Faculty Details Proforma for DU Web-site

Photograph

	Title	First Name	Middle Name	Last Name
1	Dr.	Ritu		Arora
2	**Designation**	Associate Professor		
3	**Permanent**	Permanent		
	Temporary/ Ad-hoc (Please specify)			
	Work Experience (Years of experience)	30+ years		
4	**Address:**	Janki Devi Memorial College, S.G.R.H. Marg, New Delhi -110060		
5	**Phone No: Office**	01125787754		
	College Email	ritu@jdm.du.ac.in		
6	**Educational Qualifications (Highest Degree)**	Ph.D.		
7	**Orientation/ Refresher/ FDP/ any other**	1. Refresher Course in Mathematics (Math-14) entitled 'Analysis' Centre for Professional Development in Higher Education, University of Delhi, May 13 to June 2, 1998. 2. 57th Orientation Course, Jamia Milia Islamia, New Delhi, February 19 to March 21, 2002. 3. 5th Refresher Course in Mathematics, Jamia Milia Islamia, New Delhi, January 20 to February 08, 2003. 4. 6th Refresher Course in Mathematics, Jamia Milia Islamia, New Delhi, February 07-28, 2004. 5. Attended a 7-day Online FDP on "ICT Enabled Teaching and Learning" organised by Janki Devi Memorial College in collaboration with Teaching Learning Centre (TLC) of Ramanujan College, University of Delhi (Ministry of Human Resource Development- Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) from 7th - 13th September, 2020. 6. Attended an FDP on "New Education Policy: The Future of Higher Education" organised by College of Vocational Studies, University of Delhi with IQAC on 8th February, 2021.		

		7. Participated in a Faculty Development Program on "LaTeX" organized by IIT Bombay- Spoken Tutorials during June 01-06, 2021.
		8. Participated in a Faculty Development Program on "R" organized by IIT Bombay- Spoken Tutorials during June 01 - 06, 2021.
		9. Attended one-week Faculty Development Program on Qualitative Data Analysis during April 11-17, 2022 organised by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education (Pandit Madan Mohan Malviya National Mission on Teachers and Teaching).
		10. Attended an online one-week Faculty Development Programme on "E-Content Development" from 20 – 26 August, 2022 organised by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry Of Education Pandit Madan Mohan Malaviya National Mission On Teachers And Teaching.
	Participation in Workshops	1. Workshop on e-learning, South Campus, University of Delhi, August 25-27, 2006.
		2. Workshop on e-learning, South Campus, University of Delhi, October 03-07, 2006.
		3. ICT Workshop for Capacity Building of Delhi University Staff conducted by ILLL, University of Delhi, December 21-23, 2009.
		4. National Workshop on Numerical Methods and Differential Equations in Computational Science, Deen Dayal Upadhyaya College (University of Delhi), Delhi, February 01-05, 2011.
		5. 'Introduction to Mathematica' a training course conducted by Delhi University Computer Centre, May 30- June 03, 2011.
		6. Workshop on Foundation Course 'Building Mathematical Ability' conducted by Centre for Professional Development in Higher Education, University of Delhi, May 20-22, 2013.
		7. Workshop on Foundation Course 'Methodology of Teaching Science and Mathematics to students with Vision Impairment' conducted by Centre for Professional Development in Higher Education, University of Delhi, June 18-19, 2013.

8. Convener, Workshop on LaTeX and HTML, Janki devi Memorial College, October 07- 08, 2016.

9. ICT workshop on 'Excel and Google spreadsheets' organized by JDM college on 27th October, 2016.

10. Attended IP Awareness/Training program online under NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION on January 05, 2022 organized by Intellectual Property Office, India.

11. Attended an International Workshop on "Wavelets and its Applications: Image Processing, Data Science and PDEs" organized by Department of Mathematics, Manav Rachna University, Faridabad in collaboration with Department of Mathematics, IIT Indore from December 06 - 10, 2021.

12. Convenor for the National Webinar **Domestic Violence** organized by the Department of Mathematics, Janki Devi Memorial College, University of Delhi on 7th April, 2022.

13. Resource Person & Convenor, 3-Day Online Workshop on the Basics of MS Word, Excel and Power Point during May 19-21, 2022, Organised by Department of Mathematics, Janki Devi Memorial College under the aegis of IQAC-JDMC.

14. Resource Person and Convener, 3-Day Online Workshop on "MS Word, MS PowerPoint and MS Excel-Level-2" held from 29th September to 1st October 2022 organized by the Department of Mathematics, Janki Devi Memorial College, University of Delhi.

15. Attended the five-day National Workshop on "Introduction to Python for Meta-analysis of Data" during November 01-05 2022, organised by the Internal Quality Assurance Cell, Zakir Hussain College from 01-11-2022 to 05-11-2022.

16. Resource Person for the National Webinar "Basics of Microsoft Excel" organized by the Department of Mathematics, under the aegis of NCWEB, Teaching Centre, JDMC, University of Delhi on 12th November 2022.

17. Resource Person for the National Webinar "Formulas and Formatting in Excel" organized by the Department of Mathematics, under the aegis of NCWEB Teaching

		Centre, JDMC, University of Delhi on 19th November 2022.
		18. Attended a five-day National Workshop on "Manipulation and Realization of Data through R" organised by the Internal Quality Assurance Cell, Zakir Hussain College from 16-12-2022 to 21-12-2022.
		19. Attended the workshop on "Gender Sensitization"on 20th February, 2023 organised by The IQAC and Centre for Gender Equity Studies, Janki Devi Memorial College.
		20. Resource Person for the workshop "Let's Begin with Excel" on 31st May 2023, organized by Sociology Department, JDMC.
8	**Administrative Assignments**	
	Department (in the last two years)	TIC, Dept of Mathematics Workload Committee Time-Table Committee Admission Committee Screening Committee
	College (in the last two years)	Convener, Workload Committee Convener, Examination Committee Convener, Time-Table Committee Convener, ICT Committee Member, Promotion Committee Member, Provident Fund Committee Member, Admission Committee Member, Moderation Committee Internal Auditor, ISO21001:2018
	University (In the entire tenure)	Member, Faculty of Mathematical Sciences, University of Delhi -Twice Member, Curriculum Development Committee (UGCF-2022 based on NEP 2020)
9	**Areas of Interest / Specialization**	Algebraic Coding Theory
10	**Subjects Taught (in the last three years)**	Real Analysis, Theory of Real Functions, Reimann Integration and Uniform Convergence, Elementary Real Analysis, Sequence and Series of Functions, LaTex Practical
11	**Research Guidance**	NA
12	**Publications Profile**	**Research Papers**

1. B.K. Dass and Ritu Arora (2010), Codes correcting repeated burst errors blockwise *Applied Mathematical Sciences*, Vol. 4, No. 49, pp. 2405-2416.
2. B.K. Dass and Ritu Arora (2010) Error locating codes dealing with repeated low-density burst errors *Ratio Mathematica*, Vol. 20, pp. 67-International, UGC CARE-1
3. B.K. Dass and Ritu Arora (2012) Error locating codes dealing with repeated burst errors *Italian Journal of Pure and Applied Mathematics,* Vol. 29, pp.109-118. International, SCOPUS Indexed
4. Surbhi Madan, Poonam Garg, Ritu Arora, Dhiraj Kumar Singh, *Estimating the Parameters of Covid-19 Cases in South Africa*, Biosciences Biotechnology Research Asia, Volume 19(1), p. 153-162, March 2022. ESCI
5. Ritu Arora, Surbhi Madan, Poonam Garg and Dhiraj Kumar Singh, *Analysis Of Covid-19 Spread In Himalayan Countries,* Advances and Applications in Mathematical Sciences, Volume 21, Issue 6, p. 3249-3263, April 2022. ESCI
6. Surbhi Madan, Ritu Arora, Poonam Garg and Dhiraj Kumar Singh, *Analysis and Prediction of Covid-19 Spread Using Numerical Method*, Advances in Differential Equations and Control Processes, Volume 27, p. 97-114, April-June 2022. ESCI
7. Poonam Garg, Surbhi Madan, Ritu Arora, Dhiraj Kumar Singh, *Covid-19 cases in Morocco: A comparative analysis,* Results in Nonlinear Analysis, 5 (2022) No. 3, 337–346. International, SCOPUS Indexed
8. Poonam Garg, Ritu Arora, Surbhi Madan and Dhiraj Kumar Singh, *Estimation of Parameters and Stability Analysis of Coronavirus Pandemic,* Advances in Differential Equations and Control Processes, Volume 28, Pages 119 - 134, 2022. ESCI
9. Surbhi Madan, Poonam Garg, Ritu Arora and Esha Garg, *On Correction of Repeated Burst Errors in Multiple Blocks*, Advances and Applications in Discrete Mathematics,   Volume 33, Pages 45 – 71, 2022.

