project work done by Sri / Kum **PRARTHANA.S(RBSD2021)** under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence) Of the University of Mysore

Signature of the Guide:

Signature:

Nayana  
31/07/2024

MOD  
Department of Computer Science  
Sarada Vilas College  
Mysuru-570 004  
Head of the Department  
with Seal

Examiners:

1. \_\_\_\_\_

2. \_\_\_\_\_

Date of Submission:

Akshaya H.L

VALUED  
March/October 19  
(1) \_\_\_\_\_  
(2) \_\_\_\_\_

RS  
Sarada Vilas College  
Mysuru.



# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “ROAD LANE LINE DETECTION” is a bonafide record of project work done by Sri / Kum Bharath M (RBSD2006) under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence) Of the University of Mysore.

Signature of the Guide:

Nay W.M  
26/07/2024

Signature:

~~LEG~~ H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysore-570 004  
Head of the Department  
with Seal

Examiners:

1. H.S. Naik alav
2. \_\_\_\_\_

Date of Submission:

<b>VALUED</b>	
March/October _____ 19____	
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(2)	_____
EHS Sarada Vilas College Mysore	

**Sarada Vilas Educational Institutions**  
**Sarada Vilas College**

Department of Computer Science

Mysuru – 570 004

**CERTIFICATE**

Certified that this report titled “EcoGirth: Revolutionizing Tree Health Monitoring with Automated Girth Measurement” is a bonafide record of project work done by Hemanth S (RBSD2011) under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc(Hon's) in Data Science & Artificial Intelligence of the University of Mysore

Signature of the  
Guide:

*Akshay H.L*

Signature :

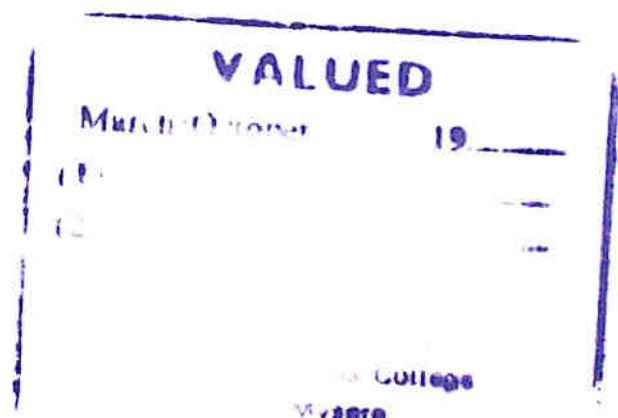
*[Signature]*  
**H.O.D**  
Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

Examiners:

1. *[Signature]*

2. \_\_\_\_\_

Date of Submission:



# Sarada Vilas Educational Institutions

Sarada Vilas College

Department of Computer Science

Mysuru - 570 004

## CERTIFICATE

Certified that this report titled **"EcoGirth: Revolutionizing Tree Health Monitoring with Automated Girth Measurement"** is a bonafide record of project work done by Ravi D (RBSD2024) under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc(Hon's) in Data Science & Artificial Intelligence of the University of Mysore

Signature of the  
Guide:

*Akshay H.L.*

Signature :

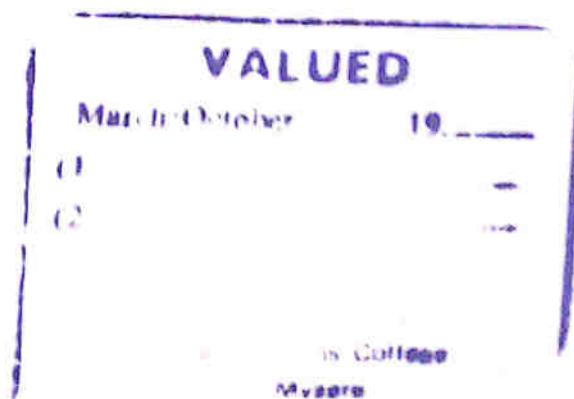
*[Signature]*  
Department of Computer Science  
Sarada Vilas College  
Mysuru - 570 004  
With Seal

Examiners:

1. *[Signature]*

2. \_\_\_\_\_

Date of Submission:





# Sarada Vilas Educational Institutions

Sarada Vilas College

Department of Computer Science

Mysuru - 570 004

## CERTIFICATE

Certified that this report titled "Design and Development of ECG Report Analysis System" is a bonafide record of project work done by Chiranth Sharma M (RBSD2009) under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc(Hon's) in Data Science & Artificial Intelligence of the University of Mysore

Signature of the Guide:

*Akshay H.L*

Signature :

*H.O.D*  
Department of Computer Science  
Sarada Vilas College  
Head of the Department with  
Mysuru - 570 004  
Seal

Examiners:

1. *[Signature]*

2. *Akshay H.L*

Date of Submission:

**VALUED**  
March 13, 2020 at 19:00  
(1) \_\_\_\_\_  
(2) \_\_\_\_\_  
Mysuru

# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “Autonomous ship model prototype” is a Bonafederecord of project work done by Sri NANDISH A M (RBSD2018) under our supervision and guidance, towards partial fulfilment of requirement for theaward of the degree of B.Sc. (Hon's) (Data Science & Artificial Intelligence of the University of Mysore.

Signature of the Guide: Akshay H.L

Signature:

H.O.D  
Department of Computer Science  
Head of the Department  
With Seal 004

Examiners:

1. H.S. Nagalakshmi
2. \_\_\_\_\_

Date of Submission:

31/07/2024

## Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

### CERTIFICATE

Certified that this report titled “Two way communication for deaf peoples” is a bonafide record of project work done by Sri / Kum **Bhavani S (RBSD2007)** under our supervision and guidance ,towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon’s)(Data Science & Artificial Intelligence ) of the University of Mysore

Signature of the Guide:

Signature:

May 17  
26/07/2024

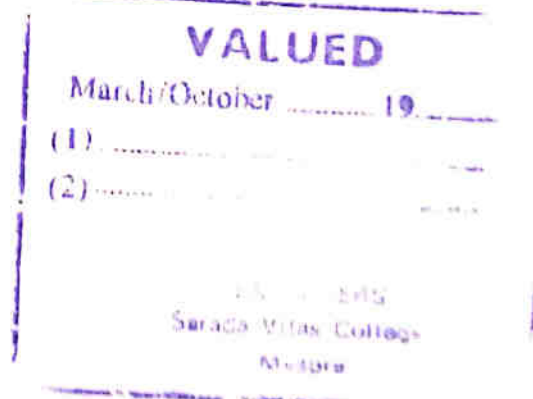
H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysuru  
Head of the Department  
with Seal

Examiners:

1. \_\_\_\_\_

2. \_\_\_\_\_

Date of Submission:





# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “ROAD LANE LINE DETECTION” is a bonafide record of project work done by Sri / Kum **Manoj Kumar (RBSD2015)** under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence) Of the University of Mysore.

