CHRIST
COLLEGE (AUTONOMOUS)
IRINJALAKUDA, KERALA

P.O. Irinjalakuda North, 680125

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http://christcollegeijk.edu.in

CRITERION	II	Teaching-Learning and Evaluation
KEY INDICATOR	2.3	**Teaching - Learning Process**
METRIC	2.3.1	**Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences:**

PG Department of Botany

Participative Learning Program

Short Bio of the Dept: The MSc Botany Programme was started in 2013 with "Environmental Biology and Biodiversity Conservation" and "Genetic Engineering" as special papers. The Department has also implemented the Choice-based Credit System for grading M.Sc., which offers flexibility in the structuring and assessment of courses. The Department has Tissue Culture and Biochemistry labs that are well equipped with latest instruments. The Department also maintains an enormous collection of museum and herbarium specimens that facilitate practical learning of the subject and a connection with the specimens of nature that student's study.

Participative Learning

1.Participation in International seminar

Program Objectives / Expected outcomes:

- To learn about new trends and techniques in research
- Students get a chance to interact with scientists

Program Report:

Third semester MSc. Botany Students attended an international seminar organised by Carmel College (autonomous) Mala, Thrissur Dist on 02-11-2023. The title of seminar was "evaluating the prospectus of biology. Students learned about new trends and techniques in Biological research.

Programme attained outcome:

- Students learned about new trends in biology
- Students got a chance to interact with scientists.

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CARMEL COLLEGE (AUTONOMOUS) MALA
Re-Accredited by NAAC with 'A' Grade (4th Cycle)
Thrissur Dt. Kerala-680732, www.carmelcollegemala.ac.in, 0488-2890247

PG & Research Department of Botany
Carmel College (Autonomous), Mala, Thrissur (Dt.), Kerala, India

International Seminar on "Evaluating the prospects of Biology"

This is to certify that Ms./~~Mr./Dr.~~ Meeval Alphonsa T Paulson has participated/~~presented~~ research paper on .....

at International seminar on 'Evaluating the prospects of Biology' organized by the PG & Research Department of Botany, Carmel College (Autonomous) Mala, Thrissur, Kerala, India on 2nd November 2023.

Dr. Sr. Kochuthresia K. P, Principal
Dr. Sinjumol Thomas, Co ordinator
Dr. Dhanya Thomas T. T., Co ordinator
Dr. Bindhu K.B, Head of the Department

2.Participation in National seminar

Program Objectives / Expected outcomes:

- To learn about new trends and techniques in research.
- Students get a chance to interact with scientists.

Program Report:

Second semester MSc. Botany Students attended a two day National seminar organised by MES Asmabi College, Kodungallur Thrissur Dist on 18-01-2024. The title of seminar was Biodiversity and climate change". Students learned about biodiversity on earth and how climate change affect the biodiversity.

Programme attained outcome:

- Students learned about biodiversity and climate change.
- Students got a chance to interact with scientists.

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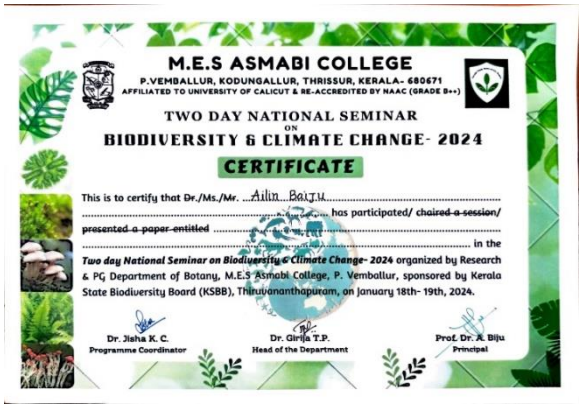
M.E.S ASMABI COLLEGE
P.VEMBALLUR, KODUNGALLUR, THRISSUR, KERALA- 680671
AFFILIATED TO UNIVERSITY OF CALICUT & RE-ACCREDITED BY NAAC (GRADE B++)

TWO DAY NATIONAL SEMINAR
ON
BIODIVERSITY & CLIMATE CHANGE- 2024

CERTIFICATE

This is to certify that Dr./Ms./Mr. Ailin Baiju has participated/ ~~chaired a session~~/ ~~presented a paper entitled~~ ..... in the *Two day National Seminar on Biodiversity & Climate Change- 2024* organized by Research & PG Department of Botany, M.E.S Asmabi College, P. Vemballur, sponsored by Kerala State Biodiversity Board (KSBB), Thiruvananthapuram, on January 18th- 19th, 2024.

