




Title:	Dr.	First Name: RAJNI	Last Name: ARORA	
Designation:	Assistant Professor			
Department:	Mathematics			
Address:	455/2, GF, Adarsh Nagar, Gurugram, Pin-122001			
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Educational Qualifications (from Bachelor's Degree):			
Degree	Subject	University/ College/Institution	Year
B.Sc.(H) Mathematics	Mathematics	Sri Venkateswara College, Univeristy of Delhi	2008-11
M.Sc. Mathematics	Mathematics	Sri Venkateswara College, Univeristy of Delhi	2011-13
PhD	Mathematics	Department of Mathematics, University of Delhi	2019

Experience:					
	Name of the University/College/ Institute/Organisation	Designation & Status (Permanent /Ad-hoc)	From	To	Effective Time Period
Teaching	Sri Venkateswara College	Ad-hoc	02-01-2017	30-12-2022	6 Years
	Shyam Lal College	Permanent	27-03-2023	till date	
Research/ Corporate					
Consultancy					

Teaching - Learning Process (During the Academic Year 2019-2020)		
Are You using ICT (LMS, E-Resources)?	If Yes, Please give the details below:	
	Name	Total Numbers
E- Resources		
Techniques and Platforms		

Career Advancement and Contribution to College Corporate Life (Last three years till June 2020):				
	Name of the Committee/ Centre/ Society/ Cell	Designation	From	To
Convenor/Member of Committees	Sports Committee, Sri Venkateswara College	Member	2019	2022
	IQAC, Sri Venkateswara College	Member	2021	2022
	Center for Skill Development, Shyam Lal College	Member	2023	till date
Any Other Administrative Responsibility (Bursar, Coordinator, Superintendent etc.)				

Areas of Interest/Specialisation:	
S.No.	Areas of Interest/ Specialisation
1	Numerical Methods for partial differential equations

Subjects Taught (During the Academic Year 2019-2020)			
S.No.	Subject	S.No.	Subject
1	Ring Theory and Linear Algebra-I	4	Differential Equations
2	Probability Theory and Statistics	5	Statistical Software R
3	Numerical Methods	6	Linear Algebra

Publications: Citation Index in Scopus/Web of Science or Pub Med/ Indian Citation Index

Title of Paper	Name of the Author	Title of the Journal	Year of Publication	Citation Index	h-Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations	Impact factor, if any	
Exponential b-spline collocation method for the numerical solution of one-space dimensional non linear wave equation with strong stability preserving time integration	Rajni Arora, Swarn Singh, Suruchi Singh	International Journal of Advance Research in Science & Engineering	2015			Department of Mathematics, DU	2		Before June 2018
New highly accurate stable schemes for the solution of telegraphic equation with Neumann boundary conditions	Swarn Singh, Suruchi Singh, Rajni Arora	Neural, parallel and Scientific Computations	2016		20	Department of Mathematics, DU	2		
Numerical solution of second order one dimensional hyperbolic equation by exponential B-spline collocation method	Swarn Singh, Suruchi Singh, Rajni Arora	Numerical Analysis and Applications,	2017		15	Department of Mathematics, DU	12	0.81	
Unconditionally stable modified methods for the solution of two- and three-dimensional telegraphic equation with Robin boundary conditions	Swarn Singh, Suruchi Singh, Ping Lin, Rajni Arora	Numerical Methods of Partial Differential Equations	2018		68	Department of Mathematics, DU	3	3.568	
An Unconditionally Stable Numerical Method for Two-Dimensional Hyperbolic Equations	Swarn Singh, Suruchi Singh, Ping Lin, Rajni Arora	East Asian Journal on Applied Mathematic	2019		21	Department of Mathematics, DU	2	2.011	July 2018 - June 2019
Numerical solution of second-order two-dimensional hyperbolic equation by bi-cubic B-spline collocation method	Rajni Arora, Swarn Singh, Suruchi Singh	Mathematical Sciences	2020		20	Department of Mathematics, DU	7	2.07	July 2019-June 2020

Books and Chapters in edited Volumes/Books published, and paper in National /International conference Proceeding per teacher during the Year

Title of Book/Paper/ Book Chapter	Publisher	National/International	Year	
				Before June 2018
				July 2019- June 2020

