

**ACTIVITY REPORT**

<b>Name of the activity</b>	Introduction to R for Data Science	<b>Date</b>	10 <sup>th</sup> -31 <sup>st</sup> OCT,2023
<b>Name of the Moderator</b>	Dr. Faniza Joshi	<b>Time</b>	9:30 AM
<b>Name of the Resource Person</b>	Dr. Shivani Inder	<b>Mode</b>	Offline
<b>Nature of the activity</b>	Value Added Course Session	<b>Program &amp; Batch</b>	IPM-BATCH 22
<b>Number of students participated</b>	43	<b>Academic Session</b>	2022-2023

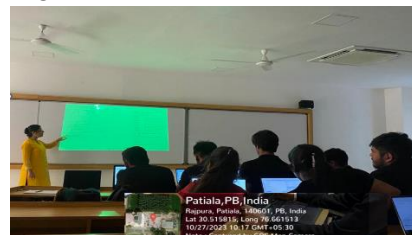
**About the Activity**

Dr. Shivani Chopra took sessions on R-Software. Dr. Shivani's meticulous guidance made even the initial set-up seem manageable. The R for Data Science course provided a comprehensive introduction to data analysis and manipulation using the R programming language. Participants gained proficiency in data management, statistical analysis, and visualization techniques. The curriculum focused on practical skills, including data cleaning, wrangling, and exploration, followed by the creation of insightful visualizations and predictive models. By the course's completion, students were able to independently analyse datasets and solve real-world problems using R. The engaging instructors fostered a collaborative learning environment, making the process of acquiring these valuable skills both stimulating and rewarding. It started through basic syntax, learning how to input commands, work with variables, and perform simple calculations. The interactive approach, with immediate feedback on our code, solidified learning and encouraged exploration. Data visualization took centre stage next. Dr. Shivani showcased R's powerful graphical capabilities, revealing how charts and graphs breathe life into data. Students experimented with generating histograms, scatter plots, and boxplots, learning how to customize visuals for effective communication. Participants were then guided through data manipulation techniques, including importing, cleaning, and transforming data. It was about discovering the hidden stories within datasets, revealing patterns invisible to the naked eye. We learned to speak the language of data, transforming spreadsheets into vibrant landscapes of information. Statistical concepts such as hypothesis testing and regression analysis were also introduced, accompanied by hands-on exercises to solidify understanding. She mentioned numerous packages available for specific domains, piquing our curiosity about advanced applications. This ignited a desire to delve deeper into the world of R and explore its diverse functionalities. Dr. Shivani's enthusiasm and practical guidance have left the session not only with a foundational understanding of R, but also with a sense of empowerment and excitement to embark on my own R programming journey.

**Aligned Activity Outcomes with Objectives**

<b>Activity Objectives</b>	<b>Activity Outcomes</b>
1. Understanding the Basics	Effectively navigate the R console and execute basic commands.
2. Learning techniques of data analysis and Visualization.	Perform data manipulation tasks, including importing, cleaning, and transforming data.
3. Application of the techniques.	Apply statistical methods, such as hypothesis testing and regression analysis, to analyze data.

**GLIMPSES OF THE ACTIVITY**



“Expert sharing valuable insights with students “