

# ZAKIR HUSAIN DELHI COLLEGE (University of Delhi)

## **Faculty Details**

Title	Dr.	First Name	Sanchita	Last Name	Sharma	Photograph
Designation		Assistant Professor				
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Phone Number		Office				
ı		Residence		_		
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Web Page		_				
Educational Qualification						
Degree		Ir	Institution			Year
Ph.D. (Mathematics)			Department of Applied Sciences and Humanities, Indira Gandhi Delhi Technical University for Women, Delhi			2021
M.A. (Mathematics)			University of Delhi, Delhi			2012
B.A. (Hons.) Mathematics			University of Delhi, Delhi			2010
Career Pr	ofile					

- 1. Assistant Professor, Department of Mathematics, Zakir Husain Delhi College, University of Delhi, India, March 2023 Present.
- 2. Guest Faculty, Department of Applied Sciences and Humanities, Indira Gandhi Delhi Technical University for Women Delhi, India, September 2022 March 2023
- 3. Assistant Professor (Contractual), Department of Mathematics and Statistics, Banasthali Vidyapith, Rajasthan, India, June 2019 May 2021

**4.** Guest Faculty, Department of Applied Sciences and Humanities, Indira Gandhi Delhi Technical University for Women Delhi, India, August 2014 - May 2018

## **Administrative Assignments**

- Member of NAAC SSR content creation committee, ZHDC (AY 2023-24)
- Member of Admission Enabling committee, ZHDC (AY 2023-24)
- Member of Gandhi Study Circle, ZHDC (AY 2023-24)
- Member of B.A.(Prog.) committee, ZHDC (AY 2022-23, 2023-24)
- Member of Annual Report compilation committee, ZHDC (AY 2022-23)
- Member of Annual day stage management committee, ZHDC (AY 2022-23)

## Areas of Interest / Specialization

Mathematical Programming, Multi-Objective Optimization, Allocation Problems

## **Subjects Taught**

## **Undergraduate Level:**

Differential Equations (UPC: 42357501), Elementary Discrete Mathematics (UPC: 2352201102), Theory of Equations and Symmetries (UPC: 2352202002), Differential Equations Practical (Mathematica), Analytic Geometry, Elementary Linear Algebra, Optimization Techniques (BAS-206), Numerical Methods (BAS-203), Complex Analysis (MATH 209), Applied Mathematics-I (BAS-101), Advanced Engineering Mathematics (BAS-202), Mathematics for Business Application (MATH 109), Mathematics for Management (MATH 306)

## **Postgraduate Level:**

Mathematical Programming (MATH 515), Modeling and Simulation (CS 528), Computational Labs II (Mathematica) (MATH 418L),

#### **Research Guidance**

#### • M.Sc. Dissertation:

- Ms. Anita Kumari (Title: Efficient solutions of Integer Linear Fractional Programming Problem), Banasthali Vidyapith, 2020-2021
- Ms. Shruti (Tile: Pareto optimal solution of cost-time trade-off bulk transportation problem), Banasthali Vidyapith, 2020-2021

#### • M.Sc. Project:

 Ms. Meenakshi Bisht and Ms. Harshita Lunayach (Title: Simulation analysis of some Markovian Queueing Models), Banasthali Vidyapith, 2019-2020

#### **Publications Profile**

- Sanchita Sharma and Shalini Arora, Bi-Objective Capacitated Transportation Problem with Bounds over distributions and requirement capacities, International Journal of Applied and Computational Mathematics, 7(3) (2021), 115. (ISSN: 2349-5103)
- Sanchita Sharma, Rita Malhotra and Shalini Arora, Efficient triads related to transportation problem with common pivotal time, International Journal of System Assurance Engineering and Management, 10 (2019), 1353–1360. (ISSN: 0975-6809)
- Sanchita Sharma, Rita Malhotra and Shalini Arora, Trade-Offs in Bi-objective Transportation Problem corresponding to all Pivotal Times, The Electronic International Journal Advanced Modeling and Optimization, 20 (1) (2018), 33–53. (ISSN: 1841-4311)
- Sanchita Sharma and Shalini Arora, Limitation and Modification: On a Cost Pipeline Trade-Off in a Transportation Problem, **Yugoslav Journal of Operations Research**, 27 (4) (2017), 439–450. (ISSN: 0354-0243)

## **Conference Organization/ Presentations (in the last five years)**

## **Workshop Organization:**

 Member of Program committee in National Workshop on Mathematics: Concepts, Motivation and Applications sponsored by MHRD, January, 11-13, 2020 organized by Center for Excellence in Science and Mathematics Education, Banasthali Vidyapith

#### **Conference Presentations:**

- Efficient Triads of Capacitated Transportation with bounds over distributions and requirement capacities, Conference on Engineering Systems Design and Optimization, (CESDO-2021), G. H. Raisoni College of Engineering and Management, Ahmednagar, Maharashtra, India, March 26-27, 2021
- Bi-objective Assignment Problem with Better Higher Completion Time of Assignment, International Conference on Advances in Smart Materials Emerging Technologies (ASMET 2020), IGDTUW, Delhi, India, January 23-24, 2020.

## **Association With Professional Bodies**

Member, Operational Research society of India (ORSI)

#### **Other Activities**

## **Workshops/Conferences/FDP Attended:**

- Inter-Disciplinary two- week Refresher Course in "Managing Online Classes & Cocreating MOOCS 27.0" Teaching Learning center, Ramanujan College, University of Delhi under the aegis of Ministry of Education, PMMNMMTT, June 06-20,2023
- Five days national level online workshop on Software in Mathematics and Statistics (WSMS 2021), Department of Mathematics, National Institute of Technology Tiruchirappalli, August 02–06, 2021.
- 5th Faculty Induction Programme, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD, Govenment of India, Banasthali Vidyapith, Rajasthan, November 17 December 16, 2019.
- One week short term course on Modeling and Simulation Tools, Department of Mathematics, Malviya National Institute of Technology Jaipur, July 03-07, 2017.
- National Workshop on Mathematical Modelling and Computational Techniques using Mathematica, Department of Mathematics, Zakir Husain Delhi College, University of Delhi, India, March 30-31, 2017.
- 49th Annual Convention of the Operational Research Society of India, Birla Institute of Management Technology, Greater Noida, India, December 12–14, 2016
- Short term course on optimization using MATLAB through ICT, Mechanical Engineering Department, Indira Gandhi Delhi Technical University for Women, Delhi, India, October 24–28, 2016.
- International Conference on Recent Advances in Optimization Theory and Applications, Department of Mathematics, University of Delhi, India, January 30-31, 2016.
- Workshop on Research Methodology and Tools, Research and Consultancy Wing, Indira Gandhi Delhi Technical University for Women, India, November 6, 2015.