Department of Mathematics and Statistics - Department Report 2021-22

I. Extension, Co-curricular & Field based Activities

The Department of Maths and Statistics organised a Talk On 'Handling and Analysing Financial Data' by Tania Shah who has done BA(Economics Major) and is currently working in JP Morgan Chase & Co as a Senior Analyst in Risk Management (Portfolio Compliance). The event was held on 3rd December, 2021 at 11:45am on Zoom and went on till 12:50pm. There were 45 participants. She spoke about her experience with dealing with financial data. Since each stock has a variety of attributes, which primarily include price, country data, rating data among other things, choosing what attributes to consider becomes quite significant. Furthermore, she spoke about bond rating terminologies and agencies, on the basis of which firms or a firm's client's invest, along similar lines, she enumerated the importance of rating grades- nobody wants to invest in stocks that don't do well. Other than that, she spoke about how the theoretical knowledge as well as other things that she learned in college, assisted her in the application of financial data which was a huge chunk of her job at JP Morgan. Additionally she stated the importance of a fresh perspective, advising the students to leverage what they are learning right now and use that to develop a newer point of view on things. The event ended with an interactive Q&A session.

- The Department of Mathematics and Statistics, Sophia College (Autonomous) organized a talk on 'Vital Statistics: An Introduction to the Science of Demography' by Anisha Aditi Chaudhary who has done B.A. economics from Sophia College and is currently pursuing her Masters in Population Studies from International Institute of Population Studies, Mumbai. The event was held on 10th February,2022 at 12:15pm on Zoom and went on till 2pm. There were 34 participants. She gave an introduction to population studies, currently her major. She then talked about vital statistics and how it is useful for analyzing real life data. She further gave real life examples such as when builders examine marriage rates and divorce rates to decide on building apartments and why understanding background data is crucial. She also explained about long term implications of 'one child policy' by China and how it affected suicide rates, son preference. Furthermore, she spoke about ageing and dying population, how countries' policy changes due to an ageing population -they provide free accomodation, education and invite international students to combat the problem and boost their economy. She then went on to talk about her research paper in detail and how she plans to collect data regarding the same. The event ended with an interactive QnA.
- The Department of Mathematics and Statistics, Sophia College (Autonomous) organized a talk on '"Data Analytics: A basic guide to understand analytics" by Gayatri Keole who has done B.A. economics from Sophia College for Women and is currently working as a senior analyst at OML(Only Much Louder). The event was held on 25th February,2022 at 12:25pm on Zoom and went on till 1:40. There were 16 participants. She spoke in detail about what exactly is data analytics and explained its types and tools through a presentation. The types included, descriptive, predictive and prescriptive data, and the tools used to work or analyze these kinds of data, range from using computer languages like R, python to working on excel etc. She also focused a lot upon working on basic statistics like mean,median and mode which are extremely helpful and build the foundation for other

methods of handling data. Further she also elaborated on how she works on data at OML which is basically an artist management ,event management and content production company. She also encouraged the students to do internships and talked about her experience at Zomato and EY. She is now planning to do her masters at NUS in Singapore. Overall the talk and the session was very interesting and informative.

II] Contribution to Department and college administration/activities :

Ms S Mendes:

- Head, Department of Mathematics & Statistics
- Member EXSP panel
- Member of Time table Committee (Science)
- Member of Admission Committee (Science)
- IQAC
- NAAC Quantitative Data Collation Committee
- Junior Supervisor for the College Examinations Theory

Ms V Konar

- Member of Attendance Committee (Arts)
- Member of Remedial Teaching Committee (Arts)
- Member of Criterion-1 (NAAC)
- Junior Supervisor for the College Examinations Theory