

DEEN DAYAL UPADHYAYA COLLEGE,  
UNIVERSITY OF DELHI  
**Department of Mathematics**

Hands-on Workshop in  
**MATHEMATICA/EXCEL/TORA**  
(12<sup>TH</sup> JULY – 13<sup>TH</sup> JULY 2018)  
Under DBT Star College Scheme

## **REPORT**

Department of Mathematics of Deen Dayal Upadhyaya College successfully organised a two days Hands-on workshop on Mathematica/Excel/Tora on 12th - 13th July 2018, under the aegis of DBT Star College Scheme.

**Mathematica** is a modern technical computing system used in many technical, scientific, engineering, mathematical, and computing fields.

**Excel** is very beneficial for students. Students can learn by using excel how to convert raw data into meaningful information. **TORA** is mathematical software in the area of operations research which is very easy to use. It is used to solve the problem of Linear Programming, Transportation Model, Integer Programming, etc.

The goal of this program was to encourage the students of program courses to take mathematical practicals for improving their knowledge like calculus, differential equations, linear algebra, statistics, optimization etc. The goal of this program is to give the basic knowledge of Mathematica, Excel and Tora which are used to solve mathematical and scientific problems. Participants had access to computing facilities with these softwares and had an opportunity to hands-on exercises with the same.

Inaugural talk was delivered by Prof. Subhendu Ghosh, Head, Dept. of Biophysics, South Campus, University of Delhi. He motivated the participants to take up mathematics subject in higher studies and gain applied knowledge of mathematics.

**The first day of the program** had one session on tora was taken by Ms. Rashmi Gupta and two sessions on excel, taken care by Mr. Tarachand Prajapati.

**Second day of the program** had Three sessions on mathematica which included calculus, differential equations and multivariate calculus. The resource person for second day was Dr. Dinesh Kumar.

There were total 22 participants (from different colleges of University of Delhi and other universities ) in the workshop.

**Name of College/Dept./University – no. of participants**

Ramanujan College, DU

– 1

Janki Devi Memorial College. DU	–	2
Deen Dayal Upadhyaya College , DU	–	14
Gautam Buddha University, Greater Noida	–	1
Department of Botany DU	–	1
Department of Botany, Jamia	–	1
Jesus and Mary College DU	–	1
Dayal Singh College, DU	–	1

**Organising Committee members**

Dr. Mamta A. Wagh (Convenor)

Dr. Poonam Garg (Co-convenor)

Ms. Rashmi Gupta

Dr. Dinesh Kumar

Mr. Tarachand Prajapati

**Some of the photographs from the workshop:**



**Dr. Mamta A. Wagh addressing the audience on the inaugural of the workshop.**



**Dr. Manoj Saxena, Coordinator, DBT Star College Scheme, welcoming Prof. Ghosh with a sapling.**



**Dr. Poonam Garg (Co-convenor of workshop) presenting a sapling to Dr. Manoj Saxena as a token of thanks.**



**Mr. Tarachand Prajapati introducing Prof. Ghosh to the participants.**



**Dr. Poonam Garg, Dr. Mamta A. Wagh, Prof. Ghosh and Dr. Manoj Saxena.**



**Prof. Ghosh delivering his lecture.**



**Participants attending the session in the computer center.**



**Participants attending technical session in computer center.**



**Participants attending workshop (second day) in Computer lab.**



**Dr. Dinesh Kumar, , Ms. Rashmi Gupta, Dr. Mamta A. Wagh, Dr. Poonam Garg**



**Group photograph with participants.**