Signature of the Guide:

*Manoj K*  
20/07/2024

Signature:

**H.O.D.**  
Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

Head of the Department  
with Seal

**VALUED**

March/October 19\_\_\_\_

Examiners:

1. *H.S. Na Salak*

2. \_\_\_\_\_

Date of Submission:

# Sarada Vilas Educational Institutions

Sarada Vilas College

Department of Computer Science

Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “LLM” is a bonafide record of project work done by Shri Bhuvan S Biradar, Shri Shijin Pal J, Shri Shreyas Rao H Mohite under our supervision and guidance, towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence) of the University of Mysore

Signature of the Guide:

*Akshay H.V*

Signature:

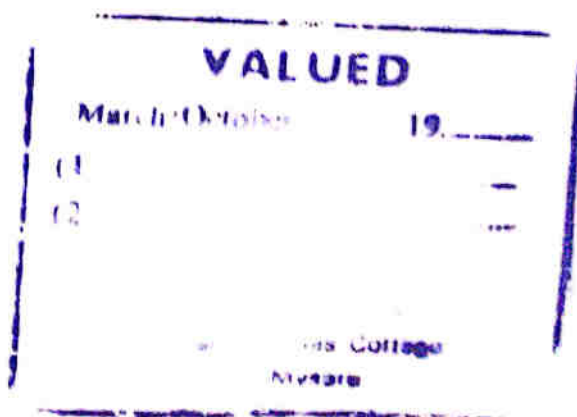
*[Signature]*  
H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysuru - 570 004

Examiners:

1. \_\_\_\_\_

2. \_\_\_\_\_

Date of Submission:



# Sarada Vilas College

Department of Computer Science

Mysuru – 570004

## CERTIFICATE

Certified that this report titled “ENVIRONMENTAL ROVER” is a bonafide record of project work done by SHEELASHREE S (RBSD2027) under our supervision and guidance, towards partial fulfilment of requirement for the award of the degree of B.Sc. (Hon's) in Data Science & Artificial Intelligence of the University of Mysore

Signature of the Guide:

Akshay H. L

Signature :

A.P.D  
Department of Computer Science  
Sarada Vilas College  
Head of the Department with Seal  
Mysore-570 004

Examiners:

1. 

2. Akshay H. L

Date of Submission:



# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “Two way communication for deaf peoples” is a bonafide record of project work done by Sri / Kum **Manu C (RBSD2017)** under our supervision and guidance ,towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon’s)(Data Science & Artificial Intelligence ) of the University of Mysore



Signature of the Guide:

Nayana M  
24/07/2024

Signature:

  
H.O.D.  
Department of Computer Science  
Sarada Vilas College  
Mysuru - 570 004  
Head of the Department  
with Seal

Examiners:

1. 
2.  Akshaya H.C  
02/08

Date of Submission:

<b>VALUED</b>	
March/October 19	
(1)	
(2)	
ERS Sarada Vilas College Mysuru	

# Sarada Vilas College

Department of Computer Science

Mysuru - 570004

## CERTIFICATE

Certified that this report titled "ENVIRONMENTAL ROVER" is a bonafide record of project work done by B S PRAJWAL (RBSD2005) under our supervision and guidance, towards partial fulfilment of requirement for the award of the degree of B.Sc (Hon's) in Data Science & Artificial Intelligence of the University of Mysore

Signature of the Guide:

*Akshay H. U*

Signature :

*H.O.D*  
Department of Computer Science  
Sarada Vilas College  
Head of the Department with Seal

Examiners:

1. *[Signature]*

2. *Akshay H. U*

Date of Submission:

## Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

### CERTIFICATE

Certified that this report titled “Integrated Agricultural Solutions” is a bonafide record of project work done by Sri / Kum Abhishek M (RBSD2001) under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon's)(Data Science & ArtificialIntelligence) Of the University of Mysore

Signature of the Guide:

Nayal M  
30/07/2024

Signature:

H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysuru - 570 004  
With Seal

Examiners:

1. \_\_\_\_\_
2. Abhishek H.L

Date of Submission:

<b>VALUED</b>	
Marked by	19. _____
(1)	_____
(2)	_____
Sarada Vilas College Mysuru	



**Sarada Vilas Educational Institutions**  
**Sarada Vilas College**

Department of Computer Science

Mysuru – 570 004

**CERTIFICATE**

Certified that this report titled **“EcoGirth: Revolutionizing Tree Health Monitoring with Automated Girth Measurement”** is a bonafide record of project work done by Rakshith BV (RBSD2022) under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc(Hon's) in Data Science & Artificial Intelligence of the University of Mysore

**Signature of the  
Guide:**

*Akshay H.L*

**Signature :**

*[Signature]*  
**H.O.D**  
Department of Computer Sci  
Head of the Department  
Sarada Vilas College  
Mysuru-570 004  
with Seal

**Examiners:**

1. *[Signature]*

2. \_\_\_\_\_

**Date of Submission:**

<b>VALUED</b>	
March/October	19. _____
(1)	_____
(2)	_____
College Mysuru	

# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “Two way communication for deaf peoples” is a bonafide record of project work done by Sri / Kum Mahendra M (RBSD2014) under our supervision and guidance ,towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon’s)(Data Science & Artificial Intelligence ) of the University of Mysore

Signature of the Guide:

Signature:

Nagw.r  
24/07/2024

H.O.D  
Department of Computer Science  
Head of the Department  
Sarada Vilas College  
Mysuru - 570 004  
with Seal

Examiners:

1. 

2.  H.O.  
22/08

VALUED  
March/October 19\_\_\_\_\_  
(1) \_\_\_\_\_  
(2) \_\_\_\_\_  
SARADA VILAS COLLEGE  
MYSURU

Date of Submission:

**Sarada Vilas Educational Institutions**  
**Sarada Vilas College**

Department of Computer Science

Mysuru – 570 004

**CERTIFICATE**

Certified that this report titled “**Design and Development of ECG Report Analysis System**” is a bonafide record of project work done by Swaroop C (RBSD2031) under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc(Hon's) in Data Science & Artificial Intelligence of the University of Mysore

**Signature of the Guide:**

*Akshay H.L*

**Signature :**

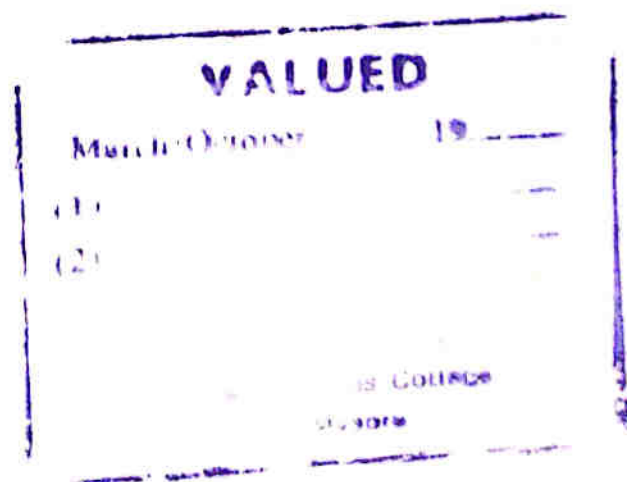
*[Signature]* **H.O.D**  
Department of Computer Science  
Head of the Department with  
Seal Mysore-570 004

**Examiners:**

1. *[Signature]*

2. *Akshay H.L*

**Date of Submission:**





# Sarada Vilas Educational Institutions

Sarada Vilas College

Department of Computer Science

Mysuru - 570 004

## CERTIFICATE

Certified that this report titled "Design and Development of ECG Report Analysis System" is a bonafide record of project work done by Parameshwar B (RBSD2020) under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc(Hon's) in Data Science & Artificial Intelligence of the University of Mysore

Signature of the Guide:

Akshay H. L.

Signature :

H.O.D  
Department of Computer Science  
Head of the Department with  
Sarada Vilas College  
Mysuru - 570 004

Examiners:

1. 

