

**Activity: World Environment Day Celebration** 

Date: June 5, 2024

Venue: Potter's Hill

### **Objectives**

- To raise awareness about the conservation of environment, biodiversity loss and environmental pollution.
- To foster global cooperation on environmental protection and share knowledge.
- To highlight the importance of sustainable practices and encouraging the adoption of green technologies.
- To provide a platform for interacting with experts in the field.

### **Description**

To celebrate World Environment Day, students of Department of Botany participated in an inter-college quiz, skit and painting competition based on the theme 'Land restoration, desertification and drought resilience'. The event was organized by Himalayan Forest Research Institute, Panthaghati. This initiative aimed to create a global movement towards a healthier and more sustainable environment. Notable writer and historian Raja Bhasin delivered a talk highlighting the importance of sustainable environmental practices in Shimla town. The occasion was graced by renowned public figures like Dr. Sandeep Sharma, (Director In-charge), Dr. Vaneet Jishtu, (Scientist), HFRI, Mr. Shahnawaj Ahmad Bhat (DFO, Shimla) and Mr. Gur Harsh (IFS, Shimla). Students also interacted with senior scientists and other dignitaries from esteemed organizations. Teams from various local colleges participated in diverse competitions, based on issues related to environmental and biodiversity conservation. St. Bede's secured second prize in the Intercollege Skit Competition, third prize in the Quiz Competition and a consolation prize in the Painting Competition. These achievements highlighted the students' knowledge and commitment to environmental issues, as well as their creative and collaborative spirit.

#### Outcomes



The event raised awareness about environmental issues among the students. They became more informed about topics such as climate change, biodiversity loss, pollution, and sustainable living. This fosters a sense of community and collective responsibility for the environment. The outcomes were successful, as evidenced by the students' commendable performances and the enriching experiences gained through interactions and competitions.



**Invitation Letter** 

















World Environment Day Celebration

Activity: 'Wetlands for LIFE' Film Festival and Forum

Venue: Hotel Peterhoff, Shimla

**Date**: August 30, 2024

**Objective:** 



- 1. To acquaint the students about the ecological importance of wetlands and their roles in biodiversity support and climate regulation.
- 2. **To acquire knowledge about** the threats to wetlands, such as pollution, habitat loss, and climate change.
- 3. To promote the skills related to Environmental Filmmaking.

### **Description:**

The post-graduate students and faculty members of Department of Botany, St Bede's college attended the 'Wetlands for LIFE' Film Festival and Forum organized by Himachal Pradesh Council for Science, Technology and Environment (HIMCOSTE), Department of environment, science technology and climate change (DEST & CC), HP State Wetland Authority and Centre for Media Studies, New Delhi. The event highlighted the crucial role of wetlands in ecosystem with special focus on biodiversity conservation, human well-being and climate change mitigation.

The event was a part of the Indo-German technical cooperation project, 'Wetlands management for biodiversity and climate protection' initiated by Govt of India and German Development Cooperation (GIZ).

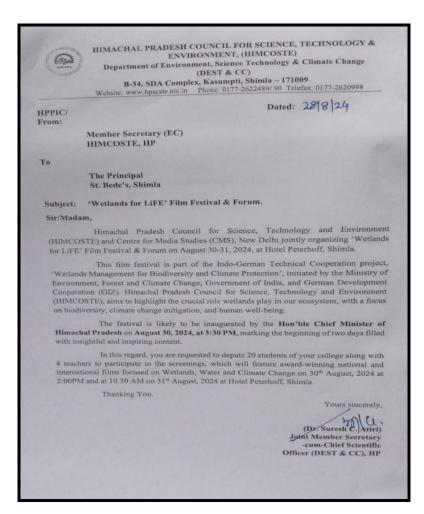
The event was inaugurated by Hon'ble Chief Minister, Himachal Pradesh, Shri Sukhvinder Singh Sukhu. Chief Minister laid emphasis on environmental protection and sustainable development. He encouraged the students to reduce dependence on fossil fuels and carbon emission. During the event, Dr. Ravi Chopra founder of Peoples Science Institute, Dehradun, Mr. Prabodh Saxsena, Chief Secretary and Prof. Somnath Bandyopadhyay of Nalanda University addressed the various challenges faced by wetlands and biodiversity from pollution and habitat destruction.