Conference/ Seminar/ Symposium/ Workshop/ Presentation:						
Sr. No.	National/ International/state	Topic of the Conference/Seminar/Workshop	Paper Presentation/Attend/ Resource Person	Date	Duration	
1	International Conference held at JNU	Recent Innovation in Science, Engineering and Management	Paper Presentation	Nov 22, 2015	Nov 22, 2015	Before June 2018
2	International Conference held at SAU	Current Trends in PDEs: Theory and Computations	Paper Presentation	Dec 29, 2015	Dec 28-30, 2015	
3	Workshop held at ITM, Vadodara	Modelling week and study group meeting on industrial problems	Attended		March 10-19, 2016	
4	International Conference held at PU	Recent Advances in Theoretical & Computational Partial Differential Equations with Applications	Paper Presentation	Dec 7, 2016	Dec 5-9, 2016	
5	International Conference held at DU	Annual Conference of the Society of Mathematical Sciences	Attended	May 1-2, 2017	May 1-2, 2017	
6	International Conference held at IITB	Recent Advances in PDEs: Theory, Computations and Applications	Contributed talk	June 9, 2017	June 8-10, 2017	
7	International Conference held at SAU	Current Trends in Theoretical and Computational Differential Equations with Applications	Paper Presentation	Dec 3, 2017	Dec 1-5, 2017	
8	International Conference held at SAU	Mathematical Modelling and Computations	Paper Presentation	Dec 1, 2018	Dec 1-3, 2018	July 2018 - June 2019
8	Workshop organized by CPDHE	NEP-2020 Implementation plan: Strategic Action Plan and Goals	Attended		Aug 31, 2022	July 2019- June 2020
9	Workshop organized by ZHDC, DU	Data Manipulation and Visualization through Statistical Software R	Attended		July 27-31, 2021	
10	International Conference held at SLC, DU	Bhartiya Business Practices: A roadmap to future Sustainability	Attended		April 17-18, 2023	
Research Projects/ Innovation Projects (Major Grants/Research Collaboration):						
S.No.	Title of the Project	Funding Agency	Status/Output			
Research Guidance (Ph. D./ M. Phil.):						
	No. of Ph.D. Students	No. of M.Phil. Students				
Awarded						
Submitted						
Under Progress						
Fellowships/Awards /Distinctions/Recognitions:						

Year of Award	Name of the Fellowship/Award/ Distinction/ Recognition	Designation	Name of the Academic Bodies /Association	International /National/ State
2012	South Campus Endowment Scholarship	First rank in MSc Mathematics Prev.	University of Delhi South Campus	
Incentive to the teachers who receive recognition/awards				
State	National		International	
Association with the Professional Bodies:				
	Name of the Organisation		Year	
Membership				
Any Other				
Development of E-Learning Delivery Process/Material:				
S.No	Title of the Module	Recognised by/Submitted at/ Delivered at any government setup		
1	e-chapter :Introduction to Numerical (ISSN: 2349-154X)	VLE, NMEICT,ILL, University of Delhi		
2	e-chapter: Methods for Solving Non-Linear Equations	VLE, NMEICT,ILL, University of Delhi		
3	e-chapter: Methods for Solving System of Linear Equations	VLE, NMEICT,ILL, University of Delhi		
4	e-chapter: Interpolation	VLE, NMEICT,ILL, University of Delhi		
Refresher/ Orientation Programme/ FDP / Other Specialised Courses:				
S.No.	Topic	Name of the Organiser	Place	Duration and Year
1	Faculty Induction Training/Orientation Programme	TLC, Ramanujan College, DU	Delhi	April 23 to May 22, 2023
2	FDP on 'Python: Essentials, programming and analytics'	University of Delhi and Guru Angad Dev Teaching Learning Center, SGTB Khalsa College	Delhi	Oct 27 to Nov 3, 2022
3	FDP on 'Managing Online Classes and Co- Creating MOOCS'	TLC, Ramanujan College, DU	Delhi	April 6 to May 6, 2022
4	FDP on 'ICT enhanced teaching and learning'	IQAC, Sri Venkateswara College,DU	Delhi	Oct 13 to Oct14, 2018
5	FDP on 'Climate across the curriculum: Resources for integrating climate topics in Discipline-specific teaching'	IQAC, Sri Venkateswara College,DU	Delhi	Nov 1 to Nov 4, 2018
Declaration				
I do hereby solemnly declare that the information given and the statements made by me are correct and true to the best of my knowledge				
				Dr Rajni Arora