Department of Geography

Departmental Activities Session: 2025-26

1) Tree Plantation Drive
Date: 13th September, 2025

Objectives:
The Tree Plantation Drive was organized with the objective of creating awareness among students about the importance of trees and environmental protection. The programme aimed to encourage students to adopt eco-friendly practices and understand their role in conserving nature for future generations.

Programme Description:
The Department of Geography, St. Bede's College, organized a Tree Plantation Drive on 13th September, 2025 within the college campus. The activity was conducted under the theme "Plant Today, Sustain Tomorrow", highlighting the importance of taking responsible actions today for a sustainable future.
The programme began with a brief address by the faculty members, who spoke about the role of trees in maintaining environmental balance, improving air quality, conserving biodiversity, and supporting life on earth. Students were motivated to understand that planting a tree is not just an activity, but a long-term commitment towards nature.

Students actively participated in planting saplings at different locations across the campus. Suitable plant species were selected to ensure healthy growth and sustainability. The participation of both students and teachers created a positive and encouraging atmosphere throughout the event.
The activity helped students connect their academic learning with practical environmental action and promoted a sense of care and responsibility towards the campus environment.

Conclusion:

The Tree Plantation Drive was a meaningful and successful initiative that helped students understands the value of trees and environmental conservation in a simple and practical way. The programme encouraged teamwork, responsibility, and environmental awareness among participants. The event concluded with the message that small efforts, when taken collectively, can contribute significantly towards building a greener and more sustainable future.

2) Field Survey

Date: October 2 – 6, 2025

Objectives:

- To expose the students of Geography to a range of sub themes and research opportunities in a real-world setting.
- To foster a holistic understanding of geographical diversity, environmental issues, and cultural aspects in Jaipur.
- To develop research, data collection, and analytical skills among our students.

The Department of Geography organized a field survey to Jaipur city, Rajasthan, from October 2 - 6, 2025, as part of the academic curriculum for undergraduate students. The main objective of the survey was to provide students with first-hand experience in field techniques, data collection, and real-world observation.

Day-wise Schedule and Activities

Day 1 – Field Survey at Badi Chaupar and City Palace

The students left for Badi Chaupar at 8:30 a.m. and reached by 9:00 a.m. The first session of fieldwork began shortly after arrival. Students were divided into groups and instructed to collect primary data through structured questionnaires. Each student filled 10–12 questionnaires during the first session, which concluded at 12:00 p.m.

Following the morning session, students visited the City Palace, observing its architecture and cultural significance while understanding the pressures of tourism on heritage conservation.

The second session began after lunch and continued until 5:00 p.m. During this time, students completed 6–7 additional questionnaires and interacted with local residents regarding solid waste management practices in the area. In the evening, the group visited Chokhi Dhani, where they enjoyed traditional Rajasthani cuisine, music, and folk performances, experiencing the cultural richness of the state.

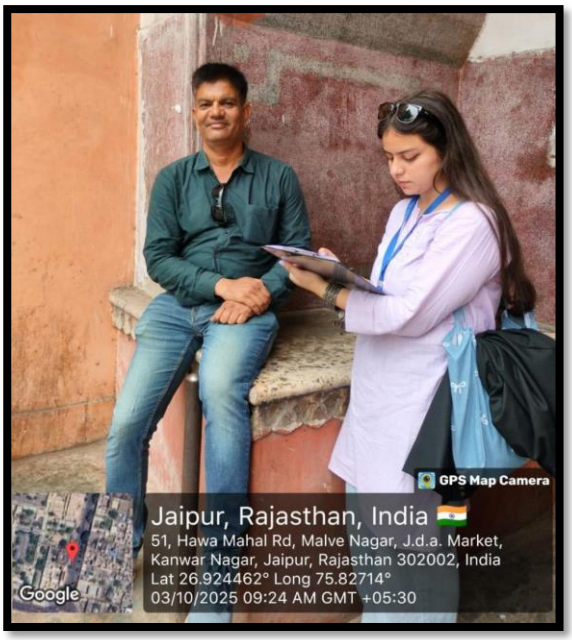
Day 2 – Data Collection near Albert Hall Museum and Jantar Mantar

On the second day, students departed for field activities at 9:00 a.m. The focus of the day's survey was on solid waste management and heritage site conservation near Albert Hall Museum, one of Jaipur's most prominent landmarks. Students interacted with local authorities, vendors, and tourists to gather information on waste collection systems, recycling efforts, and the impact of waste on the surrounding environment.