The event featured social impacts films like 'Guardians of Wetlands', 'Women as Stewards of Conservation' and 'Initiatives of Healing Himalayas'. There were panel discussions and interactive workshops related to wetland conservation and environmental filmmaking.

#### **Outcomes:**



- Awareness about various Ramsar sites and Wetlands of Himachal Pradesh and their conservation strategy.
- Inspired students about the community support efforts.
- Fostered collaboration between students, environmentalists, film-makers and policy -makers.



**Invitation Letter** 







'Wetlands for LIFE' Film Festival and Forum

Activity: Talk cum interactive session on career pathways in life sciences

Date: October 10, 2024

**Venue: Seminar Hall** 

### **Objectives:**

- To develop a broad understanding of career pathways in life sciences.
- To familiarize students with opportunities in botanical research, both in India and internationally.
- To provide insights into research facilities, internships, scholarships, and study programs abroad.

### **Description:**

The Department of Botany, St. Bede's College, organized an insightful Talk cum Interactive Session on Career Pathways in Life Sciences on October 10, 2024. The event featured Dr. Vijay Kumar, an expert in plant resilience research from Bielefeld University, Germany.



Dr. Kumar shared his extensive knowledge on plant resilience research and discussed his groundbreaking work in the field. He provided students with an in-depth overview of career opportunities in botanical research, both in India and internationally. He also introduced students to research facilities available in both countries, emphasizing the global potential for collaboration and growth in the field.

Furthermore, he discussed internship opportunities, scholarships, and study programs abroad, encouraging students to explore avenues for academic and professional development in life sciences. The session was highly engaging, leaving students inspired and equipped with valuable career insights.

#### **Outcomes:**

The session was both informative and inspiring, equipping students with the knowledge and tools necessary to navigate their future career paths in botanical research and life sciences. It was a valuable opportunity for students to gain insights into the academic and professional possibilities that await them in this dynamic and impactful field.







is Organizing a talk cum interactive session on career pathways in Life Sciences

Topic: Plant exposure to combined stresses:

Are we using existing molecular diversity for survival in nature?

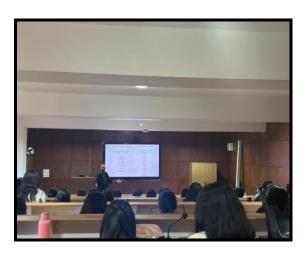


Date: October 10, 2024 Time: 10:30 am Venue: Seminar room

#### **Brochure**







Talk cum Interactive Session on Career Pathways in Life Sciences

Activity: Interactive Session for School Children on World Food Day

Date: October 16<sup>th</sup>, 2024

### **Objectives:**

- To spread awareness about World Food Day and its importance.
- To encourage children for the consumption of healthy food and to avoid junk food.

### **Description:**

To celebrate World Food Day, the Department of Botany, St. Bede's College organized an interactive session for the children of Govt. Primary School, Sanjauli. The activity was based on theme for World Food Day, 2024. *i.e.* "Right to Foods for a Better Life and a Better Future" and the topic was 'Rainbow of Food'. This topic emphasized on the crucial role healthy food and healthy habits for the betterment of human life.

