FDP on Research Methodologies for Interdisciplinary Research
Event Report

Dates	**:**	**8th December 2025 to 12th December 2025**
Time	**:**	**10:00 AM to 4:00 PM**
Venue	**:**	**Online Mode**
Organized by	**:**	**Department of Data Science**
Course Coordinator :		**Dr U N Roy, Professor, NITTTR, Chandigarh**
Convener	**:**	**Prof. (Dr.) Sanjay Kumar**
Coordinator	**:**	**Dr. Sachin Kumar, Dr. Anju Chadana, Dr. Kalpna Sagar, Dr. Nisha Pal**

Glimpse:

- 22 hours of interactive knowledge sharing sessions with experts from academia, and industry.
- Hands-on Experimental learning sessions on Research based AI tool.
- Article discussions and case studies discussions in various sessions
- Daily Feedback and Technical Quiz based on the session delivery

Inaugural:

FDP was inaugurated on 8th December 2025 in online mode in the presence of Director, Heads of NITTTR Chandigarh along with GCET Director, Prof. Dr. Vikarm Bali, other remote Centre Director and the participants of the FDP. Course Coordinator welcomed all to the inaugural ceremony. Director GCET briefed about FDP and motivated all the participants to have maximum advantage of this FDP. Further, Prof UN Roy briefed about the FDP schedule, how the NITTTR Chandigarh and its authorities are always work towards the Faculty skills and the overall development of Faculty and Students. Further, Prof UN Roy discussed the types of FDPs and the significance of investing time in such fruitful events. He also motivated all the participants to get the maximum benefit from the five-day FDP. The inaugural ceremony ended with discussions.

Sessions Delivery:

Day 1- Research and Types of Research and Growing Inter Disciplinary Projects, Research Questions, Hypotheses and Research Design

First session was started by Director / Dr U N Roy and Department Faculty. The session introduced fundamental concepts of research and various types of research, including basic, applied, qualitative, quantitative, and mixed-method approaches, with special emphasis on the increasing importance of interdisciplinary projects in addressing complex societal and developmental challenges. Detailed guidance was provided on framing clear and researchable questions, formulating testable hypotheses, and selecting appropriate research designs aligned with study objectives and data requirements. Through illustrative examples and discussions, participants gained insights into structuring rigorous and ethically sound research studies. Overall, the session enhanced participants' ability to conceptualize, plan, and execute high-quality research with interdisciplinary relevance and practical impact. The speakers of the day-1 were Dr U N Roy and Dr Sunil Dutt.

Day-2 Literature Review and Identification of Research Topics, Survey Techniques and Tools for Data Collection, Sampling Techniques