After completing the first session, the group visited the Albert Hall Museum to observe its historical exhibits and study how heritage preservation is maintained.

Field Survey at City Palace and Jantar Mantar

In Session 2, students visited Jantar Mantar, where they learned about the significance of astronomical instruments and collected data on visitor management and site conservation practices. Later in the evening, a group discussion session was organized in which students shared their experiences, field observations, and the challenges faced during data collection. This reflective discussion allowed students to exchange ideas, identify practical solutions, and strengthen their understanding of fieldwork techniques.



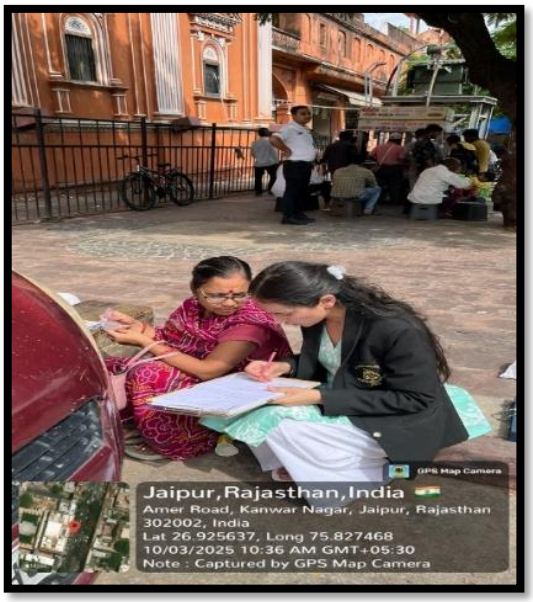
Field Survey at Albert Hall Museum

Day 3 – Visit to Jal Mahal, Amer Fort, and Group Discussion

The third day began with the group departing from the hotel at 10:00 a.m. The students visited Jal Mahal, located in the middle of Man Sagar Lake, and conducted data collection related to waste management around tourist sites and environmental protection. After lunch, they visited Amer Fort, where they studied the fort's architecture, heritage conservation methods, and tourism sustainability.

In the evening, around 6:00 p.m., the group began their return journey to Shimla.

Field Survey at Jal Mahal



Field Survey at Amer Fort

Outcomes and Learning Experiences:

The field survey to Jaipur offered students a valuable opportunity to gain practical exposure to geographical research, focusing on solid waste management and heritage site conservation. Through direct observation, interaction, and field documentation, students learned how environmental and cultural aspects are interlinked in an urban setting.

The survey emphasized that the real world serves as the true laboratory of a geographer. It enhanced students' abilities to plan, organize, and conduct fieldwork systematically.

Key outcomes of the field survey include:

- Insight into heritage site conservation efforts and their role in promoting sustainable tourism.
- Development of questionnaire design, data collection, and analysis skills.
- Improved communication and interpersonal skills through field interactions.
- Enhanced ability to identify environmental challenges and propose possible solutions.
- Strengthened teamwork, coordination, and leadership skills during group-based fieldwork.
- Reflection on real-world challenges faced during primary data collection and problem-solving in the field.

Overall, the field survey was a successful academic exercise that strengthened the student's conceptual understanding, practical skills, and research aptitude. It helped them connect classroom knowledge with real-life issues and inspired them to approach future studies with a research-oriented perspective.