Dr. Jisha K. C. Programme Coordinator
Dr. Girija T.P. Head of the Department
Prof. Dr. A. Biju Principal

3.Participation in observation skill programme; Psilotum hunt

Program Objectives / Expected outcomes:

- To enhance observation skill of students.
- To encourage the students to observe nature.

Program Report:

MSc. Botany Students attended the Programme. One student from each department won the competition. A Prize was handed over by our Coordinator, Prof. E .J Vincent.2023.

Programme attained outcome:

- Students Learned to observe nature
- Students got more information about plants.

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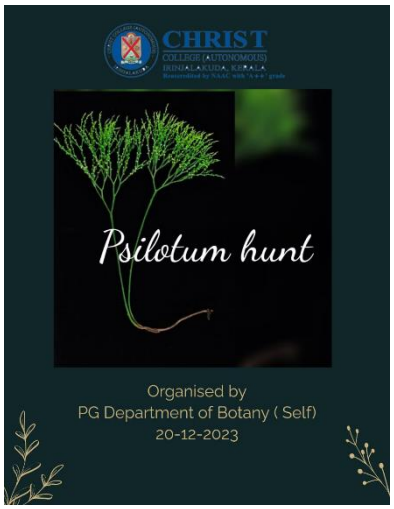

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Experiential Learning Program

1.Organizing and participating in regional talk and book launching ceremony

Program Objectives / Expected outcomes:

- To bring everyone together based on their interests and build relations.
- To create connections, expand skills, and explore different elements of university life while making lifelong friends.
- Developing organizing skill.
- Improving anchoring skill.
- Encourage group activities

Program Report:

Third MSc. Botany Students organized a regional talk and book launching Programme on 05-01-24. The title of the talk was “diversity and distribution of bat flowers”. Book launching ceremony of Prof.E.J Vincent et.al were also done.

Programme attained outcome:

- Students Learned about bat flowers and their distribution.

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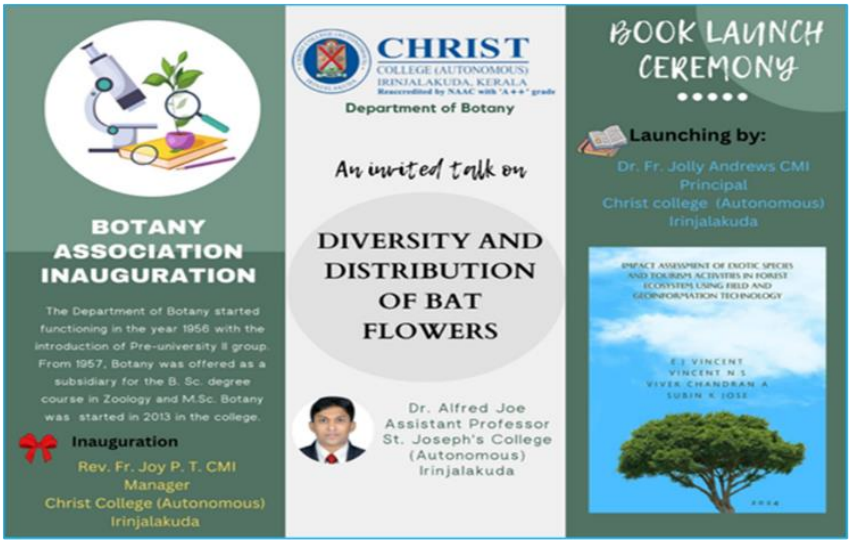