2. Akshay H. L.

Date of Submission:

VALUED	
March/October 19	
(1)	
(2)	
Sarada Vilas College Mysuru	

# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru - 570 004

## CERTIFICATE

Certified that this report titled "Stock Market Trend Analysis " is a bonafide record of project work done by Darshan L (RBSD 2010) under our supervision and guidance ,towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence ) of the University of Mysore

Signature of the Guide:

*Akshay H.L*

Signature:

*[Signature]*

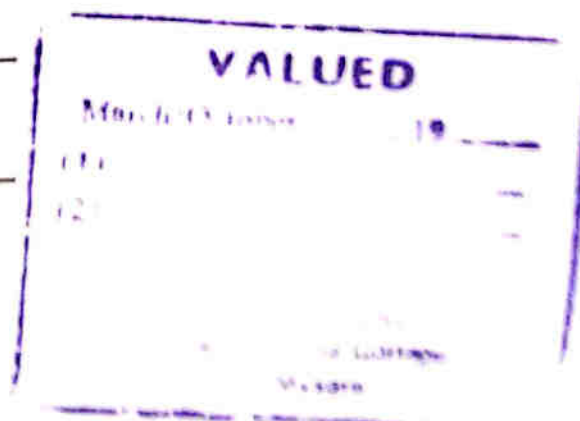
Head of the Department  
with Seal  
Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

Examiners:

1. *[Signature]*

2. *Akshay H.L*

Date of Submission:



**Sarada Vilas College**  
Department of Computer Science  
Mysuru -570 004

**CERTIFICATE**

Certified that this report titled "**Automation Of Arbitrage**" is a bonafide record of project work done by **Kum. Soundarya S (RBSD2030)** under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc (Hon's) (Data Science & Artificial Intelligence ) of the University of Mysore.

**Signature of the Guide:**

Nayana  
31/07/2024

**Signature:**

**H.O.D**  
Department of Computer Science  
Sarada Vilas College  
Mysore-570 004



**Head of the Department  
with Seal**

**Examiners:**

1. H.S. Nagalakshmi
2. Akshaya H.L

**Date of Submission:**



# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “**Integrated Agricultural Solutions**” is a bonafide record of project work done by Sri / Kum **Madhu Kumar G (RBSD2013)** under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon’s)(Data Science & Artificial Intelligence) Of the University of Mysore



Signature of the Guide:

May 17  
30/07/2024

Signature:

H.O.D  
Head of the Department  
Sarada Vilas College  
Mysore-570 004  
with Seal

Examiners:

1.  (1)
2.  (2)

Date of Submission:

VALUED  
March - October 19. \_\_\_\_\_

Sarada Vilas College  
Mysore

# Sarada Vilas Educational Institutions

Sarada Vilas College

Department of Computer Science

Mysuru - 570 004

## CERTIFICATE

Certified that this report titled "**Design and Development of ECG Report Analysis System**" is a bonafide record of project work done by Chiranth Sharma M (RBSD2009), Parmeshwar B (RBSD2020) and Swaroop C (RBSD2031) under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc(Hon's) in Data Science & Artificial Intelligence of the University of Mysore

Signature of the Guide:

*Akshay H.V.*

Signature :

*[Signature]*  
H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysuru-570 004

Examiners:

1. *[Signature]*

2. *Akshay H.V.*

Date of Submission:

<b>VALUED</b>	
March/October	10
(1)	
(2)	
College	

# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “**Handwritten Character Recognition And Digit Recognition Using Deep Learning**” is a bonafide record of project work done by **Yuktha K H (RBSD2032)** under our supervision and guidance ,towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence ) of the University of Mysore

Signature of the Guide:

Akshay H.L

Signature:

[Signature]

Head of the Department  
with Seal

H.O.D

Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

Examiners:

1. H S - NaSalake
2. Akshay H.L

Date of Submission:

31-7-2024



# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled "Stock Market Trend Analysis " is a bonafide record of project work done by Madhu K D (RBSD 2012) under our supervision and guidance ,towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence ) of the University of Mysore

Signature of the Guide:

*Akshaya H. L.*

Signature:

*[Signature]*

Head of the Department  
with Seal

**H.O.D**

Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

Examiners:

*[Signature]*

1. \_\_\_\_\_

2. *Akshaya H. L.*

Date of Submission:

**VALUED**

March/October ..... 19.....

(1)

(2)

Stamp area with vertical lines and text.

**Sarada Vilas College**  
Department of Computer Science  
Mysuru -570 004

**CERTIFICATE**

Certified that this report titled “Automation Of Arbitrage” is a bonafide record of project work done by **Kum. Roja D (RBSD2025)** under our supervision and guidance, towards partial fulfillment of requirement for the award of the degree of B.Sc (Hon's) (Data Science & Artificial Intelligence ) of the University of Mysore.

**Signature of the Guide:**

*Nagay. N*  
31/07/2024

**Signature:** **H.O.D**  
Department of Computer Science  
Sarada Vilas College  
Mysore-570 004  
*[Signature]*  
**Head of the Department  
with Seal**

**Examiners:**

1. *H. S. Nagalakshmi*
2. *Akshaya H. L*

**Date of Submission:**

# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “**Handwritten Character Recognition And Digit Recognition Using Deep Learning**” is a bonafide record of project work done by **Akshay C S (RBSD2003)** under our supervision and guidance ,towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence ) of the University of Mysore

Signature of the Guide:

*Akshay H.L*

Signature:

*[Signature]*

Head of the Department  
with Seal

**H.O.D**

Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

Examiners:

1. *H.S. Nagalakshmi*
2. *Akshay H.L*

Date of Submission:

*31-7-2024*



# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “ROAD LANE LINE DETECTION” is a bonafide record of project work done by Sri / Kum Naveen Kumar M (RBSD2019) under our supervision and guidance, towards partial fulfillment of the requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence) Of the University of Mysore.

Signature of the Guide:

Naveen M  
26/07/2024

Signature:

H.O.D  
Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

Head of the Department  
with Seal

Examiners:

1. H.S. Naveen Kumar
2. \_\_\_\_\_

<b>VALUED</b>	
March/October _____ 19_____	
(1)	_____
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HRS Sarada Vilas College Mysore	

Date of Submission:

# Sarada Vilas Educational Institutions

Sarada Vilas College  
Department of Computer Science  
Mysuru – 570 004

## CERTIFICATE

Certified that this report titled “**Handwritten Character Recognition And Digit Recognition Using Deep Learning**” is a bonafide record of project work done by **Ajith S (RBSD2002)** under our supervision and guidance ,towards partial fulfilment of requirement for the award of the degree of B.Sc(Hon's)(Data Science & Artificial Intelligence ) of the University of Mysore

Signature of the Guide:

 H.L

Signature:





Head of the Department  
with Seal

H.O.D

Department of Computer Science  
Sarada Vilas College  
Mysore-570 004

Examiners:

1.  H.S. Nagarajan
2.  H.L

Date of Submission:

31-7-2024



**Sarada Vilas College, Mysuru**

Krishnamurthypuram, Mysore - 570004 Karnataka

Re accredited by NAAC with A grade ( CGPA : 3.19 )



**UNIVERSITY OF MYSORE**

**MYSORE-570005**



**AN INTERNSHIP REPORT ON**

**“PYTHON”**

Submitted to

**UNIVERSITY OF MYSORE, MYSORE**

In the partial fulfillment of the requirement for the award of

**BACHELORE OF SCIENCE IN  
PHYSICS & MATHEMATICS**

Submitted by

**MADHU K V U01BG21S0040**



**RANK BOOK LEARNING AND SOFTWARE SOLUTION PVT.LTD**

Saraswathipuram, bake point, mysore.



## **CERTIFICATE OF INTERNSHIP**

**DATE: 22-MAY-2024**

This is to certify that **Mr. Madhu K.V.**, student of **Sarada Vilas College Mysore**, has successfully completed the internship By **RankBook Learning and Software Solutions Pvt. Ltd.** in “**Python**” for 90 hours from **March 2024 to April 2024**.