Conclusion:

The Field Survey to Jaipur City (2025–26) was a fruitful and well-organized academic activity conducted by the Department of Geography. It met its objectives of providing practical exposure, fostering research skills, and enhancing awareness about environmental and heritage conservation. The fieldwork experience proved invaluable for the students, shaping them into responsible future geographers and researchers committed to sustainable development.

3) GIS Webinar

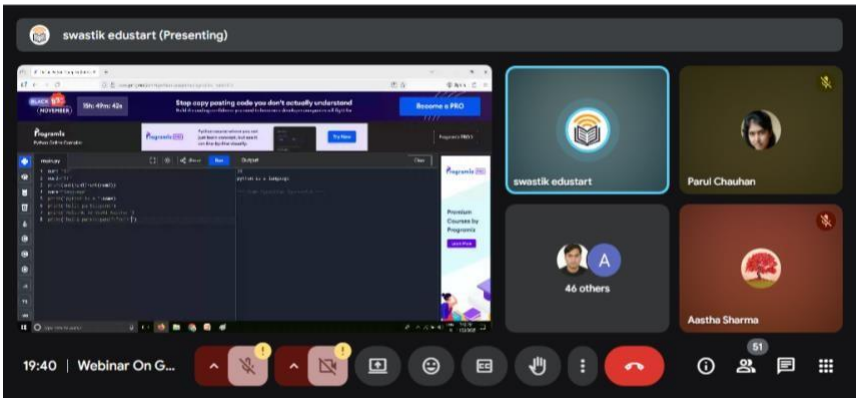
Date: November 22, 2025

Objective:

Introduction to GeoAI

The Department of Geography at St. Bede's College organized an insightful webinar titled "Introduction to GeoAI" as part of its GIS Webinar – 2025 series. The session was held on 22nd November 2025 at 7:00 PM, and it brought together students and teachers. The webinar was conducted in collaboration with Swastik Edustart, GIS Training Institute, Delhi, and the session was delivered by Dr. Bratati Dey, who shared her expertise with great clarity and enthusiasm.

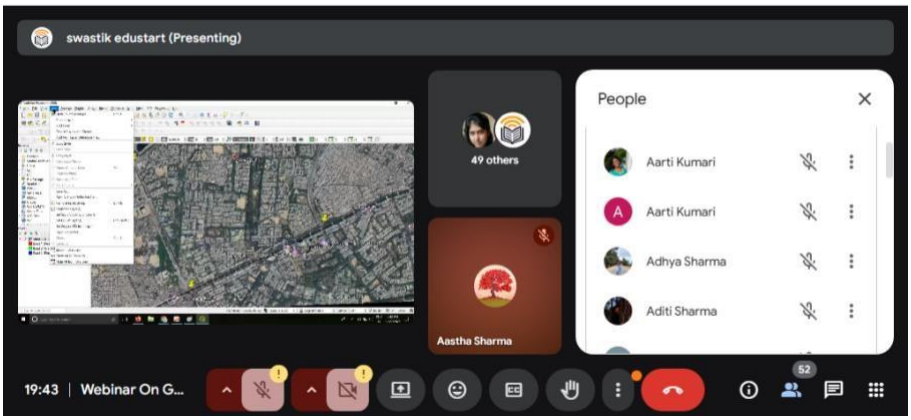
From the beginning, the session aimed to introduce participants to the rapidly growing field of Geospatial Artificial Intelligence (GeoAI). As the volume of geospatial data continues to increase, understanding how AI tools can process, analyze, and interpret this information has become extremely important. Dr. Dey explained these concepts in a simple and relatable manner, making the emerging field feel accessible even to beginners.



The webinar began with an overview of what GeoAI means and by discussing the rapidly growing career opportunities in the Geospatial field, especially in areas involving GeoAI, spatial analytics, GIS programming, remote sensing, environmental modeling, and data science. Her introductory remarks encouraged participants to consider GeoAI as a promising and future-oriented career path. How it brings together GIS, Remote Sensing, and Artificial Intelligence to identify patterns and make better decisions. Dr. Dey discussed how modern technologies like machine learning, deep learning, and neural networks are now widely used in spatial problem-solving.