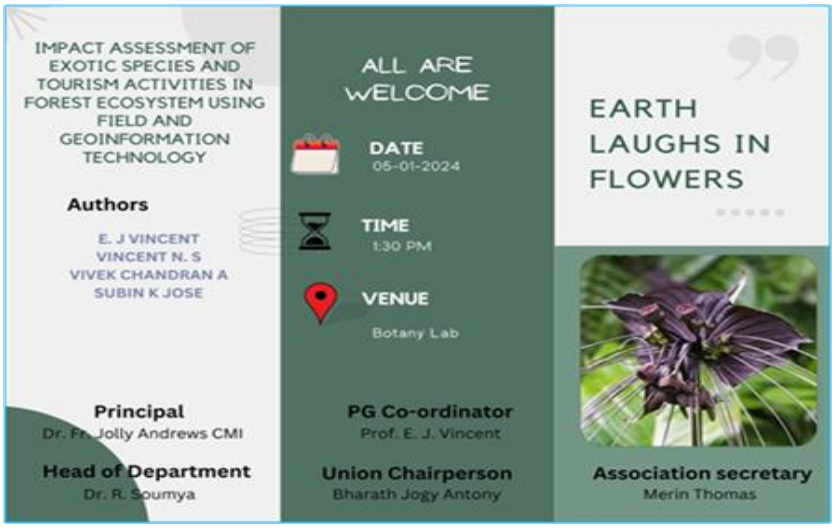

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2.Institutional Visits

Program Objectives / Expected outcomes:

- To learn about working environment, new technologies and lab instruments
- To interact with experts of various discipline.

Program Report:

Third MSc. Botany Students visited Kerala Agriculture University, Mannuthy on 23-06-23 with teachers. Students visited plant pathology lab, tissue culture lab, microbiology lab, plant breeding department and Horticulture department.

Programme attained outcome:

- Students learnt about various technologies and instruments in agricultural research
- Interacted with experts

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3.Algae collection trip

Program Objectives / Expected outcomes:

- To learn about habitat and features of marine algae

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- To learn about ecology and distribution of marine algae.
- To learn about algal herbarium preparation.

Program Report:

Second MSc. Botany Students visited Thikkodi beach, Kozhikode district on 06-03-24 for algae collection with teachers. Students collected various algal species and prepared algal herbarium.

Programme attained outcome:

- Students learnt about habit and morphological features of algae.
- Prepared algal herbarium.

Algal herbarium preparation

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4. Angiosperm Plant collection trips.

Program Objectives / Expected outcomes:

- To learn about habitat and features of Angiosperms
- To learn about ecology and distribution of Angiospems
- To teach students to visualize data they learn in class. Herbaria are essential for the study of plant taxonomy as well as they preserve a historical record of change in vegetation over time.

Program Report:

Third and Second MSc. Botany Students visited Peruvanmala near kacheri, Thrissur district on 16-6-23 and 7-11-23 and Munnar on 12-12-23 for plant collection. Students collected various plant species including endemic plants and prepared herbarium.

Programme attained outcome:

- Students learnt about habit and morphological features of plants
- Prepared plant herbarium.

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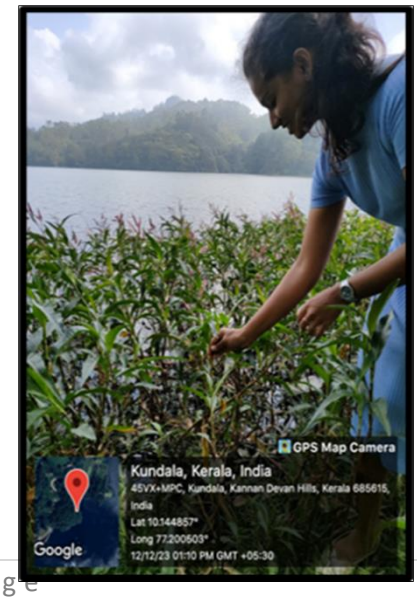
TAXONOMY COLLECTION TRIP - MUNNAR, IDUKKI



