|  | **Indira Gandhi Delhi Technical University For Women**  **(Established by Govt. of Delhi vide Act 09 of 2012)**  **Kashmere Gate, Delhi - 110006** |
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**Report on**

**ICT based Short Term Course**

**On**

**Data Science Using R**

Dept. of CSE organized ICT based Short Term Course on “Data Science Using R” from 26-11-2018 to 30-11-2018 in collaborations with NITTTR Chandigarh and it was attended by 37 participants from the university. The participants have successfully completed the hands on experiments and gain a great exposure to R language for Data Science.

**Objectives of Course:**

• To learn the basics of R Programming.

• To install R software and working using R Interface.

• To use various data structures available in R for data input and storage of data.

• To understand descriptive and inferential statistics fundamentals and to implement descriptive and inferential statistics methods in R.

• To perform graphical analysis, predictive analysis using R.

• To extract and analyse real time streaming data and sentiment analysis in R

• To analyse interdisciplinary datasets in R and preprocessing of data.

**Course Content:**

| **Day** | **9:30 -**  **11:00 a.m.** | **11:00-**  **11:30** | **11:30 a.m. -**  **1:00 p.m.** | **1:00 p.m. -**  **2:00 p.m.** | **2:00 p.m.-**  **4:00 p.m.** |
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| 26.11.2018  (Monday) | Inauguration and Registration  (TP / Japjot/Nisha) | Tea-Break | Introduction to R Programming and Installation  (RK) | L  U  N  C  H  B  R  E  A  **K** | Basic programming in R  (Er. Shano Solanki) |
| 27.11.2018  (Tuesday) | Introduction to Data Structures : Vectors and Matrices  (Dr. Gaurav Kumar) | Data Structures : Arrays, Lists, Data frames and Practice  (Dr. Gaurav Kumar) | Graphical Analysis-I  (Er. Shano Solanki) |
| 28.11.2018  (Wednesday) | Creating and Importing Datasets, Reshaping and Transformation of Data  (Dr. Gaurav Kumar) | Missing Values Treatment and Imputation in R,  Analytics of Web Data, JSON, CSV and XML  (Dr. Gaurav Kumar) | Graphical Analysis-II  (Er. Shano Solanki) |
| 29.11.2018  (Thursday) | Social Media Mining and Predictive Analysis using R  (GK) | Big Data Toolboxes and Packages, BigMemory, Data Reduction Packages and Interpretation  (GK) | Inferential and Descriptive Statistics using R-I  (Dr. Shikha Sharma) |
| 30.11.2018  (Friday) | Data Mining and Machine Learning using CARET tool– I  (Er. Nanak Chand) | Data Mining and Machine Learning using CARET tool R Studio – II  (Er. Nanak Chand) | Feedback and Evaluation  (Er. Shano Solanki) |
| **Course Coordinator:** Mrs. Shano Solanki, Asst. Prof., CSE , NITTTR, Chandigarh  **Dr.** Rakesh Kumar, Asst. Prof., CSE, NITTTR, Chandigarh  **Dr.**Shikha Sharma, Sr. Project Manager and Coorporate Trainer, Olam Solutions Pvt. Ltd., Chandigarh  **Dr.** Gaurav Kumar, Managing Director, Magma Research and Consultancy, Pvt. Ltd., Ambala  **Er.** Nanak Chand, Senior Analyst DataScience at RailYatri.in  **Technical Assistance:** Mr. Santosh Tiwari- 8557057880 | | | | | |

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**Ms. Khyati Ahlawat**

**(Coordinator)**

**Assistant Professor**

**Department of CSE**