After outlining the career prospects, Dr. Dey shifted into a more technical explanation, beginning with the concept of geo-information. She explained that geo-information is not limited to maps; rather, it includes spatial data, attributes, coordinates, satellite imagery, geodatabases, vector and raster layers, and terrain information. She emphasized that understanding the structure and nature of geo-information is the foundation for all meaningful geospatial analysis. She then detailed the complete workflow involved in handling geospatial data, beginning with data creation through satellite sensors, GPS devices, drones, surveying tools, and digitization processes. She highlighted how remote sensing plays an essential role in producing updated and reliable datasets.

Following this, she discussed data management and explained how large volumes of spatial data are organized and stored using geodatabases, metadata, and structured file systems. She pointed out that proper data management ensures accuracy, consistency, and smooth analysis. She then described the analysis stage, in which spatial techniques such as overlay, buffering, spatial joins, raster calculations, classification, interpolation, and modeling are used to extract meaningful information. Dr. Dey stressed that modern geospatial analysis increasingly relies on automation and programming rather than only manual tools, especially given the size and complexity of today's datasets.



One of the most important aspects of the session was Dr. Dey's explanation of programming languages used in the geospatial domain. She highlighted the significance of Python, SQL, and JavaScript, explaining that Python has become the most preferred language due to its simplicity and the availability of powerful libraries for machine learning, deep learning, spatial analysis, and data processing. She also discussed the role of QGIS as an open-source GIS platform that supports the integration of Python, enabling users to automate geoprocessing tasks, create custom tools, and perform advanced analysis. Dr. Dey emphasized that programming has now become an essential skill for geographers because it allows faster processing, efficient handling of large datasets, and the development of automated analytical workflows.

Outcomes: The webinar was technically rich, engaging, and highly beneficial for students. Dr. Bratati Dey's ability to explain complex concepts such as Geo-information, Data Workflows, Programming Integration, and GeoAI in a clear and connected manner made the session extremely

valuable. The presentation not only enhanced participants' understanding of modern geospatial technologies but also inspired them to develop the technical skills necessary for future opportunities in the field of geography and spatial science.

4) Three-Days training on Role of Community in Village Level Disaster Management Planning at HIPA.

Date: October 30 to November 1, 2025

Objectives:

To build conceptual understanding of disaster risk, vulnerability, and resilience at the village level in the context of natural and human-induced hazards and To sensitize participants about the critical role of local communities, Panchayati Raj Institutions (PRIs), Self-Help Groups (SHGs), youth clubs, and civil society in disaster preparedness, response, and recovery.

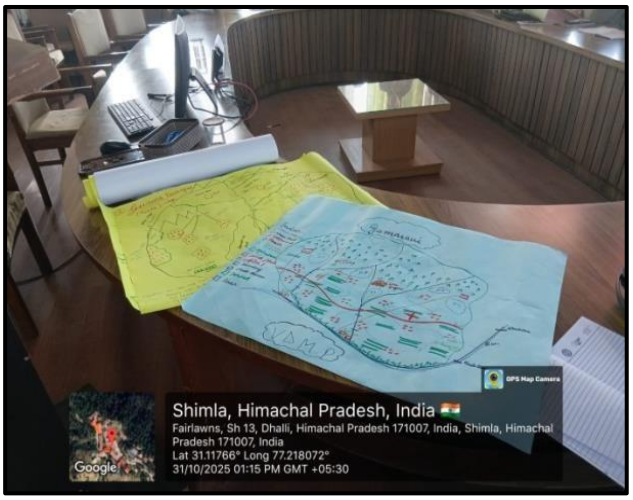
A three-day certificate course on "Role of Community in Village Level Disaster Management Planning" was organized by the Dr**.** Manmohan Singh Himachal Pradesh Institute of Public Administration (MSHIPA), Shimla. The program brought together participants from various NGOs, Panchayati Raj Institutions, and government sectors, as well as representatives from the districts of Una, Bilaspur, and Hamirpur.