The session on literature review emphasized effective strategies for searching, organizing, and critically analyzing scholarly literature to identify research gaps and formulate relevant and impactful research topics. This was followed by a detailed discussion on survey techniques and tools for data collection, highlighting the design of questionnaires, use of digital survey platforms, ethical considerations, and methods to enhance response quality and reliability. The session on sampling techniques provided clarity on probability and non-probability sampling methods, sample size determination, and their suitability for different research contexts. Collectively, these sessions equipped participants with essential methodological skills to design robust studies, collect reliable data, and undertake meaningful research aligned with academic and societal needs. The speakers of the day-2 were Dr U N Roy and Dr Sunil Dutt.
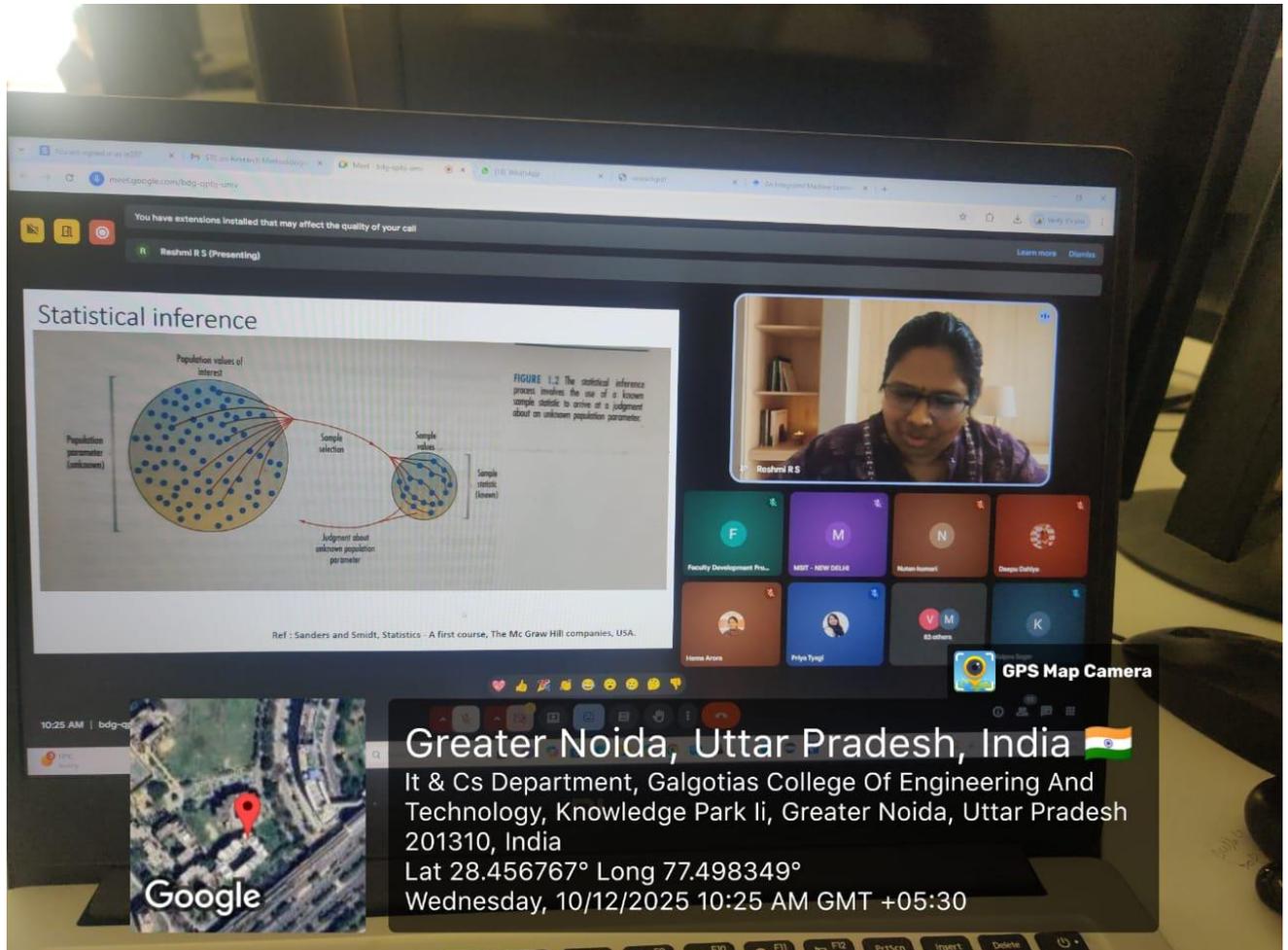

Day 3 Types of Data and Parametric and Non-Parametric Test, Open-Source Software for Research, Application of SPSS for Data Analysis