During the internship program he/she had been exposed to different processes and was found diligent, hardworking and inquisitive.  
We wish him/her success in future endeavors.

*Nagesh M*  
**Mr. Nagesh M**

**Internship Head, RankBook**



## Acknowledgement

I sincerely express my profound sense of gratitude to the people who have helped me in the successful completion of my internship.

I am thankful to my trainer **Ms. Manasa** for her continuous encouragement throughout the project .

I am thankful to my principal **Dr.Devika M** for giving me the opportunity to work on this project.

I express my immense gratitude to **Mrs.Shilpashree N**, Asst. Prof and Head, Department of Computer Science for her valuable guidance

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## 1 INTRODUCTION

My internship at RankBook Learning and Software Solutions Pvt. Ltd. marked a significant milestone in my journey towards becoming a proficient Python developer. Spanning 90 hours, this period offered me a unique opportunity to immerse myself in the practical application of Python programming and web development concepts. This report aims to provide a comprehensive overview of my internship experience, detailing the objectives pursued, projects undertaken, and activities performed during this transformative period.

### 1.1 Objective of the Internship

The primary objective of my internship was to gain hands-on experience in Python development and web application architecture. With a specific focus on exploring the Django framework, I aimed to deepen my understanding of backend development, database management, and MVC architecture. Additionally, I sought to enhance my problem-solving abilities, collaborative skills, and overall proficiency in software development practices.

### 1.2 Projects Undertaken

During the internship, I had the opportunity to work on main projects:

- Data Analysis
- Building GUI Application
- Developing a web Application

### 1.3 Activities Performed

Throughout the internship, I engaged in a variety of activities aimed at enhancing my skills and knowledge in Python development:

- Participated in workshops and training sessions to deepen my understanding of Python programming, web development technologies, and software engineering practices.
- Collaborated with fellow interns and mentors to brainstorm ideas, troubleshoot issues, and iteratively develop solutions for the assigned projects.
- Conducted research and self-study to explore advanced topics in Python development, including best practices, design patterns, and optimization techniques.

## 2 ORGANIZATION PROFILE

### OVERVIEW

I Choose RankBook Learning and Software Solutions Pvt. Ltd. Mysore for my internship program because I wanted to gain practical knowledge on **Front End technologies**. I joined RankBook Learning and Software Solutions Pvt. Ltd. Mysore to get exposed to the real world of EdTech and software development and to have first-hand experience on the same since I am a student of **Computer Science**. I wanted to know how business firms use digital marketing and what role it plays in the growth and development of business activities.

The firm's headquarters is situated on the Third Floor, Sandesh Arcade, Bake Point Circle, Saraswathi Puram, Mysore, that occupies around 3600 sqft of office premises. It has offices in Hassan, Chikamagalur and Bangalore.

### BACKGROUND

Rankbook is the pioneer in the domain of software training and placement of candidates. Rankbook is founded on the vision of "realization of achievement potential".

RankBook is an organization committed to the Ed-Tech and Job-Tech space. In line with our vision and mission, we aim to empower the lives of students based in Tier-II and Tier-III towns by upskilling in modern technological and entrepreneurial domains and benefit from these programs to become a productive and proactive part of the corporate space. Through rigorous and immersive training along with simulated real-life technical exposure through live projects, we train the candidate to be among the most fulfilled and develop their all- round capability as well.

Rank Book learning and Software Solutions has redefined the process of recruitment to a predictably accurate process with defined parameters for matching job skills of potential candidates with the job profiles of local and international companies. We as a placement agency provide job opportunities for skilled, semi-skilled and unskilled workers.

We are a team of professionals from different domains like Engineering, HR, BFSI, Manufacturing etc. Our services include software development & training, training on Business English, Soft skills etc, and Placement Service

Our focus area has been Tier-2 & Tier-3 cities and rural areas where corporates are yet to reach the untapped potential of trained candidates. So we aim at these target areas and help students of different streams including Engineering, Graduation, Diploma and ITI.

We hope to help the Dreamers Do and achieve their true potential.

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## NATURE OF THE BUSINESS

RankBook Operates in the domains of EdTech, SkillTech and JobTech. We are focused on improvement of candidates from tier-II and tier-III and rural places.

The nature of RankBook as an EdTech (Educational Technology), SkillTech and Job-Tech company can vary widely depending on its specific focus, target audience, and the problems it aims to address within the education sector. Here are some common characteristics and areas of focus for EdTech companies:

**Online Learning Platforms:** Many EdTech startups develop platforms for online courses, tutorials, and educational content. These platforms often incorporate features such as video lectures, interactive quizzes, and discussion forums to enhance the learning experience.

**Personalized Learning:** Some companies focus on leveraging technology to personalize learning experiences for students. This may involve adaptive learning algorithms that tailor content and pacing to individual student needs and learning styles.

**Skill Development:** EdTech startups often target specific skill areas, such as coding, language learning, or STEM (Science, Technology, Engineering, and Mathematics) subjects, providing interactive tools and resources to help users develop these skills.

**Education Analytics:** Another area of focus is education analytics, where companies develop tools to collect and analyze data on student performance and engagement. This data can be used to identify areas for improvement, track progress, and inform instructional decisions.

**Virtual Reality (VR) and Augmented Reality (AR):** Some EdTech companies explore the use of VR and AR technologies to create immersive learning experiences. These technologies can simulate real-world environments, allowing students to engage with content in new and interactive ways.

**Teacher Support and Professional Development:** EdTech startups may also develop tools and resources to support teachers in lesson planning, classroom management, and professional development. These can include platforms for sharing lesson plans, collaborative tools for teachers, and online training courses.

**Early Childhood Education:** Some companies focus on providing educational resources and tools for young children, including interactive games, storytelling apps, and multimedia content designed to support early learning and development.

**Education Accessibility:** Accessibility is a crucial focus for many EdTech companies, with efforts to make educational resources and platforms more inclusive for students with disabilities or diverse learning needs.

Overall, the nature of a new EdTech company often revolves around leveraging technology to improve and enhance various aspects of the educational experience, from K-12 and higher education to professional development and lifelong learning.

## VISION

"Help dreamers do". We aim to bridge the gap between academic and industry by providing skill development, management and placement. For realization of true potential.

## MISSION

To Provide skill development and placement services to candidates from tier-2/cities.

## QUALITY POLICY

### Values

Our core values are driven by a desire to improve life, achieve engineering excellence, operate with the highest standards of integrity, expand access to our services and employ a diverse workforce that values collaboration.

### Ethics

Integrity, honesty, and fairness towards our candidates, parents, companies and other stakeholders in matters of content creation, content delivery and output oriented edTech along with financial value for all is our moral compass.

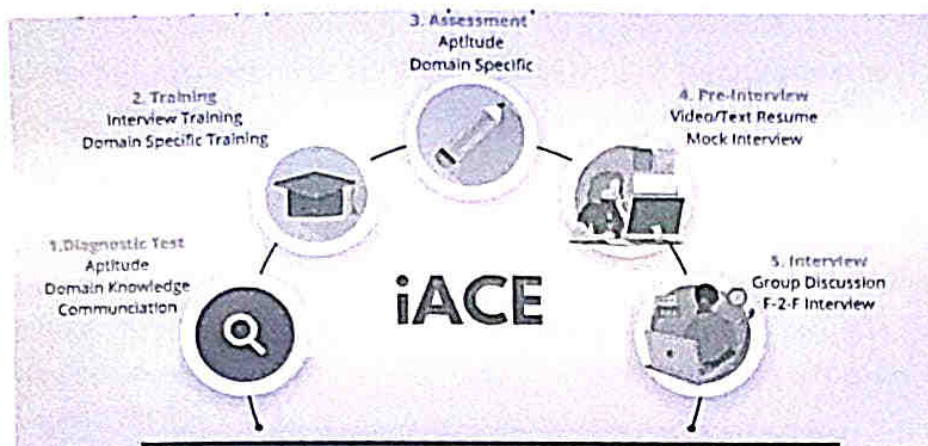
### Quality

There is no shortcut to happiness and quality requires time. Quality does not come cheap or abruptly. But delivering within the stipulated time is our commitment with the best deliverables.

