#### **ACTIVITY REPORT**



# LUCKNOW UNIVERSITY CONSULTANCY CLINIC (LUCC)



Interaction with

# Department of Statistics and Department of Mathematics and Astronomy

DATE – JUNE 9, 2021.

Lucknow University Consultancy Clinic (PARAMARSH) successfully completed the third day of the series of interactions with the teachers of various departments and faculties of University of Lucknow.

This meet was held as an icebreaking session to know about the potential areas of consultancy and prospective clients in the area of Statistics, Mathematics and Astronomy.

The interaction was held online on zoom platform (Meeting ID: 884 5532 7275, Password: number) Day: Jun 9, 2021Time: 06:00 PM IST with 22 participants from Department of Statistics and Department of Mathematics and Astronomy and LUCC. The meet focused on exploring the ways to move forward to provide expert consultancy to industries and different public and private sector.

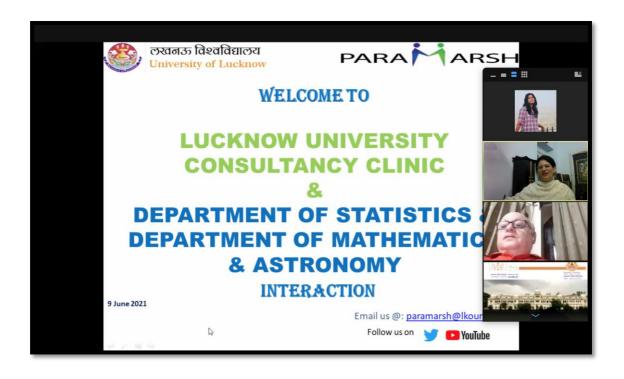
The interaction was carried out by the **Director**, **LUCC**, **Dr. Ritu Narang alongwith her team members namely**, Dr. M.K. Jain (Additional Director), Dr. Nishant Kumar, Dr. Anupama Singh, Dr. Ashish Kumar Srivastava and Dr. Ranvijay Pratap Singh.

Dr. Narang officially welcomed the faculty members of Department of Statistics and Department of Mathematics and Astronomy and apprised the very concept and mechanism of Consultancy Clinic in University of Lucknow via an elaborative digital presentation.

Dr. Narang explained the consultancy policy of University of Lucknow and various benefits of providing consultancy in different arena of society. She also briefed the faculty about the benefits of consultancy work and active role played by academicians. Further, she explained that consultancy could enrich the skillset of faculty members as well provide revenue benefits to University and its teachers. Consultancy can bring out the talent of faculty on a larger platform and the multidisciplinary collaborations can enhance the research areas tremendously thereby contributing to society.



DR. RITU NARANG INTERACTING WITH FACULTIES









After this brief presentation, she invited the faculty members to present their ideas and opinions for bringing in consultancy projects and the issues that we might face for doing so.

➤ Prof. Rajeev Pandey, Head, Department of Statistics suggested elaborative specializations (Annexure I) for the consultancy in different sectors.

- ➤ He also pointed out that the process should be made more fluid for the ease of both the client and the service providers. This was seconded by Dr. Nishant Kumar.
- In this regard, Dr. Narang explained the finance mechanism and assured that that Consultancy Clinic will provide all support to make the process easier. She also explained that the Consultancy Clinic will prove to be a stress-free channel between the client and service provider so that both the parties can benefit.
- ➤ Prof. Poonam Sharma, Head, Department of Mathematics and Astronomy some areas of expertise in the field of applied mathematics that their faculty offers.
- ➤ Dr. Shambhavi Mishra, Department of Statistics stated that the consultancy clinic can help them provide the potential clients where they can offer consultancy.
- ➤ Dr. Alka Misra assured that they will provide the possible areas of expertise for providing Consultancy to clients.

## PROF. RAJEEV PANDEY PRESENTING HIS VIEWS AND SUGGESTIONS



## PROF. POONAM SHARMA PRESENTING HER VIEWS AND SUGGESTIONS



#### DR. NISHANT KUMAR INTERACTING WITH THE HOUSE



#### **ANNEXURE I**

#### CONSULTANCY AREAS IDENTIFIED BY DEPARTMENTS

### OF STATISTICS •

- Data visualization; exploratory data analysis; Categorical and Longitudinal data analysis.
- Statistical data analysis; statistical modeling.
- Unsupervised and supervised learning from data.
- Linear or nonlinear regression analysis; AR(Auto Regressive modelling); Dynamic regression model.
- Survey Methodologies: Designing and conducting sample serveys;
- Resampling methods and their application;
- Data Analysis for Medical Science such as Survival Analysis and Clinical Trials
- Bioanalytical services; pharmacokinetics; biopharmaceutics;
- Multivariate Analysis for the field of Medicine and Industries
- Application of statistics Demographical studies.
- Design and analysis of reproducibility and repeatability studies;
- Statistical Data mining and Big Data Analysis; Clinical data mining; adverse events data mining; safety data mining;
- Nonparametric statistical analysis;
- Computer-intensive statistical methods;
- Business statistics; Management statistics;
- Analytical customer relationship management (analytical CRM a CRM);
- Enterprise analytics; Predictive analytics; Business analytics;
- Marketing analytics; supply chain analytics;
- Multivariate Time Series Analysis
- VAR(Vector Auto Regressive model)
- Multidimensional Scaling
- Bayesian Predictive Modelling and simulation techniques
- Robust statistics;
- ANN & SVM
- Predictive modelling Web analytics Text mining
- Text mining, Networking Mining and Web Mining

# DEPARTMENT OF MATHEMATIC S AND ASTRONOMY

- Mathematical modeling in Pollution control
- Ground water pollution control using effective models
- Mathematical Modeling in various applied sciences
- Architecture for Signal, Image and Vision Applications
- Applications of Operations Research
- Fluid Mechanics
- Approximation and interpolation

The Departments showed interest in interacting with industry associations and agreed to identify their target markets for focussed approach.

The initiative of the Consultancy Clinic was appreciated by all the participants in view of the prospective benefit that can be derived in securing NAAC and NIRF ranking and contributing to sharing of earnings with the institution.

Further, the Department of Mathematics & Astronomy announced that the exact nature of projects along with list of potential target clients will be worked out in consultation with the faculty members. The department would be too willing to share the same with the Consultancy Cell in the next few days.