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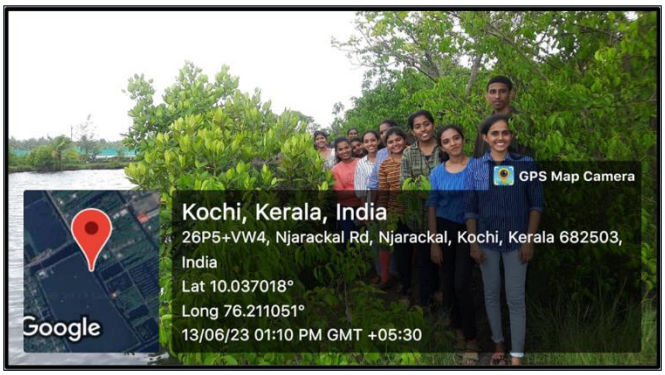
Visit to ecologically important area - Njarakkal



5.Internship

Program Objectives / Expected outcomes:

- Explore career alternatives
- Integrate theory and practice.
- Assess interests and abilities in their field of study.
- Develop communication, interpersonal and other critical thinking
- Build networks

Program Report:

Fourth MSc. Botany Students did their internship on various research institutes. Duration of the internship was 3 months.

Programme attained outcome:

- Students learnt about new technologies in biological research
  Interacted with scientists.

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Pharmacological Analysis: Sitaram Ayurveda (P) Limited. Nedupuzha. Thrissur, Kerala

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Pharmacological Analysis: Vaidyaratnam Oushadhasala, Thaikkattussery, Thrissur, Kerala.

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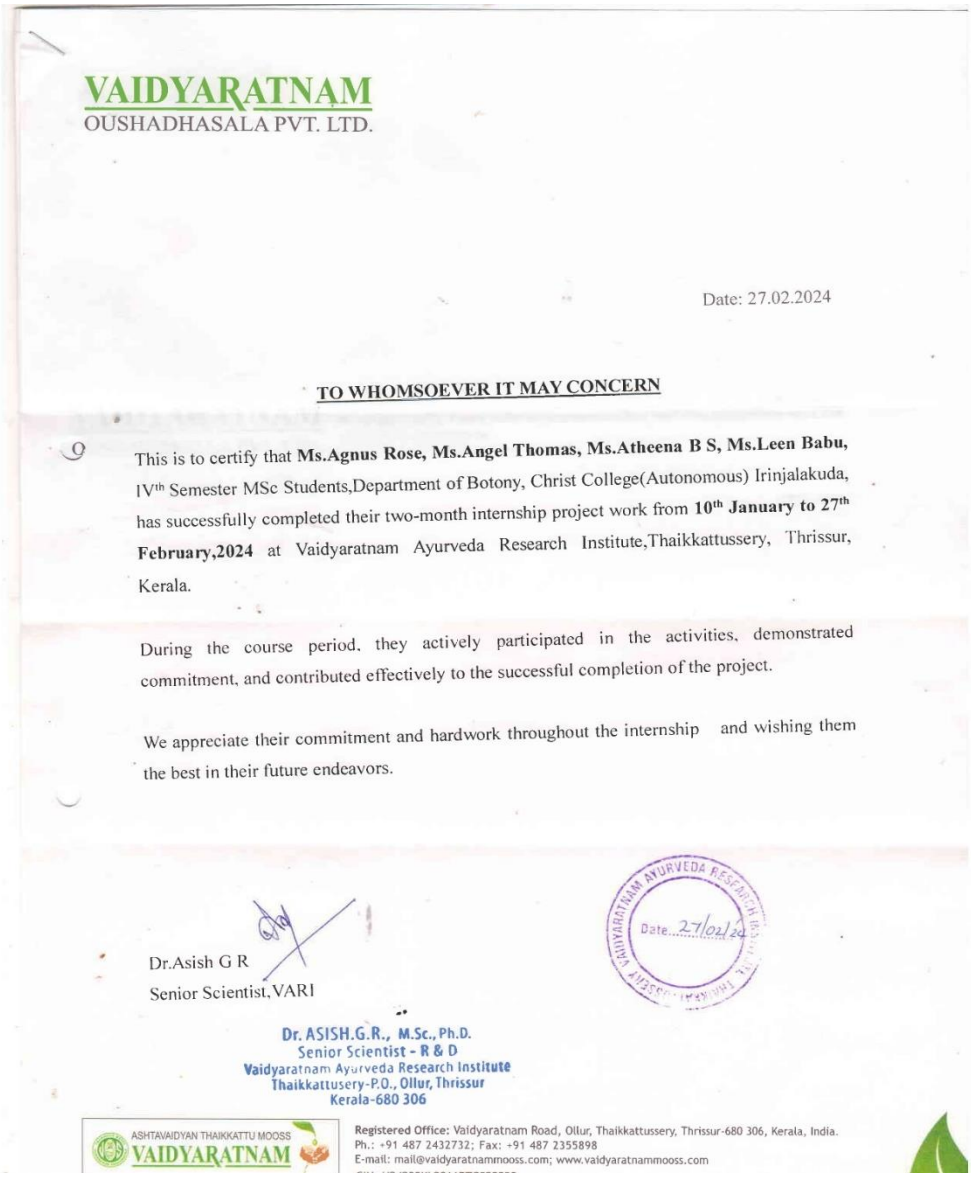