Day-3 session provided clarity on qualitative and quantitative data, levels of measurement, and criteria for selecting appropriate parametric and non-parametric statistical tests in research studies. This was followed by an informative discussion on the use of open-source software for research, emphasizing cost-effective,
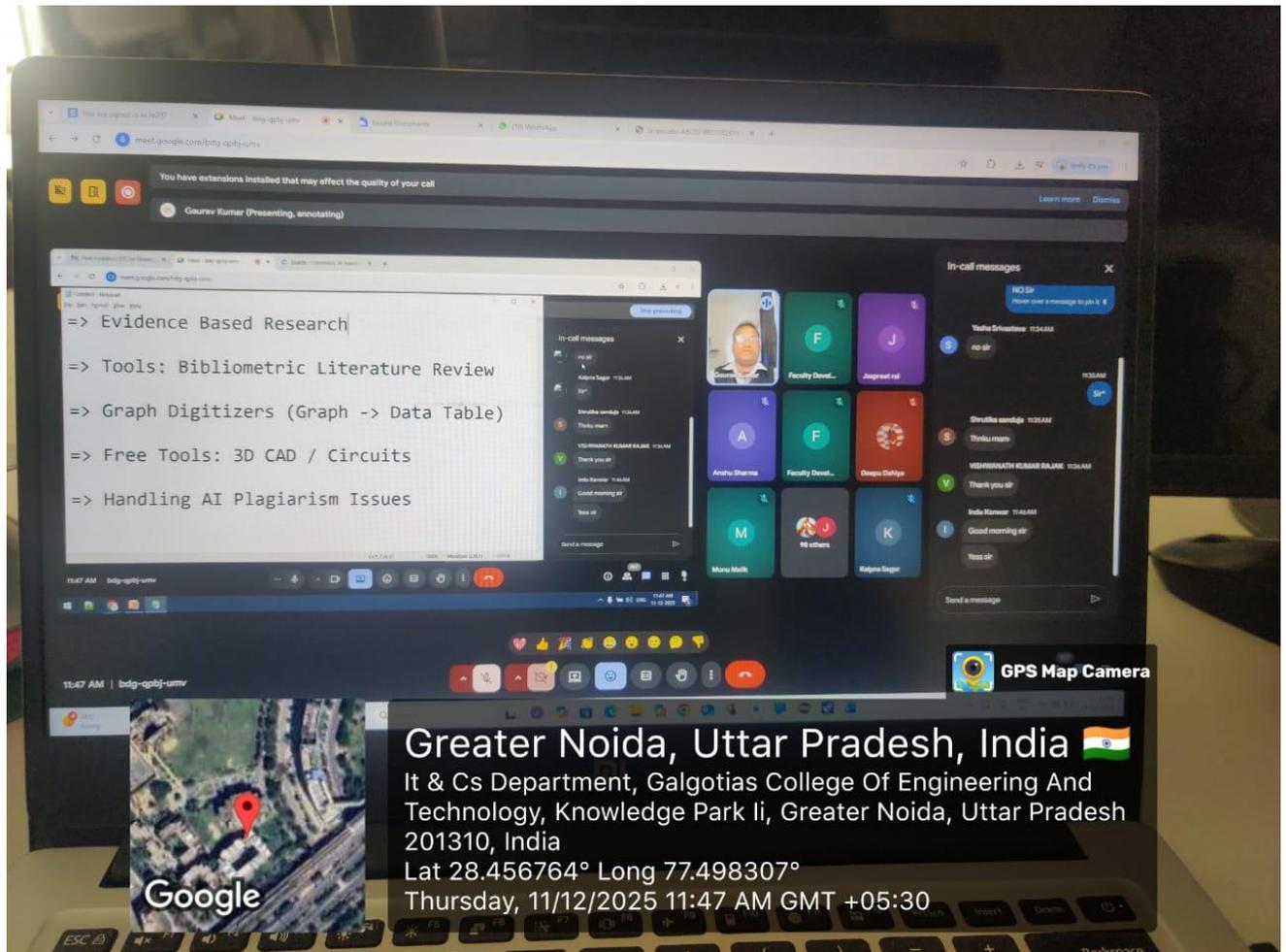
transparent, and reproducible research practices through widely used tools for data analysis, visualization, and documentation. The practical session on SPSS offered hands-on exposure to data coding, descriptive statistics, hypothesis testing, and interpretation of outputs, enabling participants to confidently apply statistical techniques in their own research work. Overall, the session enhanced participants' analytical capabilities and promoted the adoption of appropriate statistical tools and software for high-quality research outcomes. The speakers of the day-3 were Dr Reshmi, IIPS Mumbai, Dr Gaurav Kumar, Dr Archana Roy, and IIPS Mumbai.
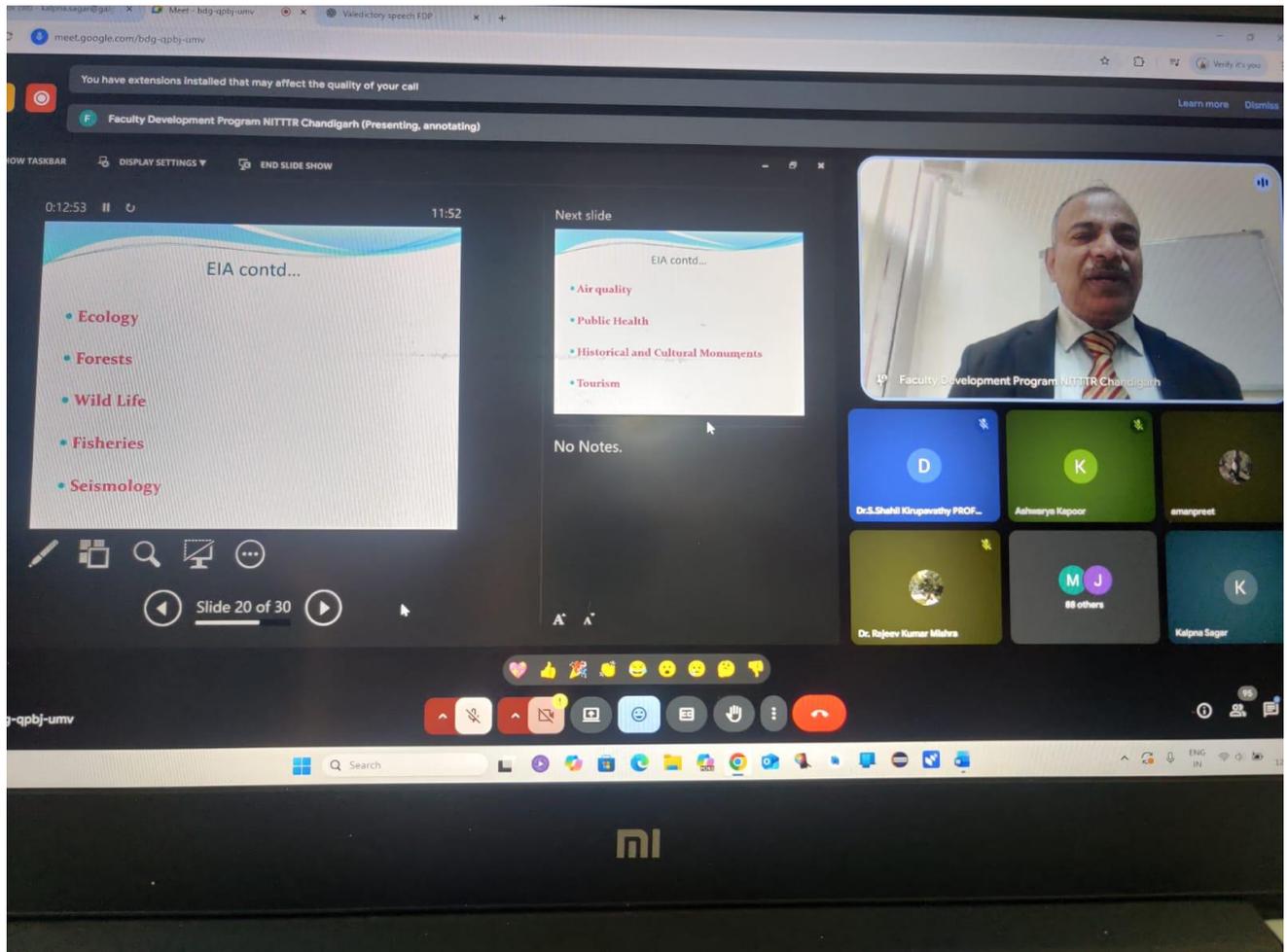