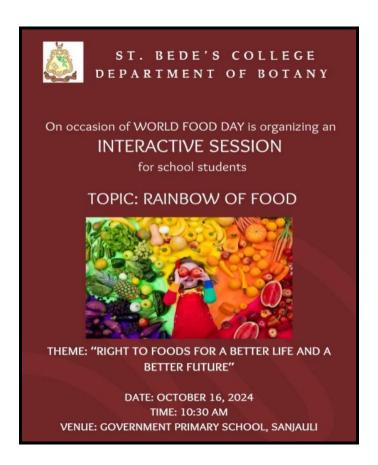
16 students from M.Sc. Botany 1<sup>st</sup> and 2<sup>nd</sup> Year have participated in the interactive session with the school children. The interaction started with pictorial demonstrations by the students. Some questions about the food habits have been asked and the appreciation gifts were also given to the children to motivate them. Students demonstrated "Healthy *vs.* Unhealthy food "which portrayed benefits of eating healthy and ill effects of eating unhealthy /junk food.



They also demonstrated 5 keys for safer food and about the role of balanced diet. The consequences of eating unhealthy food like pizza, burger, chips, momos and the importance of healthy food like fruits and vegetables in human life were also highlighted in the session. A total of 42 school children were benefited by the activity.

#### **Outcomes:**

Participants and the school children gained a deeper understanding about healthy and unhealthy eating habits. They became aware about consequences of consumption of unhealthy food.



Brochure









Interactive Session for School Children on World Food Day

Activity: Three-day training program on "Seed, Nursery and Plantation Techniques of Oak Species" for other stakeholders

Date: 23- 25<sup>th</sup> October, 2024

Venue: ICFRE-Himalayan Forest Research Institute (HFRI), Panthaghati, Shimla

### **Objectives:**

• To comprehend knowledge and skills to get an employment or to become an entrepreneur in plant nursery sector.



- To understand the importance of Oak species in Himalayan Ecosystem.
- To understand plant nursery and basic infrastructure to establish it.
- To explain the basic material, tools and techniques required for Oak nursery.
- To infuse entrepreneurial skills of commercialization of nursery production.

### **Description**

The 3-day training program on "Seed, Nursery and Plantation Techniques of Oak Species" for other stakeholders." was organized by ICFRE-Himalayan Forest Research Institute (HFRI), Shimla during 23-25, October 2024. The programme was funded by the MoEF & CC, New Delhi. The aim of this training programme was to develop skills in nursery management of Oak species. About 28 trainees from different colleges, gram panchayats and army soldiers of Himachal Pradesh participated in the training program. The program was inaugurated by Col. Mohan Singh Commandant 133-Eco Task Force, Shimla. Dr. Sandeep Sharma, Director, HFRI welcomed the guests and felicitated the chief guest. The Chief Guest addressed and motivated the trainees to take up the nursery business. Dr. P.S. Negi senior scientist, HFRI briefed about the significance of program and the 3 days training schedule. The vote of thanks was given by Dr. Swaran Lata Scientist, HFRI.

The training sessions included different aspects of Oak species *viz.*, distribution and uses of Oak, their diseases and ecofriendly management. The status of agroforestry in Himachal Pradesh was also discussed. The visits to field research station, Shilaru and Oak Forest, Kufri and Narkanda were arranged for the trainees. The hands-on training on different propagation techniques were also given to trainees.

On third day of training program various key topics like Nutritive value of Himalayan Oak, Plantation techniques, Insect pests and their control measures and Assessment of carbon stock of Shimla Forest Area were discussed. The hands-on training was given to students during laboratory visits. Students got the insight of high-tech instrumentation like atomic spectrophotometer, Nitogen estimation system, C H N S Analyser, PCR machines, Tissue micro-organiser, Sonicator, High pressure liquid chromatography, Muffle furnace, Seed



germinator, Vacuum packaging machine etc. Students also got an opportunity to interact with the scientific staff and other stakeholders. Thereafter detail discussions were held between participants and experts. All queries of participants were satisfied with expert opinion

Sh. Anil Joshi, Member Secretory, HP state pollution control board was the chief guest for the valedictory ceremony.

#### **Outcomes**

The training imparted basic knowledge and developed skills about the propagation of Oak species. It provided basic knowledge related to establishment of commercial plant tissue culture unit. It updated the skills of students about importance of nursery management practices for producing elite, disease free planting material by different propagation methods including tissue culture. The students got exposed to practical experience of several techniques in propagation of Oak species and also to commercial nurseries who multiply large number of plants and meet the demand of industry. The training program helped the students to enhance their class room learning.



**Brochure** 





Three-Day Training Program on "Seed, Nursery and Plantation Techniques of Oak Species" for Other Stakeholders



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Three-Day Training Program on "Seed, Nursery and Plantation Techniques of Oak Species" for Other Stakeholders









Activity: Educational Trip to Forest Research Institute, Dehradun

Date: 25th to 29th October, 2024

### **Objectives:**

- To bridge theoretical knowledge with real-world applications in botany and environmental science.
- To provide students with practical exposure to forestry and conservation techniques.
- To enhance understanding of plant diseases, sustainable forestry practices, and the socioeconomic role of forests.

### Description:

From October 25<sup>th</sup> to 29<sup>th</sup>, B.Sc. and M.Sc. Botany students of St. Bede's College embarked on an enriching educational trip to Uttarakhand. This experience not only deepened their



academic knowledge but also strengthened their bond as Bedeians and introduced them to Uttarakhand's cultural and natural beauty.

Students accompanied by their teachers visited the Forest Research Institute (FRI) in Dehradun. This visit was a significant learning opportunity, as FRI houses five specialized museums that provide valuable insights into forestry and conservation. Under the guidance of Dr. Preeti and Asst. Prof. Titiksha, students explored these museums, receiving detailed explanations that enhanced their understanding.

The Pathology Museum focused on plant diseases, where students learned how pathogens affect forest health. In the Silviculture Museum, they explored sustainable forestry practices and gained insights into forest management. The Social Forestry Museum highlighted the relationship between forests and rural communities, emphasizing the crucial role of forests in supporting local livelihoods. At the Timber Museum, students discovered various wood types and their preservation techniques, while the Non-Wood Forest Products Museum showcased sustainable uses of forest resources such as resins and tannins.

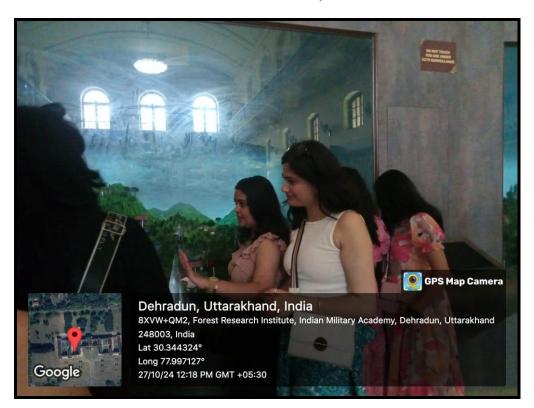
#### **Outcomes:**

- Students gained a deeper appreciation for the role of botany in ecological sustainability.
- They developed a better understanding of the interconnections between forests, conservation, and rural livelihoods.
- The trip reinforced classroom learning through hands-on experiences, fostering greater engagement with environmental studies.
- The trip successfully combined theoretical learning with practical exposure, reinforcing key academic concepts and fostering a deeper appreciation for forestry and ecological sustainability.





Forest Research Institute, Dehradun

























Activity: National Webinar on "Bioprospection of Ethnomedicinal Plants of India."

Date: November 9, 2024

### **Objectives:**

- To provide information about traditional uses of ethnomedicinal plants.
- To apply the acquainted information in modern contexts, particularly in pharmaceutical development.
- To ensure the preservation and utilization of indigenous knowledge about medicinal plants in sustainable manner.

### **Description:**

St. Bede's College, Department of Botany organized a National Webinar on "Bioprospection of Ethnomedicinal Plants of India" on November 9, 2024. The resource person for the



webinar was Prof. Nawal Kishore Dubey, an expert from Banaras Hindu University, Varanasi Uttar Pradesh, India. Prof. Dubey shared his extensive knowledge and insights with the students about ethnobotanical uses of several plants species. He also provided an overview of various diseases like Alzheimer, Dementia and Malaria which can be cured by medicinal plants. Additionally, he familiarise the students with various pandemic diseases and their cure with help of the plants. A total of 80 participants from different Colleges and Universities (BHU, AMU, Delhi University and HPU etc.) joined online and 41 students from (M.Sc and B.Sc Botany) St. Bede's College have participated offline in the webinar. Over all the session was very informative and interactive. Students asked their quires regarding ethnomedicinal plants and their conservation measures.

#### **Outcomes:**

- Students get acquainted with the traditional uses and the chronic diseases that can be cured with the help of ethnomedicinal plants.
- Participants become aware about the economic and ecological importance of some medicinal plants and their conservation methods.
- Students got opportunity to interact with the participants from different educational institutes of India.





### **Brochure**











National Webinar on Bio Prospection of Ethnomedicinal Plants of India



Media Report- National Webinar on Bio Prospection of Ethnomedicinal Plants of India

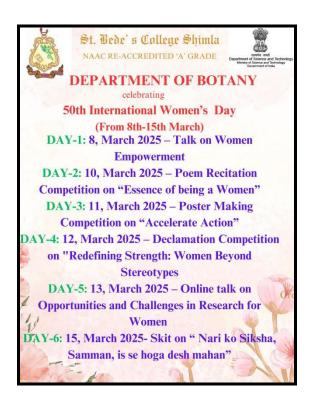
Activity: 50<sup>th</sup> International Women's Day Celebration

**Date: 8<sup>th</sup>-15th March, 2025** 

On the occasion of the 50<sup>th</sup> International Women's Day, Department of Botany, St. Bede's College, Shimla, organized week-long activities to celebrate women's achievements and advocate for gender equality. The main purpose of the week-long celebration was to raise



awareness of women's rights and the need to end gender discrimination. Various activities were carried out by the students of department of Botany to promote these causes.



#### **Brochure**

### DAY-1: 8th March, 2025 - Talk on Women Empowerment

The celebration commenced on 8th March 2025, i.e., International Women's Day, with a talk on *Women Empowerment*. The session was held in the Seminar Hall at 11:00 AM, with Dr. Anupama Tandan Tomar, Head and Associate Professor of the Department of Economics at St. Bede's College, Shimla, as the resource person. Dr. Tomar inspired the students by highlighting the importance of literacy, skills, and independence for women. She also shared her personal life experiences, which motivated the students to focus on empowerment and self-reliance.











DAY-1: 8th March 2025 - Talk on Women Empowerment

### DAY-2: 10th March, 2025 - Poem Recitation Competition

On Day 2, 10th March 2025, the Department of Botany organized a *Poem Recitation Competition on the theme "Essence of being a Women"*. A total of 14 students participated in the competition, which was judged by Dr. Madhu Bala, Head of the Chemistry Department at St. Bede's College, Shimla. Students recited various poems titled "Still I rise", "Vigyaan ki jyoti Nari Shakti", "Chu le har Unchai tu". Students also shared their original compositions, adding a personal touch to the competition. These poems reflected the diverse perspectives and voices of young women today, each exploring different aspects of womanhood, from personal empowerment to societal challenges.









DAY-2: 10th March 2025 - Poem Recitation Competition

### DAY-3: 11th March, 2025 – Poster Making Competition

On Day 3, 11th March, 2025, a Poster Making Competition was organized on the theme "Accelerate Action" to raise awareness about women's rights and gender equality. The event aimed to engage students creatively, encouraging them to express their perspectives on social issues through visual art. A total of 12 M.Sc. Botany students participated in the competition, showcasing their artistic talents and their commitment to advocating for gender equality.









DAY-3: 11th March, 2025 - Poster Making Competition

### **DAY-4: 12th March 2025 – Declamation Competition**

On the fourth day of the event series, a **Declamation Competition** was organized on **12th March 2025**, centered around the theme "Redefining Strength: Women Beyond Stereotypes". Five **M.Sc. Botany** students enthusiastically participated, showcasing their eloquence and deep understanding of the topic. The competition was evaluated by judges, **Dr. Preeti Kaundal** and **Dr. Kusum Sharma**, who assessed the participants based on **content, relevance to the theme, and confidence in delivery.** The event provided a platform for students to voice their perspectives on gender equality, women's rights, and societal progress, making it an engaging and thought-provoking session.









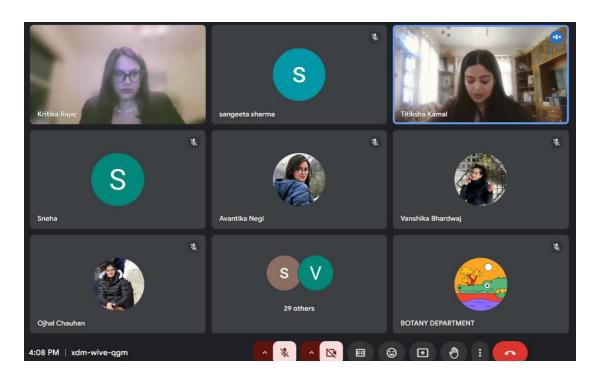


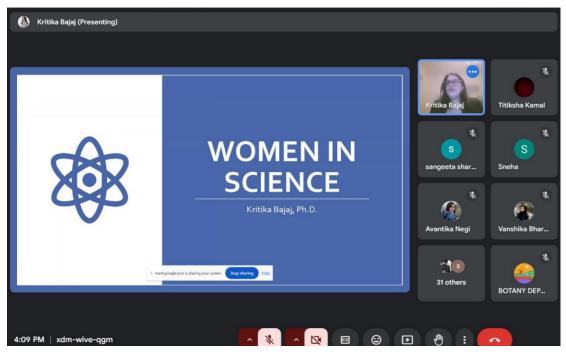
DAY-4: 12th March, 2025 - Declamation Competition

# DAY-5: 13th March, 2025 – Online talk on Opportunities and Challenges in Research for Women

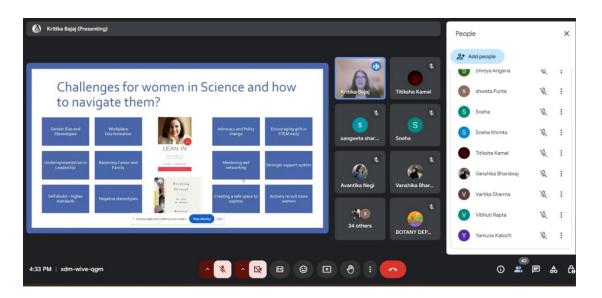
On Day 5, 13th March, 2025, the Department of Botany hosted a online talk *on Opportunities and Challenges in Research for Women* via Google Meet. The session was conducted by Dr. Kritika Bajaj, a Research Scientist at Croda's Princeton Innovation Centre, Plainsboro, New Jersey, United States. Dr. Bajaj shared insights into the various opportunities and challenges that women face in research, providing an inspiring perspective for students aspiring to pursue careers in science. Also Dr. Bajaj discussed various government schemes related to promoting higher education and research.

















# DAY-5: 13th March, 2025 – Online Talk on Opportunities and Challenges in Research for Women

### DAY-6: 15<sup>th</sup> March, 2025- Skit on "Nari ko Siksha, Samman, is se hoga desh mahan"

On 15th March, 2025, the students of M.Sc. Botany performed a skit titled "Nari ko Siksha, Samman, is se Hoga Desh Mahan". The skit focused on the critical role of education in empowering women and its direct impact on the progress of the nation. The performance highlighted key societal issues related to women's education, gender equality, and the significance of empowering women through knowledge and respect.

The final message of the skit pointed out that a nation can only truly progress when both men and women have equal access to education and opportunities. Educated women can become leaders, innovators, and role models, driving positive change across all sectors.











DAY-6: 15th March, 2025- Skit on "Nari ko Siksha, Samman, is se hoga desh mahan"

Activity: Three-Day Online International Workshop on Research Methodology

Date: April 7-9, 2025

### **Objectives**:

- To introduce research methodology fundamentals and key components.
- Enhance understanding of research ethics, including participant protection and ethical dilemmas.
- To develop skills in data analysis and research classification.
- To promote interdisciplinary collaboration for innovative research questions.
- To equip participants with practical research skills, from problem identification to statistical analysis.
- Encourage socially sensitive research practices, particularly with vulnerable populations.
- To foster international collaboration and knowledge exchange.

### **Description**:

Day I- April 7, 2025

Topic: Research Ethics

Speaker: Prof. Ma. Rosita Ampoyas-Hernani (Cebu Normal University, Philippines) Moderator: Dr. Yogamaya Panda (Shailabala Women's Autonomous College, Cuttack, India)

The workshop commenced at 11:00 AM with a welcome by Dr. Kusum Sharma (Department of Botany, St. Bede's), followed by introductions from the moderator. Prof. Hernani delivered a comprehensive session on research ethics, emphasizing integrity, participant rights, and trust in research. She illustrated ethical concerns through case studies and real-life



examples, such as mental health surveys and trauma research, and highlighted the role of ethics committees.

She concluded with the remark: "Ethics is Foundation, not Option." Dr. Panda summarized the key points and expressed gratitude to the speaker and organizers. A Q&A session followed, and Miss Vanshika Bhardwaj (M.Sc. Botany) delivered the vote of thanks. The day concluded with a group photo.

Day 2 – April 8, 2025

Topic: Basic Concepts of Research and Data Analysis
Speaker: Prof. Rajeev Choudhary (Pt. Ravishankar Shukla University, Raipur, India)
Moderator: Prof. Jomar B. Esto (University of Southern Mindanao, Philippines)

Prof. Choudhary presented the fundamentals of research, including the meaning of research, types of variables, research design, measurement scales, and data analysis. He classified research based on source, methodology, nature, and scope, and explained steps in the research process, including hypothesis formulation and statistical analysis.

Prof. Esto summarized the session, followed by a Q&A segment.

Day 3 – April 9, 2025

Topic: Interdisciplinary Insights: How Cross-Field Thinking Leads to Great Research Questions

Speaker: Prof. Oliver B. Villaflores (University of Santo Tomas, Philippines)
Moderator: Prof. Jainah Rose G. Amilbahar (University of Southern Mindanao, Philippines)

The final session began with a welcome by Miss Titiksha Kamal (Botany Dept., St. Bede's), who also summarized the previous sessions. Principal Prof. (Sr.) Molly Abraham gave the opening remarks. Prof. Villaflores discussed the importance of interdisciplinary collaboration in generating meaningful research questions, highlighting the value of curiosity, practical relevance, and cross-field synergy.

#### **Outcomes:**



- This workshop helped increase awareness of research ethics and participant protection.
- It enhanced the knowledge of data analysis and research methodologies.
- Increased interdisciplinary collaboration for innovative research.
- It helped in strengthening international academic collaboration.