The Course Director for the program was Dr. Khyal Chand, who guided and coordinated the sessions throughout the three days. Students from St. Bede's College, Shimla, accompanied by their teachers Mr. Sanjeev Kumar and Mr. Anoop Dilta, also attended the course as part of an academic extension activity under the Department of Geography.

Day 1: Expert Lectures on Capacity Building and Community-Based Planning the first day of the workshop included two engaging sessions by domain experts**.**

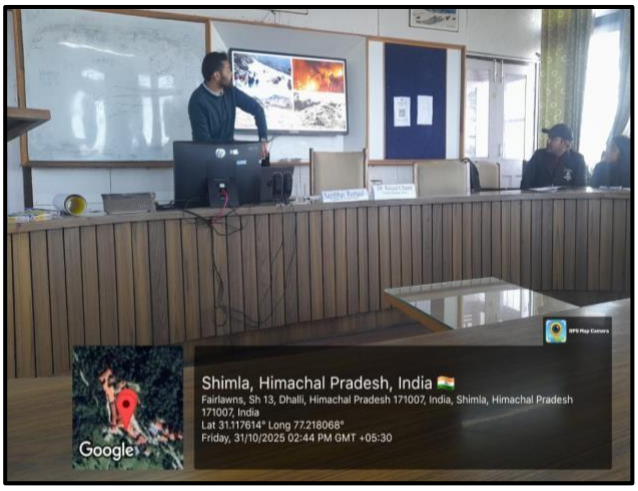
The first lecture was delivered by Dr. Krishan Chand Thakur, Training and Capacity Building Specialist at MSHIPA. He spoke about the importance of developing local capacities and strengthening community preparedness and response systems. Dr. Krishan emphasized that community involvement, awareness, and proactive participation are key to minimizing disaster risks.

The second lecture was conducted by Ms. Anuradha from the NGO Doers. She introduced participants to the concept of Community-Based Disaster Risk Management (CBDRM) and explained how communities can take the lead in identifying risks, developing mitigation strategies, and responding effectively during emergencies. She also discussed the Village Disaster Management Plan (VDMP), explaining how it serves as a participatory framework through which local communities can plan and implement disaster preparedness measures tailored to their needs.



Day 2: Technical and Governance Perspectives in Disaster Management
The second day focused on the integration of technology and governance in disaster management.

The first lecture was delivered by Dr. Rohit Chauhan, an expert in Remote Sensing and GIS working under the Himachal Pradesh State Disaster Management Authority (HPSDMS). He discussed the significance of technologies such as GIS mapping and satellite imagery in identifying vulnerable zones, assessing hazards, and creating data-based disaster management plans. The second lecture was given by Mr. Sambhav Ramaul, a consultant at the Rashtriya Gram Swaraj Abhiyan (RGSA). He highlighted the role of Panchayati Raj Institutions and local governance in effective disaster management. Mr. Ramaul stressed the importance of incorporating disaster management strategies into local development plans and ensuring strong coordination between government bodies and communities.



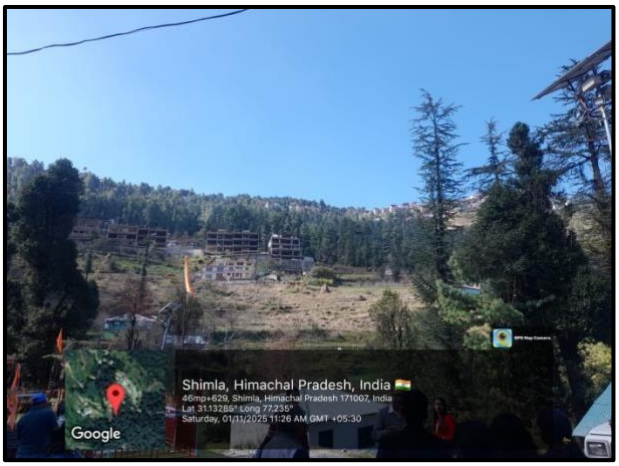
Day 3: Field Visit, Group Work, and Certificate Distribution