### Innovation

We develop and apply world-class technology. We listen, learn, and seek out the best ideas. We attack complacency and continually improve. Our LMS platform, our Web and Mobile App is best-in-class and used to store and deliver quality content.

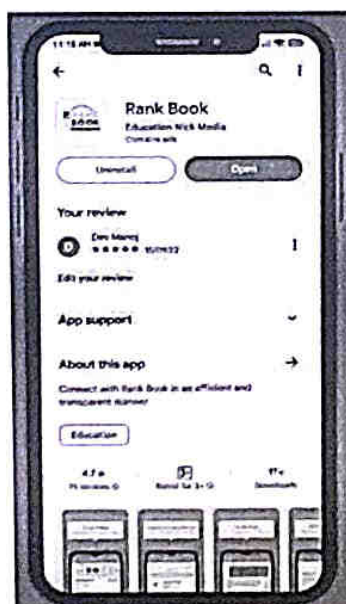
## WORKFLOW MODEL (END TO END)



## PRODUCTS / SERVICES PROFILE

### Overview

RankBook is a leading EdTech company dedicated to revolutionizing education through innovative technology solutions. Our mission is to empower learners, educators, and institutions worldwide by providing cutting-edge tools and resources to enhance the teaching and learning experience.





## SERVICES

1. **Learning Management System (LMS):** Our comprehensive Learning Management System offers a centralized platform for schools, universities, and corporate training programs to manage courses, deliver content, track progress, and facilitate communication between students and instructors.
2. **Interactive Courseware:** We develop engaging and interactive digital courseware across various subjects and grade levels. Our courseware integrates multimedia elements, simulations, and assessments to create immersive learning experiences that cater to diverse learning styles.
3. **Virtual Classroom Solutions:** RankBook offers virtual classroom solutions that enable real-time collaboration and interaction between teachers and students, regardless of geographical barriers. Our platform supports live video conferencing, chat functionalities, screen sharing, and whiteboarding tools for interactive lessons.
4. **Adaptive Learning Technologies:** Leveraging the power of our LMS and Test Platform, our adaptive learning technologies personalize the learning journey for each student. Through data-driven insights and algorithms, we dynamically adjust course content and pacing to meet the unique needs and proficiency levels of individual learners.
5. **Assessment and Analytics:** Our assessment tools provide educators with powerful insights into student performance and comprehension. From formative assessments to summative evaluations, RankBook offers customizable assessment options along with detailed analytics to track progress, identify areas for improvement, and inform instructional decisions.
6. **Professional Development Resources:** We offer professional development resources and training modules for educators to enhance their teaching practices and leverage technology effectively in the classroom. Our workshops, webinars, and certification programs cover topics such as digital pedagogy, instructional design, and educational technology integration.
7. **Parental Engagement Platform:** RankBook recognizes the importance of parental involvement in supporting student learning. Our parental engagement platform facilitates communication between parents and teachers, provides access to student progress reports, and offers resources for at-home reinforcement of learning concepts.

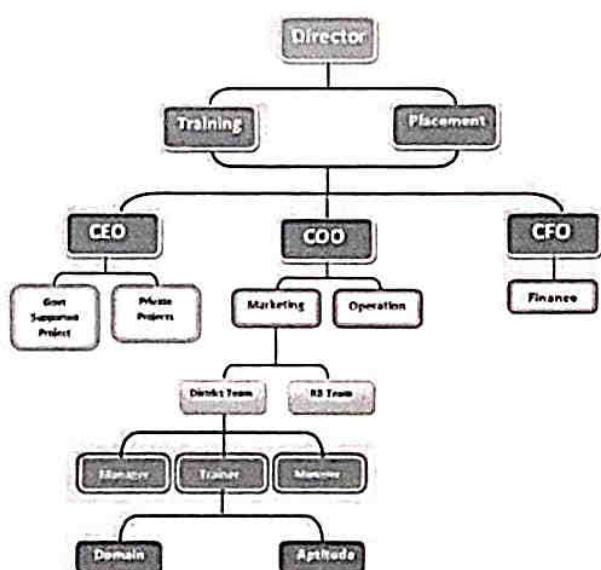
## KEY FEATURES

- User-friendly interfaces for seamless navigation and usability.
- Customization options to tailor solutions to the specific needs of educational institutions.
- Mobile compatibility for anytime, anywhere access to learning resources.
- Robust security measures to safeguard sensitive data and ensure user privacy.
- Ongoing customer support and professional development opportunities for users.

## CLIENTELE

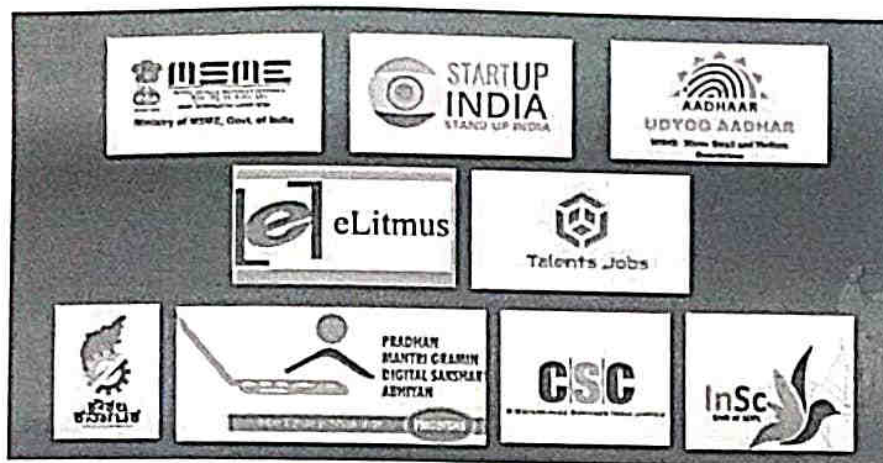
- K-12 schools
- Higher education institutions
- Corporate training programs
- Government agencies
- Non-profit organization

## ORGANIZATION STRUCTURE



## ACHIEVEMENT/AWARDS

RankBook has been receiving accolades and partnerships from clientele and corporations.



## FUTURE GROWTH AND PROSPECTS

The future growth and prospects of a Rankbook as a SkillTech company is quite promising, given the increasing demand for upskilling and reskilling in today's rapidly evolving job market. Here are some factors that contribute to the potential growth and prospects of a SkillTech company:

1. **Rising Demand for Skills:** With the advent of automation, AI, and other technological advancements, the skills required in the workforce are constantly evolving. SkillTech companies can capitalize on this by providing relevant and up-to-date training programs to individuals and businesses seeking to acquire new skills or upgrade existing ones.
2. **Lifelong Learning Trend:** There's a growing recognition of the need for lifelong learning to stay competitive in the job market. SkillTech companies can cater to this trend by offering flexible and accessible learning solutions that allow individuals to acquire new skills at their own pace and convenience.
3. **Corporate Training Market:** Businesses are increasingly investing in employee training and development to enhance productivity, innovation, and employee retention. SkillTech companies can tap into this market by offering customized training solutions tailored to the specific needs of organizations across various industries.
4. **Remote Work and Online Learning:** The shift towards remote work and online learning, accelerated by the COVID-19 pandemic, has created a significant opportunity for SkillTech companies. These companies can leverage technology to



deliver high-quality training and education remotely, reaching a global audience without the constraints of physical location.