Day 4 Types of Data and Parametric and Non-Parametric Test, Review and Inter Disciplinary Research using open-source data and software, Application of SPSS for Data Analysis

Day-4 session significantly strengthened participants' research and analytical competencies. The session on types of data provided a clear understanding of qualitative and quantitative data, levels of measurement, and the appropriate selection of parametric and non-parametric statistical tests based on data characteristics and research objectives. This was complemented by an insightful discussion on conducting systematic reviews and interdisciplinary research using open-source datasets and software tools, highlighting their relevance in addressing complex, real-world problems in rural and social development. The hands-on session on SPSS enabled participants to perform data entry, descriptive and inferential analysis, hypothesis testing, and interpretation of results, thereby bridging the gap between theoretical knowledge and practical data analysis. Collectively, these sessions enhanced participants' ability to design robust studies, analyze data accurately, and produce evidence-based research outputs aligned with contemporary research standards. The speakers of the day-4 were Dr Reshmi, IIPS Mumbai, Dr Gaurav Kumar, Dr Archana Roy, and IIPS Mumbai.

Day 5 Writing a Research Proposal, Sharing of Research Experiences by the Participants, Valedictory Session Faculty of Rural Development Department

The last day sessions of the Faculty Development Programme were devoted to *Writing a Research Proposal*, *Sharing Research Experiences by the Participants*, and the *Valedictory Session*, collectively providing a reflective and integrative closure to the programme. The session on research proposal writing offered structured guidance on identifying research gaps, framing clear objectives, selecting appropriate methodologies, and aligning proposals with funding agency requirements, with special emphasis on interdisciplinary and rural development–oriented research. This was followed by an interactive experience-sharing session in which participants from diverse institutions discussed their ongoing and completed research, field-based challenges, ethical considerations, and best practices in data collection and analysis within rural contexts. These deliberations fostered peer learning, collaboration, and critical reflection. The FDP concluded with a valedictory session, where faculty members of the Department of Rural Development summarized key learnings, acknowledged the active participation and contributions of the delegates, and emphasized the application of acquired research competencies in teaching, policy-oriented research, and community development initiatives. The session formally marked the successful completion of the FDP and reinforced the commitment to strengthening research culture in rural development studies. The speaker of the day-5 was Dr U N Roy.

Felicitation and Valedictory

The event was concluded by the felicitation of speakers, participants and the organizers by the Director NITTTR, Course Coordinator Prof. Dr. U.N Roy, Head of Department of Rural Development along with Director of GCET Prof. Dr. Vikram Bali. During the valedictory, Prof. Dr. U.N Roy, Course Coordinator of FDP, presented the brief report, and different remote coordinators appreciated the efforts of organizing team. Many participants shared their feedback on FDP and the sessions delivered. The event ended with vote of thanks.

Outcome:

Out of 35 participants, 30 participants successfully completed the FDP based on the criteria of 80% attendance and 60% marks in assessment. Based on the feedback of the participants, the FDP was well organized and fruitful for both the beginners and the experts of the different Domain.

Image Link on Google Drive:

https://drive.google.com/drive/folders/1K9CeQwm--lqcXcsVsro6mzyVILavlOgu

Event Coordinated and Report prepared by
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