On the final day, participants visited Sipur Village to gain hands-on experience in community based disaster management practices. The field visit was accompanied with Dr. Khyal Chand and Ms. Anuradha**.** The field visit provided valuable insights into how local communities prepare for, respond to, and recover from disasters.

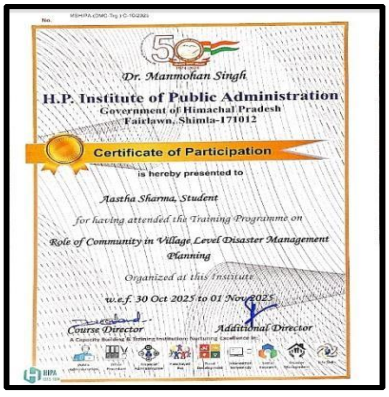
During the visit, all participants were divided into five groups, with each group assigned a specific theme to study:

1. Awareness and Preparedness
2. Evacuation and Response
3. Health and First Aid
4. Sanitation
5. Shelter Management

Each group interacted with local villagers, collected data, and analyzed their assigned topic to understand its significance in the overall Village Disaster Management Plan (VDMP). In the evening session, all groups delivered presentations based on their findings and observations, which reflected their understanding of different aspects of disaster management at the community level.



At the end of the day, a certificate distribution ceremony was held where all participants were awarded certificates for successfully completing the three-day course.



Outcomes:

The three-day certificate course proved to be an enriching learning experience that combined theoretical knowledge with practical exposure. It highlighted the critical role of community participation, local governance, and capacity building in effective disaster management planning.

Through expert lectures, interactive discussions, field activities, and presentations, participants gained a comprehensive understanding of disaster management from both technical and grassroots perspectives. The course concluded with the recognition that well-informed, organized, and empowered communities form the backbone of disaster resilience and sustainable development.

5) Educational Visit to IIRS–ISRO, Dehradun

Date: 18th – 20th December

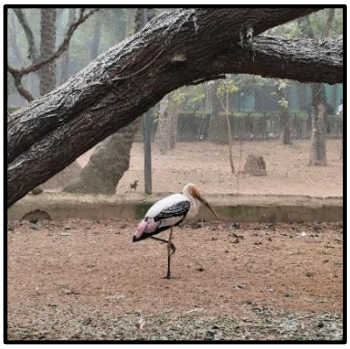
Objectives:

- To familiarize students with the role and functions of the Indian Space Research Organisation (ISRO) and the Indian Institute of Remote Sensing (IIRS) and to enhance understanding of Remote Sensing and GIS applications in resource management, environmental monitoring, disaster management, and urban planning.
- To provide exposure to satellite data acquisition, processing, and analysis techniques used in real-world geospatial projects and to demonstrate the practical relevance of classroom concepts through interaction with scientists, researchers, and technical experts.

Day 1: Visit to Chhatbir Zoo, Chandigarh (18th December)

On the first day, students visited Chhatbir Zoo, officially known as Mahendra Chaudhary Zoological Park, Chandigarh. The visit was undertaken to understand aspects of wildlife conservation, biodiversity management, and environmental sustainability. Students observed a wide variety of fauna including mammals, birds, and reptiles housed in enclosures designed to simulate natural habitats. The spatial arrangement of enclosures and species distribution provided insight into habitat planning and animal welfare practices. Emphasis was laid on the role of zoological parks in conserving endangered species and promoting environmental awareness.