VAIDYARATNAM
OUSHADHASALA PVT. LTD.

Date: 27.02.2024

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms.Agnus Rose, Ms.Angel Thomas, Ms.Atheena B S, Ms.Leen Babu,** IV[th] Semester MSc Students,Department of Botony, Christ College(Autonomous) Irinjalakuda, has successfully completed their two-month internship project work from **10[th] January to 27[th] February,2024** at Vaidyaratnam Ayurveda Research Institute,Thaikkattussery, Thrissur, Kerala.

During the course period, they actively participated in the activities, demonstrated commitment, and contributed effectively to the successful completion of the project.

We appreciate their commitment and hardwork throughout the internship and wishing them the best in their future endeavors.

Dr.Asish G R
Senior Scientist,VARI

VAIDYARATNAM AYURVEDA RESEARCH INSTITUTE
Date 27/02/24

Dr. ASISH.G.R., M.Sc., Ph.D.
Senior Scientist - R & D
Vaidyaratnam Ayurveda Research Institute
Thaikkattusery-P.O., Ollur, Thrissur
Kerala-680 306

ASHTAVAIDYAN THAIKKATTU MOOSS
VAIDYARATNAM

Registered Office: Vaidyaratnam Road, Ollur, Thaikkattussery, Thrissur-680 306, Kerala, India.
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E-mail: mail@vaidyaratnammooss.com; www.vaidyaratnammooss.com