5. **Technology Integration:** SkillTech companies can differentiate themselves by leveraging emerging technologies such as artificial intelligence, augmented reality, and virtual reality to create immersive and interactive learning experiences. These technologies can enhance engagement, retention, and the effectiveness of training programs.
6. **Partnerships and Collaborations:** Collaborating with educational institutions, corporations, and industry partners can help SkillTech companies expand their reach, access new markets, and stay abreast of industry trends and demands.
7. **Continuous Innovation:** In a fast-paced and dynamic industry, continuous innovation is crucial for staying ahead of the competition. SkillTech companies that invest in research and development to develop cutting-edge learning solutions and adapt to evolving market needs are likely to experience sustained growth.

Overall, the future prospects for a RankBook as a SkillTech company appear promising, driven by the increasing demand for skills development in the workforce, the growing importance of lifelong learning, and the opportunities presented by technological advancements and changing work dynamics.

## 3 WEEKLY OVERVIEW OF INTERNSHIP ACTIVITIES

1 <sup>st</sup> WEEK	DATE	NAME OF THE TOPIC/MODULE COMPLETED
	11-03-24	Introduction to Python syntax and variables.
	11-03-24	Introduction to Python Data types and Operators.
	12-03-24	Python Conditions and If statements, While and For Loops.
	12-03-24	Data structures: Lists, Tuples.
	13-03-24	Data structures: Set, Dictionary.
	13-03-24	Basic Programs in Python.

2 <sup>nd</sup> WEEK	DATE	NAME OF THE TOPIC/MODULE COMPLETED
	25-03-24	Python Functions, Modules, Scope.
	26-03-24	Python Math, Dates, Json, PIP.
	26-03-24	Python User Input and File Handling.
	27-03-24	Introduction to NumPy, Random and ufunctions.
	01-04-24	Introduction to Pandas and Seaborn.
	02-04-24	Python Matplotlib library.

3rd WEEK	DATE	NAMEOFTHETOPIC/MODULE COMPLETED
	08-04-24	Introduction to Data Analysis and Quiz.
	15-04-24	Mini Project on Data Analysis.
	16-04-24	Introduction to Tkinter.
	17-04-24	Explanation on Tkinter widgets and Images.
	22-04-24	Tkinter Advance.
	23-04-24	Application on Tkinter (Mini projects): Building Simple GUI Calculator. A GUI to shut down, Restart, and Logout from PC.

4th WEEK	DATE	NAMEOFTHETOPIC/MODULE COMPLETED
	24-04-24	Image Encryption and Decryption using Tkinter.
	24-04-24	Introduction to Flask.
		Mini Project on Flask.



## 4 MINI – PROJECT

During their tenure at RankBook Learning and Software Solutions Pvt. Ltd, interns were immersed in a multifaceted learning experience that extended beyond the confines of their primary projects. Recognizing the importance of practical application and continuous skill enhancement, interns were encouraged to undertake additional modules and mini projects to broaden their horizons in software development.

Engaging in mini projects is a fantastic way to solidify your Python knowledge. These projects act as practical exercises that take you beyond memorization and into real-world application. By working on mini projects, you'll learn by doing experiment with libraries and functions, and gain valuable experience troubleshooting errors. Completing these projects also provides a confidence boost and a portfolio piece to showcase your skills. The beauty of mini-projects is their accessibility - they're smaller, less time-consuming, and perfect for beginners. You can find or create projects that match your current skill level and gradually increase the complexity as you progress, making Python learning enjoyable and rewarding.

One significant endeavor undertaken by interns was the Data Analysis and Building GUI Application. The mini-project provides valuable insights into user listening habits, popular genres, and artist trends based on Spotify data analysis. It demonstrates the potential of data-driven approaches to understand music consumption patterns and inform personalized recommendations.

Tkinter provides a powerful and beginner-friendly way to build graphical user interfaces (GUIs) for Python applications. With just a few lines of code, you can create a window, add interactive elements like buttons and text boxes, and arrange them to suit your application's needs. Tkinter uses layout managers to position the elements, and you can define functions to handle user interactions with the GUI elements. This makes Tkinter a great tool for prototyping GUIs or building simple user-friendly applications. Building a calculator GUI application with Tkinter lets you create a user-friendly interface for performing calculations.

## 4.1 Spotify Data Analysis using NumPy, Pandas and Matplotlib

During my internship at RankBook Learning and Software Solutions Pvt. Ltd, I had the opportunity to work on various projects aimed at enhancing my skills in python. One of the notable projects I undertook was the Data Analysis using various python Libraries. This project provided me with valuable hands-on experience in analyzing data and to know more about libraries in python.

### 4.1.2 Project Overview:

Analyzing Spotify data offers a wealth of insights into music consumption patterns, user preferences, and industry trends. By delving into user behavior, analysts can uncover peak listening times, favored genres, and popular playlists, informing strategies for both artists and advertisers. Moreover, tracking streaming numbers enables artists to gauge their audience's engagement, identify which songs resonate most, and refine their marketing efforts accordingly.

### 4.1.3 Objective:

The objective of analyzing the Spotify dataset is to examine the data thoroughly and give the best driven outputs. Below are the following objectives which are aimed to achieve:

- The objective for data analytics is to derive meaningful and actionable insights that can be used to enhance various aspects of the Spotify platform.
- To augment the user experience.
- To escalate the business operations.

### 4.1.4 Tools and Libraries Used:

**Jupyter Notebook:** Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations, and narrative text.

Why Jupyter Notebook?

1. **Interactive Computing:** Jupyter Notebook allows for an interactive computing environment where you can run code cells one at a time.



2. **Narrative and Documentation:** It supports Markdown cells, enabling you to add narrative text, explanations, equations, and documentation alongside your code.
3. **Visualization:** Jupyter Notebook integrates seamlessly with data visualization libraries like Matplotlib, Seaborn, and Pyplot, making it easy to create and display charts, graphs, and other visualizations within the notebook.
4. **Multi-Language Support:** While it's widely used for Python, Jupyter Notebook also supports other programming languages like R and Julia.
5. **Data Exploration:** You can load datasets, manipulate data, and visualize results in real time, allowing for a deep understanding of your data.

**NumPy:** NumPy is a fundamental library for scientific computing in Python. You can use NumPy to perform numerical computations and manipulate arrays efficiently. In Spotify data analysis, NumPy can be used for tasks like data manipulation, mathematical operations, and array-based computations.

**Pandas:** Pandas is a powerful library for data manipulation and analysis. It provides data structures like Data Frame and Series, which are well-suited for handling structured data. In Spotify data analysis, you can use Pandas to load Spotify datasets, clean and preprocess the data, perform exploratory data analysis, and manipulate datasets for further analysis.

**Matplotlib:** Matplotlib is a popular plotting library in Python. It provides a wide range of functionalities for creating static, interactive, and publication-quality plots. In Spotify data analysis, you can use Matplotlib to visualize various aspects of the data, such as distribution of streaming counts, time series of listening habits, and geographic patterns of music preferences.

**Seaborn:** Seaborn is a statistical data visualization library built on top of Matplotlib. It provides a high-level interface for creating attractive and informative statistical graphics. In Spotify data analysis, you can use Seaborn to create more complex and visually appealing plots, such as heatmaps, pair plots, and categorical plots, to gain deeper insights into the data.