			ESCI
			10. Ritu Arora, Surbhi Madan, Poonam Garg and Esha Garg, *Multi-block two repeated fixed burst error correcting linear codes*, Ratio Mathematica, Volume 43, Pages 131-150, 2022. International, UGC CARE-1
			11. Ritu Arora, Surbhi Madan, Poonam Garg and Dhiraj Kumar Singh, *Bounds for Codes Detecting Repeated Bursts in Unequal Blocks*, Bull. Cal. Math. Soc., Volume 115(3), Pages 387-396, 2023. National, UGC CARE-1
			12. Ritu Arora, Poonam Garg, Surbhi Madan, *Linear Codes Detecting Repeated b(fixed) Bursts of Unequal Lengths in Distinct Sub-Blocks,* Advances and Applications in Discrete Mathematics, Volume 40(1), Pages 19-42, 2023. ESCI
	Authored Books (Single/ Co-authored)	NA	
	Edited Books (Single/ Co-edited)	NA	
	Chapter in book (Single/ Co-edited) (Please specify whether National or International)	1. B.K. Dass and Ritu Arora (2010) Codes correcting low-density repeated burst errors blockwise in *Advances in Information Theory and Operations Research,* VDM Verlag (Germany), pp. 67-93. International	
	Article in Peer-reviewed Journal (Single/ Co-edited) (Please specify whether National or International, UGC Listed)	Same as Publication profile	
	Conference Proceedings (or any other form of published content)		
	Creative Writing		
	Translation		
13	**Conference Participation (in the last three years)**	• UGC sponsored National Seminar on	

	[Please specify whether National or International]	"*Applications of Mathematics in Social Sciences*" organised by *Shyama Prasad Mukherji College for Women University of Delhi on* March 03-04 , 2022. • UGC sponsored National Conference on "Advanced Statistics and Applied Sciences - 2022 (ASAS - 2022)" organised by Ramanujan College from 30th - 31st March, 2022. • Convener of an International Conference on "Pure and Applied Mathematics 2024 (ICPAM 2024)" organized by the Department of Mathematics, Janki Devi Memorial College on February 22-23, 2024. The conference was supported by the National Board of Higher Mathematics (NBHM)
	Papers Presented	• Presented a paper '*Block-wise Location of Repeated Burst Errors of Fixed Length'* at the UGC-Sponsored National Seminar on "*Applications of Mathematics in Social Sciences*" organised by *Shyama Prasad Mukherji College for Women University of Delhi on* March 03-04 2022. • Presented a paper '*Linear Codes Locating Repeated Bursts of Length b(fixed)'* at the UGC-Sponsored Two Day National Conference on "Advanced Statistics and Applied Sciences - 2022 (ASAS - 2022)" organised by Ramanujan College from 30th - 31st March, 2022. • Presented a paper "*Estimating the parameters of Covid-19 cases through Mathematical Model"* at the International Conference on "Statistics and Data Science (SDS-2023)" organised by Dept. of Statistics, Sadguru Gadage Maharaj College, Karad on 24th to 25th, February 2023. • Presented a paper "*Bounds for Correction of m-Repeated Bursts of Length b(fixed) in Multiple Sub-Blocks"* at the International Conference on "Analysis and Its Applications (ICAA-23)" organised by the Department of Mathematics, Shivaji College, University of Delhi from 27th to 28th, February 2023.
	Sessions Chaired	• Chaired a Paper Presentation Session at the "International Conference on Pure and Applied Mathematics 2024" on 22nd February, 2024. • Chaired a Plenary talk at the "International Conference on Pure and Applied Mathematics 2024"on 23rd February, 2024.
	Discussant or any other	

14	**ICT enabled teaching-learning**	Google classroom and Google meet	PPT Presentation	Smart Board
	Development of e-content (Please specify if it is e-lesson, e-quizzes, e-lectures; also mention the Institution for which the same has been prepared)			
	Development of MOOCs			
15	**Contribution to development of Syllabi**			
16	**Research Projects**	Major Grants	Research Collaboration	UGC Funded Research Projects
17	**Awards and Distinctions**	Received Hukum Chandra Best Paper Award (Second Prize) for the paper titled '*Linear Codes Locating Repeated Bursts of Length b(fixed)*' at the UGC-Sponsored Two Day National Conference on "Advanced Statistics and Applied Sciences - 2022 (ASAS - 2022)" organised by Ramanujan College from 30th - 31st March, 2022.		
18	**Association With Professional Bodies**	• Cryptology Research Society of India • Academy of Discrete Mathematics and Applications • ISO Certified Internal Academic Auditor		
19	**Other Activities**	Has successfully completed the course and assessment requirements for ISO21001:2018-Internal Auditor, International Standard for "Management Systems for Educational organizations-EOMS" in December 2022. Internal Auditor for EOMS internal (ISO:21000) audit held		

		in JDMC in 2023 and 2024.

This is to certify that the information provided by me is correct and to the best of my knowledge

Name and Designation: Dr. Ritu Arora (Associate Professor)