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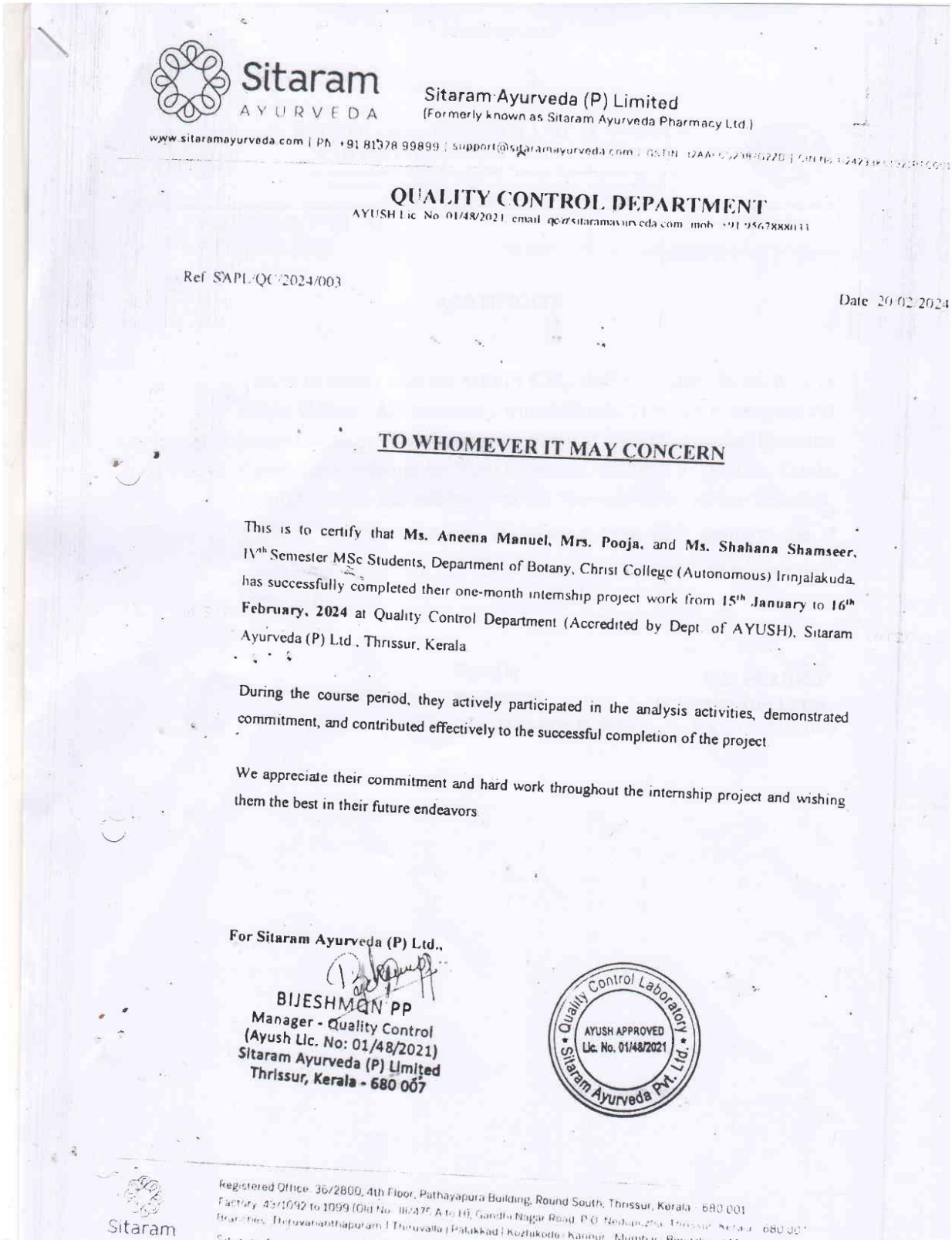

Sitaram
AYURVEDA

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(Formerly known as Sitaram Ayurveda Pharmacy Ltd.)

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QUALITY CONTROL DEPARTMENT
AYUSH Lic. No. 01/48/2021 email: qc@sitaramayurveda.com mob: +91 9567888033

Ref: SAPL/QC/2024/003

Date: 20/02/2024

TO WHOMEVER IT MAY CONCERN

This is to certify that **Ms. Aneena Manuel, Mrs. Pooja,** and **Ms. Shahana Shamseer,** IV[th] Semester MSc Students, Department of Botany, Christ College (Autonomous) Irinjalakuda, has successfully completed their one-month internship project work from **15[th] January** to **16[th] February, 2024** at Quality Control Department (Accredited by Dept. of AYUSH), Sitaram Ayurveda (P) Ltd., Thrissur, Kerala.

During the course period, they actively participated in the analysis activities, demonstrated commitment, and contributed effectively to the successful completion of the project.

We appreciate their commitment and hard work throughout the internship project and wishing them the best in their future endeavors.

For Sitaram Ayurveda (P) Ltd.,

BIJESHMON PP
Manager - Quality Control
(Ayush Lic. No: 01/48/2021)
Sitaram Ayurveda (P) Limited
Thrissur, Kerala - 680 007

Quality Control Laboratory
AYUSH APPROVED
Lic. No. 01/48/2021
Sitaram Ayurveda Pvt. Ltd.