### 4.1.5 Execution steps and Result analysis

#### 1. Collecting Data sets:

You can collect the datasets from open sources. Here we collected datasets from Kaggle website.  
<https://www.kaggle.com/datasets/geomack/spotifyclassification>

#### 2. Importing Libraries:

We've imported four libraries for analyzing the dataset i.e., NumPy, Pandas, Matplotlib and Seaborn. NumPy used for numerical computations. Pandas are used for manipulation of data. And, finally Seaborn & Matplotlib used for visualization purpose.

```
#Importing necessary Libraries for Data Manipulation & Visualization  
  
import numpy as np  
import pandas as pd  
import seaborn as sns  
import matplotlib.pyplot as plt
```

#### 3. Loading Data Set:

We've used read\_csv() function from Pandas library to load the dataset into the program. Loading the data is an important step before starting the analysis, dataset is the source of this exploratory data analysis.

```
#Loading datasets for analysis of Tracks  
  
df_tracks = pd.read_csv('features.csv', encoding='cp1252')  
df_tracks.head()
```

## RANKBOOK LEARNING

Output:

	genre	artist_name	track_name	track_id	popularity	acousticness	danceability	duration_ms	energy	instrumentalness	key	liveness
0	Movie	Henri Salvador	C'est beau de faire un Show	68Rj06ga6RKDXIDqefgWV	0	0.611	0.389	99373	0.910	0.000	C#	0.3450
1	Movie	Martin & les Flees	Fendu d'avance (par God Emaleh)	08jC1Nt5E00u9yehmNudP	1	0.246	0.590	137373	0.737	0.000	F#	0.1510
2	Movie	Joseph Williams	Don't Let Me Be Lonely Tonight	0CcSDzoNKCAs124tsuTVy	3	0.952	0.663	170257	0.131	0.000	C	0.1030
3	Movie	Henri Salvador	Dis-moi Monsieur Gordon Cooper	0Gc5TVm52BwZD07KGdW	0	0.703	0.243	152427	0.325	0.000	C#	0.0985
4	Movie	Fabien Natal	Ouverture	0hsDpLR0HKEPVS1ITQK	4	0.950	0.331	82925	0.225	0.123	F	0.2020

### 4. Analyzing the Dataset:

We've used info() function to know the datatype, no. of columns memory usage of dataset in the program.

```
#viewing no. of rows & columns and also checking whether they are null or not
df_tracks.info()
```

Output:

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 232725 entries, 0 to 232724
Data columns (total 18 columns):
 #   Column                Non-Null Count  Dtype
---  ---
 0   genre                 232725 non-null object
 1   artist_name          232725 non-null object
 2   track_name           232725 non-null object
 3   track_id             232725 non-null object
 4   popularity            232725 non-null int64
 5   acousticness         232725 non-null float64
 6   danceability         232725 non-null float64
 7   duration_ms          232725 non-null int64
 8   energy               232725 non-null float64
 9   instrumentalness     232725 non-null float64
10   key                  232725 non-null object
11   liveness             232725 non-null float64
12   loudness             232725 non-null float64
13   mode                232725 non-null object
14   speechiness         232725 non-null float64
15   tempo               232725 non-null float64
16   time_signature       232725 non-null object
17   valence              232725 non-null float64
dtypes: float64(9), int64(2), object(7)
memory usage: 32.0+ MB
```



## 5.Sorting According to the Metrics:

We've used sort values () function, in which we pass the parameter popularity and ascending = True, so that sorting would be done in ascending order.

*#Sorting: Least Popular Songs on Spotify*

```
sorted_df = df_tracks.sort_values('popularity', ascending = True).head(10)
sorted_df
```

Output:

	genre	artist_name	track_name	track_id	popularity	acousticness	danceability	duration_ms	energy	instrumentalness	key	id
0	Movie	Henn Salvador	C'est beau de faire un Show	0BRj0Gja9RKCKjDaeFgWV	0	0.6110	0.389	99373	0.9100	0.000000	C#	0
74954	Children's Music	Sing n Play	See, See My Playmate	3WaCwmpGoxLEkFmd5cpZOS	0	0.1390	0.550	150487	0.4390	0.006400	D	0
74955	Children's Music	Children Songs Company	By the God - Instrumental	5yDeh9ccZc3vB08hZXFck	0	0.2130	0.736	212547	0.4490	0.821000	D	0
74959	Children's Music	Children Songs Company	Interruption Please - Instrumental	6NEULw7AmTDAYRunFWcfv	0	0.0131	0.639	194000	0.8440	0.095700	A#	0
74961	Children's Music	Children Songs Company	Breeze	6v12SeNn1A79yFIKQAvqLz	0	0.0280	0.607	147653	0.5540	0.000000	A	0
74962	Children's Music	Children Songs Company	Woodland	7qR2PWbDeuhh1Vzd0anb2S	0	0.9950	0.529	296067	0.1540	0.414000	B	0
74963	Children's Music	Children Songs Company	Cool Me - Instrumental	0V3G9RYUaLKTJvg4KCST	0	0.2500	0.623	350090	0.4710	0.931000	A#	0
74964	Children's Music	Sing n Play	The Tortoise and the Hare	0eX193rfsy87RipzZnHBPq	0	0.4990	0.563	201362	0.3490	0.000000	D	0
55153	Movie	Bruno Pelletier	Lié par le sang	3GOSWo14Fv4XvOKE4Lrtg	0	0.0294	0.656	276027	0.6940	0.000017	A	0
74966	Children's Music	Children Songs Company	Forsaken	1rRNUG7xipmUkEXOxy8k	0	0.9940	0.429	129387	0.0382	0.000000	B	0

## 6. Applying Descriptive Statistics:

We've used describe () function to get the descriptive statistics of the data that is present in dataset. It returns values like Mean, Standard Deviation, Minimum, Maximum etc.

*#Applying descriptive statistics on dataset*

```
df_tracks.describe().transpose()
```



Output:

	count	mean	std	min	25%	50%	75%	max
popularity	232725.0	41.127502	18.189348	0.00000	29.00000	43.000000	55.00000	100.000
acousticness	232725.0	0.368550	0.354768	0.00000	0.0376	0.232000	0.7220	0.999
danceability	232725.0	0.554364	0.185608	0.05690	0.4350	0.571000	0.6920	0.989
duration_ms	232725.0	235122.339306	118935.909299	15387.00000	182857.00000	220427.000000	265768.00000	5552917.000
energy	232725.0	0.570958	0.263456	0.00002	0.3850	0.605000	0.7870	0.999
instrumentalness	232725.0	0.148301	0.302768	0.00000	0.0000	0.000044	0.0358	0.999
liveness	232725.0	0.215009	0.198273	0.00967	0.0974	0.128000	0.2640	1.000
loudness	232725.0	-9.569885	5.998204	-52.45700	-11.7710	-7.782000	-5.5010	3.744
speechiness	232725.0	0.120785	0.185518	0.02220	0.0367	0.050100	0.1050	0.957
tempo	232725.0	117.666585	30.898907	30.37900	92.9590	115.778000	139.0540	242.903
valence	232725.0	0.454917	0.260065	0.00000	0.2370	0.444000	0.6800	1.000

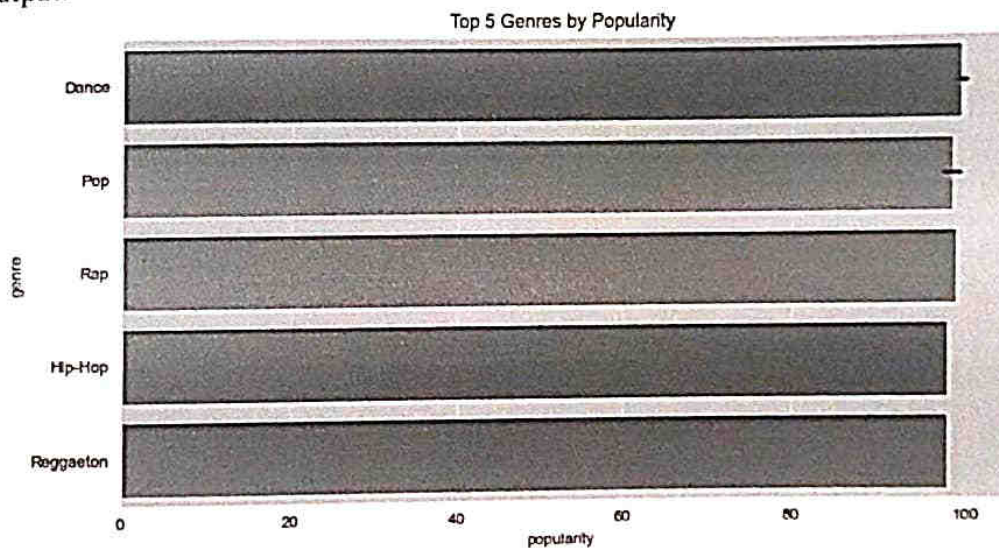
## 7. Bar Plot:

We've used `barplot()` function from the Seaborn library to visualize the correlation between Genres & Popularity parameter of the dataset.

*# Plotting: Bar Plot between Popularity & Genres (out of Top 10 in Dataset)*