### Social Media Links:

- https://www.facebook.com/share/p/18ec27ZR2R/
- <a href="https://www.facebook.com/share/p/1EYPgx4zTG/">https://www.facebook.com/share/p/1EYPgx4zTG/</a>
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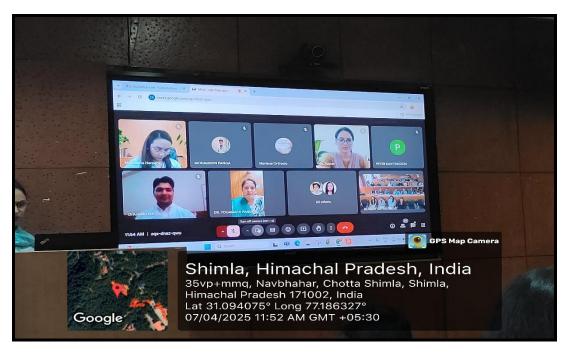


**Brochure** 























Three Day Online International Workshop on Research Methodology (April 7 – 9, 2025)

Activity: Visit to Udyan Utsav (Flower Festival) at Rashtrapati Niwas, Mashobra,

Shimla

**Date: April 19, 2025** 

**Objectives** 

• To provide experiential learning by exposing students to a diverse range of plant

species and floral displays in a natural setting.

• To familiarize students with exotic and ornamental plants and to enhance knowledge

of plant families through direct observation.

• To introduce students to the traditional Japanese art of Bonsai, understanding the

techniques of pruning and training involved in its cultivation.

• To promote awareness of ecological and cultural biodiversity of Hinachal Pradesh.

• To foster faculty-student engagement

**Description** 

The Department of Botany, St. Bede's College, Shimla, organized a one-day educational visit

to the Udyan Utsav (Flower Festival) held at Rashtrapati Niwas, Mashobra, Shimla, for the

M.Sc. Botany students. The students were accompanied by faculty members Dr. Sangeeta

Sharma and Ms. Titiksha Kamal.

The Flower Festival featured a vibrant exhibition showcasing a wide array of exotic plants.

Students explored the beautifully curated gardens, experiencing the rich biodiversity and

stunning floral displays. They were acquainted with various plants, including Lilium, Areca

palm, Carnations, Jack Pine leaves, Mimosa, Kalanchoe, Viola, Petunia, and Geranium. A

wide range of potted plants from the families Araliaceae, Crassulaceae, Asparagaceae, and

Arecaceae were also displayed. The major attraction was the Bonsai collection—an exquisite

Japanese art form of cultivating and shaping miniature trees in containers using techniques

such as pruning and training. The Bonsai specimens belonged to the family Moraceae. The

visit provided them with a valuable opportunity to learn about various plant species and gain

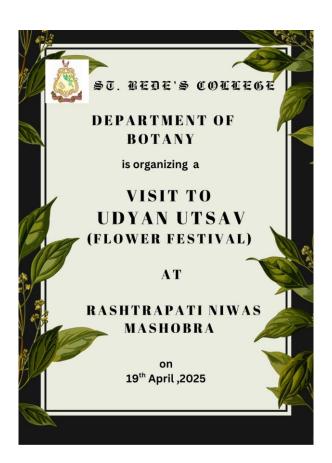


insights into the ecological and cultural heritage of Himachal Pradesh, making it a truly enriching educational experience. Overall, the trip was very informative and knowledgeable for the students as well for faculty.

#### Outcomes

- Students gained hands-on exposure to a wide variety of ornamental and exotic plant species.
- Students learned about the Japanese art of Bonsai, broadening their appreciation of plant aesthetics and horticultural practices.
- The visit fostered greater awareness of biodiversity and environmental conservation, especially in the context of Himachal Pradesh's unique flora.
- The visit served as a bridge between theoretical knowledge and real-world application, reinforcing classroom concepts through experiential learning.
- The visit strengthened academic relationships and encouraged collaborative learning between faculty and students in an informal setting.





Brochure









Visit to Udyan Utsav (Flower Festival) at Rashtrapati Niwas, Mashobra, Shimla (April 29, 2025)