Sitaram

Registered Office: 36/2800, 4th Floor, Pathayapura Building, Round South, Thrissur, Kerala - 680 001
Factory: 43/1092 to 1099 (Old No. 1[illegible]), A to H, Gandhi Nagar Road, P.O. Nedupuzha, Thrissur, Kerala - 680 30[illegible]
Branches: Thiruvananthapuram | Thiruvalla | Palakkad | Kozhikode | Kannur | Mumbai | Bangalore

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5.Certificate courses

Program Objectives / Expected outcomes:

- To understand different environmental analysis tools.
- To familiarize different analytical instruments.
- To get technical expertise in water analysis

Program Report:

With the objective of enhancing the all-round ability of students and raising their competence for the job market, the Department organizes Value-added courses for our Post graduate students. These courses are oriented towards developing graded skills and personalities beyond the regular curriculum of the Program.

Programme attained outcome:

- Students learnt about analytical instruments and expert in water analysis.

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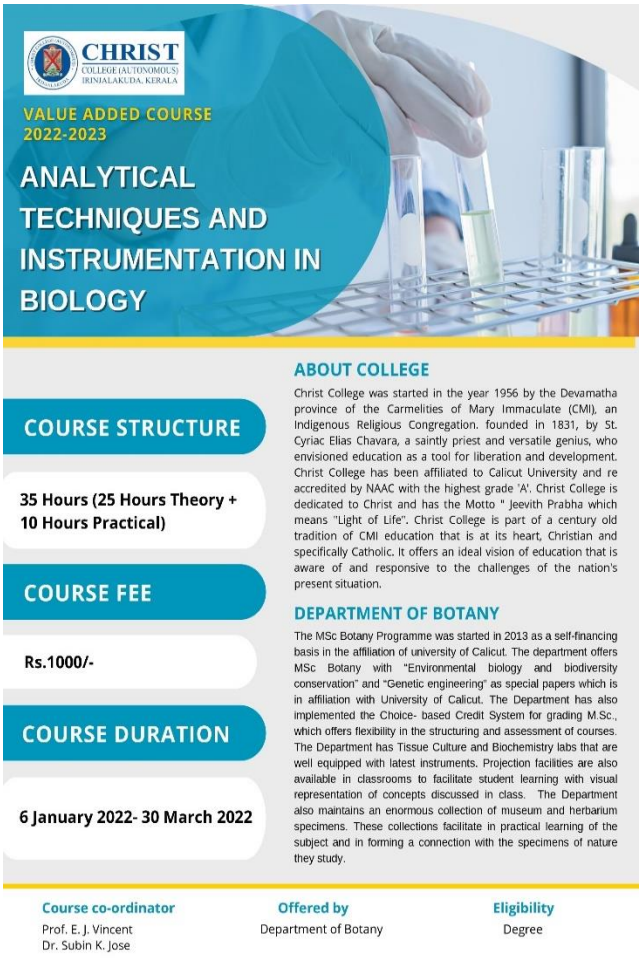

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IRINJALAKUDA, KERALA

CERTIFICATE OF COMPLETION

This to certify that Mr./Ms. MEBIN C.M has successfully completed the certificate course in Water quality Analysis and Analytical techniques, Jointly organized by Department of Botany and Department of Geology and Environmental Science , Christ College (Autonomous), Irinjalakuda.

COURSE COORDINATOR
Dr. SUBIN K JOSE

COURSE IN CHARGE
E.J VINCENT

PRINCIPAL
Dr. Fr. Jolly Andrews CMI

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COURSE COORDINATOR
Dr. SUBIN K JOSE

COURSE IN CHARGE
E.J VINCENT
17/11/23

PRINCIPAL
Dr. Fr. Jolly Andrews CMI

6.Exhibition to school students

Program Objectives / Expected outcomes:

- To enhance organization skill
- To develop communication skill
- To enhance knowledge in science field.

Program Report:

Second semester MSc. Botany students organized an exhibition to school students on 16-01-24. The students explained about scope of botany, lab specimens, lab instruments, mushroom

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cultivation, plant products, various types of plants and their ecology etc.

Programme attained outcome:

- Students learnt how to organise a programme and share knowledge.