```
sns.set_style(style="darkgrid")
plt.figure(figsize=(10,5))
famous = df_genre.sort_values("popularity", ascending=False).head(10)
sns.barplot(y="genre", x="popularity", data=famous).set(title="Top 5 Genres by Popularity")
```

Output:



## 4.2 Building Simple GUI Calculator using Tkinter

Python offers multiple options for developing a GUI (Graphical User Interface). Out of all the GUI methods, Tkinter is the most used method. It is a standard Python interface to the Tk GUI toolkit shipped with Python. Python with Tkinter outputs the fastest and easiest way to create GUI applications. Creating a GUI using Tkinter is an easy task.

To create a Tkinter:

Importing the module – tkinter

Create the main window (container)

Add any number of widgets to the main window.

Apply the event Trigger on the widgets.

### 4.2.1 Code snippet:

```

1 # Python program to create a simple GUI
2 # calculator using Tkinter
3
4 # Import everything from Tkinter module
5 from tkinter import *
6
7 # globally declare the expression variable
8 expression = ""
9
10
11 # Function to update expression
12 # in the text entry box
13 def press(num):
14     # point out the global expression variable
15     global expression
16
17     # concatenation of string
18     expression = expression + str(num)
19
20
21     # update the expression by using set method
22     equation.set(expression)
23
24
25 # function to evaluate the final expression
26 def equalpress():
27     # try and except statement is used
28     # for handling the errors like zero
29     # division error etc.
30
31     # Put that code inside the try block
32     # which may generate the error
33     try:
34         global expression
35
36         # eval function evaluate the expression
37         # and str function convert the result
38         # into string
39         total = str(eval(expression))
40
41         equation.set(total)
42
43     # initialize the expression variable
44     # by empty string
45     expression = ""
46
47     # if error is generate then handle
48     # by the except block

```

```

47 # if error is generate then handle
48 # by the except block
49 except:
50
51     equation.set(" error ")
52     expression = ""
53
54 # function to clear the contents
55 # of text entry box
56 def clear():
57     global expression
58     expression = ""
59     equation.set("")
60
61 # Define code
62 if __name__ == "__main__":
63     # create a GUI window
64     gui = Tk()
65
66     # set the background colour of GUI window
67     gui.configure(background="light green")
68
69     # set the title of GUI window
70     gui.title("Simple Calculator")
71
72     # set the configuration of GUI window
73     gui.geometry("270x150")
74
75     # StringVar() is the variable class
76     # we create an instance of this class
77     equation = StringVar()
78
79     # create the text entry box for
80     # showing the expression
81     expression_field = Entry(gui, textvariable=equation)
82
83     # grid method is used for placing
84     # the widget at respective positions
85     # in table like structure
86     expression_field.grid(columnspan=4, ipadx=70)
87
88     # create a Buttons and place at a particular
89     # location inside the root window
90     # when user press the button, the command or
91     # function affiliated to that button is executed

```

```

94 button1 = Button(gui, text=' 1 ', fg='black', bg='red',
95                  command=lambda: press(1), height=1, width=7)
96 button1.grid(row=2, column=0)
97
98 button2 = Button(gui, text=' 2 ', fg='black', bg='red',
99                  command=lambda: press(2), height=1, width=7)
100 button2.grid(row=2, column=1)
101
102 button3 = Button(gui, text=' 3 ', fg='black', bg='red',
103                  command=lambda: press(3), height=1, width=7)
104 button3.grid(row=2, column=2)
105
106 button4 = Button(gui, text=' 4 ', fg='black', bg='red',
107                  command=lambda: press(4), height=1, width=7)
108 button4.grid(row=3, column=0)
109
110 button5 = Button(gui, text=' 5 ', fg='black', bg='red',
111                  command=lambda: press(5), height=1, width=7)
112 button5.grid(row=3, column=1)
113
114 button6 = Button(gui, text=' 6 ', fg='black', bg='red',
115                  command=lambda: press(6), height=1, width=7)
116 button6.grid(row=3, column=2)
117
118 button7 = Button(gui, text=' 7 ', fg='black', bg='red',
119                  command=lambda: press(7), height=1, width=7)
120 button7.grid(row=4, column=0)
121
122 button8 = Button(gui, text=' 8 ', fg='black', bg='red',
123                  command=lambda: press(8), height=1, width=7)
124 button8.grid(row=4, column=1)
125
126 button9 = Button(gui, text=' 9 ', fg='black', bg='red',
127                  command=lambda: press(9), height=1, width=7)
128 button9.grid(row=4, column=2)
129
130 button0 = Button(gui, text=' 0 ', fg='black', bg='red',
131                  command=lambda: press(0), height=1, width=7)
132 button0.grid(row=5, column=0)
133
134 plus = Button(gui, text=' + ', fg='black', bg='red',
135               command=lambda: press("+"), height=1, width=7)
136 plus.grid(row=5, column=3)
137
138 minus = Button(gui, text=' - ', fg='black', bg='red',
139                command=lambda: press("-"), height=1, width=7)
140 minus.grid(row=5, column=3)

```



```

141 multiply = Button(gui, text='*', fg='black', bg='red',
142                  command=lambda: press("*"), height=1, width=7)
143 multiply.grid(row=2, column=3)
144
145 divide = Button(gui, text='/', fg='black', bg='red',
146                command=lambda: press("/"), height=1, width=7)
147 divide.grid(row=3, column=3)
148
149 equal = Button(gui, text='=', fg='black', bg='red',
150               command=lambda: press("="), height=1, width=7)
151 equal.grid(row=4, column=2)
152
153 clear = Button(gui, text='Clear', fg='black', bg='red',
154               command=clear, height=1, width=7)
155 clear.grid(row=5, column=1)
156
157 Decimal = Button(gui, text='.', fg='black', bg='red',
158                 command=lambda: press("."), height=1, width=7)
159 Decimal.grid(row=6, column=0)
160 # start the GUI
161 gui.mainloop()
162

```

Output:

