

DEPARTMENT OF BIOTECHNOLOGY

Workshop-Vermicomposting

A workshop was conducted on 22nd November 2023, they trained students, teachers and gardeners the production of vermicompost. Dr. Latha ,Associate Professor Maharani Cluster University along with her assistant Mr.Ambreesh from Doddaballapur were the resource person who explained the process of vermicompost. The dried leaves from campus was collected and filled in the vermicompost tank which had 3 different layers cowdung slurry, earthworms and leaves, once the packing was done, the tank was covered with thin laminated to provide aeration , they were mixed and moisture content was increased by sprinkling water intermittently. The students learnt the principle of biodegradation of waste by the help of earthworms and converting them into vermicompost which is further used as manure for the plants and initial slurry-liquid part was collected from the tank and applied to the plants. These enhanced the growth of the plants.



Skill Development and Training

The Department of Biotechnology in collaboration with Azyme Biosciences Pvt. Ltd organized a two days Hands-on training and Skill development on “Molecular Techniques” on 5th – 6th January 2024. Students learnt the method involved in PCR technique, they learnt how to amplify DNA, were able to observe the enzyme reactions, they opted protocol prescribed by the organization for RNA extraction and understood basic techniques involved in molecular biology.



Description of techniques involved in molecular Biology



Polymerase Chain Reactio

Field Visit

A visit to Department of Horticulture Biocenter, Hulivamu on 16th Jan 2024 for mushroom cultivation and tissue culture training was organized, the Department explained the economic importance and maintenance of mushroom cultivation, different species of mushroom and students were trained for sterilization of hay/ straw mixed with calcium carbonate, which was packed in thick polythene bags in layers of straw, calcium carbonate and mushroom mycelium. They also learnt the spawn production (mother culture). The costliest mushroom is found in Himalayan region.





They also explained the production of Biofertilizer-Vesicular, Arbuscules Mycorrhiza VAM using the Azolla culture along with silica and sand particles and elaborated on storage of biofertilizers



Tanks for Biofertilizer Production



VAM-Vesicular, Arbuscular and Mycorrhiza

Soft Skill Enhancement Program

In collaboration with Mediomix Diagnosis and Bioresearch Pvt. Ltd organized “Soft Skill Enhancement Program” on Bioinformatics from 29th April to 3rd May 2024. Ms.Shilpa helped the students understand the concepts of bioinformatics. This program helped students to learn more about Databases: sequence and structural database, Sequence Analysis-Pair wise and multiple sequence alignment-FASTA, Scope and Applications of Bioinformatics. The students enhanced their ability to use bioinformatics tools and software for analyzing genomic, proteomic, and other biological data.



Industrial visit –Mahabalipuram and Pondicherry 19th-22nd June2024

A visit was organized by the Department of Botany, Biotechnology and Zoology for the students from the different combinations of B.Sc course. On 19th June 2024 we visited India Sea Shell Museum which compromises 700 species of sea shell. They explained a different morphological change which varies from one species to the other, live starfish of different colour was there, the students acquired the knowledge of animals belonging to the family of crustaceans and echinodermata.



Arjuna Caves-Mahabalipuram



Butter Ball- Mahabalipuram

Visit to Blue Bay -Pondicherry





Prawn-Pleopods

On 20th June 2024 we visited Crocodile vPark





On 21st June we visited Paper factory- The process of handmade papers was clearly explained , recycling of T-shirt material was used for making papers.





MATRI MANDIR- Auroville



On 22nd we visited Pichavaram Mangrove Forest



Outreach Programme

18th December 2023- Along with 20 students and faculty of Botany, Chemistry, Biotechnology and Zoology visited Zion Home.

Mentoring Activities:Ms.Anitha Betaiah and Dr. Sharmila Wesley

Mentoring students of I B.sc (Biotechnology, Chemistry, Computer Science Nutrition, HomeScience, and Zoology). Few are irregular to class due to various reasons like physical health, emotional challenges, family issues and poor financial condition, they struggle with anxiety issues, they undergo depression and panic attack. Such students are counseled by class teachers on regular basis. Teachers consistently support and motivate students to perform better in their academics and teach them to handle their real life situations.

Dr.Sharmila Wesley and Dr.Susanna.P

Seminars/ Conferences Attended

- A National Seminar/Webinar for three days TRI HEI NEP 2K20 on “Transformational reforms in Higher Education of India through NEP 2020, RJS First Grade College on November 2023-9th-11th.
- Workshop -Faculty Development Program. TROP ICSU: Trans-disciplinary Research Oriented Pedagogy for Improving Climate
Topic:CLIMATE CHANGE IN YOUR CLASSROOM: A WORKSHOP FOR TEACHERS OF ALL DISCIPLINES
On May 2-3rd 2024 National Centre for Biological Sciences (NCBS). This helped us to adopt latest teaching strategies, methodologies and technological tools which aimed at giving enriched and quality education to the students. It helped to foster continuous growth and excellence among educators.

Dr.Sharmila Wesley

- A workshop on March 16th 2024 –Understanding Adolescence- Guiding Teens through Digital Dependence, Dealing with the roots of teenage Rebellion and Understanding Mood Swings, Healing our teens with Digital Spaces at The Ark Auditorium Father’s Nest-Santhosa Samsara.
- A workshop on Life Skills Workshop-Become an expert Life Skills Coach on June 3rd 2023
- Pre-Martial Counselling Workshop attended on 24th and 25th October 2023

- National Christian Counselors Conclave seminar attended on -26th and 27th October 2023
- Science, Sense & Sensibility - Session 1 Future of Agriculture and Beyond Tue, 23 Jan 2024 08:00 - 09:30
- A Webinar topic " Pastors Mental Health and Church : bridging the gap". 7th December from Time 4:30-6:30pm
- A Webinar -Dr. Paula Davis on Feb 1st, 2024 at 4:30- 6:30pm
Topic: Webinar Series #4 - Treating Community Trauma by Mr Robert Silva ACC, SriLanka

Memberships:

Dr.Sharmila Wesley

Member –Board of Studies- NEP Policy –Bengaluru City University, Framing and scrutinizing the syllabus for B.Sc

Autonomous College- BMS College, Maharani Clustered University, Garden City College, Indian Academy of Sciences

Member-Board of Examiners- Autonomous College- BMS College, Maharani Clustered University, Garden City College, Indian Academy of Sciences, Reva University, Christ Deemed University, Kristu Jayanthi College

Dr.Susanna.P

Member –Board of Studies- Autonomous College- BMS College, Maharani Clustered University,

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