



## Faculty Proforma- Dr. Narender Kumar

Title	<b>Dr.</b>	First Name	<b>Narender</b>	Last Name	<b>Kumar</b>	Photograph
Designation	<b>Assistant Professor</b>					
Address	<b>Department of Mathematics</b> <b>Gargi College, Sirifort Road</b> <b>New Delhi -110049</b>					
Phone No	Office					
	Residence*					
	Mobile*					
Email/ Web-Page	<a href="mailto:narender.kumar@gargi.du.ac.in">narender.kumar@gargi.du.ac.in</a> <a href="mailto:nkumariitd@gmail.com">nkumariitd@gmail.com</a>					
<b>Educational Qualifications</b>						
Degree	Institution				Year	
B.Sc. (P.C.M)	<b>CCS University, Meerut</b>				<b>2006</b>	
M.Sc. (Mathematics)	<b>IIT Delhi</b>				<b>2009</b>	
Ph.D. (Mathematics)	<b>Jamia Millia Islamia, Delhi</b>				<b>2020</b>	
Others	<b>NET, GATE, JAM</b>					
<b>Career Profile</b>						
<ul style="list-style-type: none"> <li>• Worked as Assistant Professor in the department of mathematics in Deshbandhu College (University of Delhi) from August 2009 to August 2010.</li> <li>• Worked as Assistant Professor in the department of mathematics in PGDAV College (University of Delhi) from August 2010 to September 2010.</li> <li>• Working as Assistant Professor in the department of mathematics in Gargi College (University of Delhi) since September 2010.</li> </ul>						
<b>Administrative Assignments</b>						
<ul style="list-style-type: none"> <li>• Engaged in several administrative assignments in the college.</li> </ul>						
<b>Areas of Interest / Specialization</b>						
<b>Mathematical Modeling, Population Dynamics</b>						
<b>Subjects Taught</b>						
<ul style="list-style-type: none"> <li>• <b>Pure Mathematics:</b> Real Analysis, Algebra, Linear Algebra, complex analysis</li> <li>• <b>Applied Mathematics:</b> Differential Equations, Calculus, Linear Programming, Numerical Analysis</li> <li>• <b>Computer Oriented:</b> Programming in Visual Basic, Discrete Mathematics, Computational Skills, Database Management System, Computer applications, Python, R, Latex</li> </ul>						

## Recent Publications

- Narender kumar, Shama Parveen, and Ravins Dohare. 2020. “Comparative Transmission Dynamics and Optimal Controls for Chikungunya, Dengue and Zika Virus Infections”. *Letters in Biomathematics* 6 (2), 1-14.
- Kumar, Narender, et al. "RC-Network and Comm-Network for Improvement of Research Collaboration and Communication among Delhi University Teachers." *Performance Management of Integrated Systems and its Applications in Software Engineering*. Springer, Singapore, 2020. 227-236.
- Rai, Arpita, Mandeep Kaur, Virender Gombra, Shamimul Hasan, and Narender Kumar. "Comparative evaluation of curcumin and antioxidants in the management of oral submucous fibrosis." *Journal of investigative and clinical dentistry* 10, no. 4 (2019): e12464.
- Narender Kumar, Md Imam Faizan, Shama Parveen, Ravins Dohare, “ Temperature and rainfall dependent mathematical modelling for progression of Zika virus infection”, *International Journal of Mathematical Modelling and Numerical Optimisation, Indersciences*, vol. 9, no. 4,pp. 339–365, 2019. DOI: 10.1504/IJMMNO.2019.10021526
- N. Kumar, M. Abdullah, M. I. Faizan, A. Ahmed, H. A. Alsenaidy, R. Dohare, and S. Parveen, “Progression dynamics of zika fever outbreak in El salvador during 2015–2016: a mathematical modeling approach,” *Future Virology*, vol. 12, no. 5,pp. 271–281, 2017.
- Developed Lesson “Parametric Equations and Their Representations” Discipline Courses-I in Mathematics (Semester-I Paper: Calculus-I) for FYUP under University of Delhi.
- Developed Lesson “Countable and Uncountable Sets” Discipline Courses-I in Mathematics (Semester-II Paper: Analysis-I) for FYUP under University of Delhi.

## Conference Organization/ Presentations

- Presented work in many conferences at national and international level.

## Research Projects (Major Grants/Research Collaboration)

- Communication and Research Collaboration Network among Delhi University Teachers
- Data Envelopment Analysis (DEA)
- Software Development for Fixed Dome type Biogas Plant
- Sequential and Linear Sequential Machines