From a geographical perspective, the visit helped students relate concepts of biogeography, ecosystem conservation, and human–environment interaction with real-world conservation practices. The visit enhanced awareness regarding the importance of biodiversity protection and

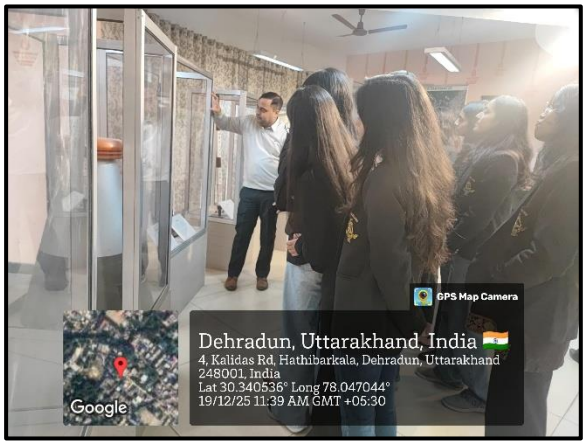



sustainable environmental management.

Day 2: Visit to IIRS–ISRO, Dehradun (19th December)

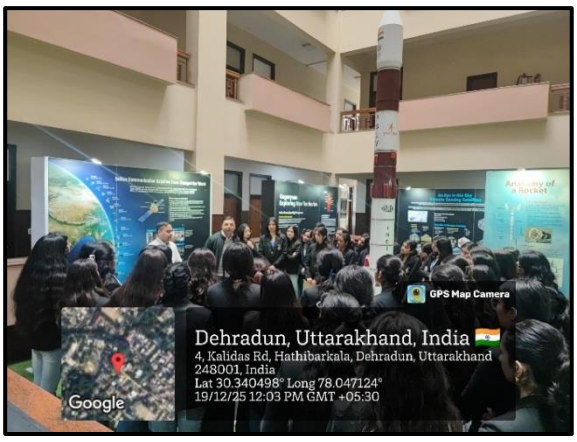
On the second day, students visited the Indian Institute of Remote Sensing (IIRS), Dehradun, a premier institute under the Indian Space Research Organisation (ISRO). The visit was focused on understanding the applications of remote sensing, GIS, and space technology in geographical studies and national development.

The visit commenced with a guided tour of the IIRS museum, which houses informative exhibits related to satellites, rockets, sensors, and space missions. The museum provided a visual and conceptual understanding of satellite systems, launch vehicles, payloads, and sensor technologies



used in earth observation and space research. The exhibits helped students comprehend complex technological concepts in a simplified manner and served as an effective introduction to the applications of space technology prior to the academic session.

An expert lecture was delivered by Ashutosh Bhardwaj, Head, Research Project Monitoring Department and Scientist/Engineer – SG, IIRS. The lecture provided an overview of the evolution of ISRO and IIRS, highlighting India's progress in developing indigenous space and geospatial capabilities. Mr. Bhardwaj elaborated on the scope and significance of Remote Sensing and GIS, explaining their applications in day-to-day life such as weather forecasting, disaster management,



agriculture, urban and regional planning, transportation, and environmental monitoring. He also discussed major developments in the Indian context, including advancements in satellite missions, sensor technologies, photogrammetry, GNSS, LiDAR, and SAR interferometry. The lecture further highlighted the future projects and vision of ISRO, focusing on upcoming satellite missions and emerging geospatial technologies. The session provided valuable insight into academic and career opportunities in the fields of remote sensing, GIS, and space sciences.

Outcomes:

The educational visit to Chhatbir Zoo, Chandigarh, and IIRS–ISRO, Dehradun, proved to be a highly enriching academic experience for the students of the Department of Geography, St. Bede's College. The first day strengthened understanding of biodiversity conservation and environmental management, while the second day provided in-depth exposure to geospatial science and space technology through expert interaction and practical learning. Overall, the visit successfully integrated theoretical knowledge with real-world observation, enhancing students' academic understanding and reinforcing the applied and interdisciplinary nature of geographical studies.