




## Shivaji College Faculty Details Proforma

Title	Prof.	First Name	Surbhi	Last Name	Madan	Photograph
<b>Designation</b>		<b>Professor</b>				
<b>Address</b>		A-5B/324, Gate No. 9, Shanti Kunj Apartments Paschim Vihar New Delhi 110063				
<b>Office Phone No.</b>		01125116644				
<b>Residence</b>		01125255298				
<b>Mobile</b>		9711140225				
<b>Email</b>		<a href="mailto:surbhi@shivaji.du.ac.in">surbhi@shivaji.du.ac.in</a>				
<b>Web-Page</b>						
<b>Educational Qualifications</b>						
<b>Degree</b>	<b>University/Institute</b>				<b>Year</b>	
<b>Ph.D.</b>	University of Delhi				2012	
<b>M.Phil./M.Tech.</b>	University of Delhi				2000	
<b>PG</b>	Kirori Mal College, University of Delhi				1998	
<b>UG</b>	Kirori Mal College, University of Delhi				1996	
<b>Any Other Qualification</b>						
<b>Career Profile</b>						
2002- Till Date Shivaji College (University of Delhi) 2001-2002 Temporary Lady Shri Ram College (University of Delhi) 2000-2001 Temporary Jesus and Mary College (University of Delhi) 1999-2000 Ad-hoc Kirori Mal College (University of Delhi)						

**Administrative Assignments**

S. No	Nature of Activity	Designation	Period	
			From	To
1	NAAC committee	Convener (Criterion 5)	2019	2020
2	India Today Ranking Coordinator	Convener	2019	2020
3	Preparing College Timetable (Timetable committee)	Member	2019	2020
4	Remedial Cell	Member	2019	2020
5	NAAC committee	Convener (Criterion 1)	2020	2021
6	India Today Group-MDRA Best Colleges ranking 2021	Convener	2020	2021
7	Screening Committee for faculty promotions	Member	2020	2021
8	Remedial Cell	Member	2020	2021
9	Preparing College Timetable	Member	2020	2021
10	Various National Ranking	Nodal Officer	2021	2022
11	Teaching, Learning Centre and Recording Studio	Co-coordinator	2021	2022
12	NAAC SSR	Convener (Criterion 1)	2021	2022
13	IQAC	Member	2021	2022
14	Solar Panel Cell	Member	2021	2022
15	Value Added Courses Committee	Member	2021	2022
16	Student Grievance Cell during Covid	Member	2021	2022
17	Website Committee	Member	2021	2022
18	Departmental Alumni Committee	Member	2021	2022
19	Various National Ranking	Nodal Officer	2022	2023
20	Teaching, Learning Centre and Recording Studio	Co-coordinator	2022	2023
21	NAAC AQAR	Convener (Criterion 1)	2022	2023
22	Solar Panel Cell	Member	2022	2023
	Value Added Courses Committee	Member	2022	2023
23	Website Committee	Member	2022	2023
24	Departmental Alumni Committee	Member	2022	2023

<b>Areas of Interest/Specialisation</b>					
<ul style="list-style-type: none"> <li>Algebraic Linear Codes</li> <li>Mathematical Modeling</li> </ul>					
<b>Subjects Taught</b>					
<ul style="list-style-type: none"> <li>Real Analysis</li> <li>Theory of Functions</li> <li>Riemann Integration</li> <li>Sequence and Series of functions</li> <li>Metric Spaces</li> </ul>					
<b>Innovation Project/Research Projects (Major Grants/Research Collaboration)</b>					
Real Time Traffic Solution	Principal Investigator	12 months, Innovation Project	2013-14	3,00,000/-	University of Delhi
<b>Publications Profile (Research Papers/Books)</b>					
<ol style="list-style-type: none"> <li>B.K. Dass and Surbhi Madan, Repeated Burst Error Locating Linear Codes, Discrete Mathematics, Algorithms and Applications, 2(2): 181-188, 2010.</li> <li>B.K. Dass and Surbhi Madan, Blockwise Repeated Burst Error Correcting Linear Codes, Ratio Mathematica – Journal of Applied Mathematics, 20: 97-126, 2010.</li> <li>B.K. Dass and Surbhi Madan, Blockwise Repeated Low-density Burst Error Correcting Linear Codes, Italian Journal of Pure and Applied Mathematics, 30:87-100, 2013.</li> <li>B.K. Dass and Surbhi Madan, Repeated Low-Density Burst Error Locating Codes, Acta Universitatis Apulensis, 33:175-191, 2013.</li> <li>Surbhi Madan, Shveta Grover, Dhiraj Kumar Singh, On the stability of a multiplicative type sum form a functional equation. Ratio Mathematica, 41:7-18, 2021.</li> <li>Surbhi Madan, Poonam Garg, Ritu Arora, Dhiraj Kumar Singh, Estimating the Parameters of Covid-19 Cases in South Africa, Biosciences Biotechnology Research Asia, 19(1): 153-162, 2022.</li> <li>Ritu Arora, Surbhi Madan, Poonam Garg and Dhiraj Kumar Singh, Analysis of Covid-19 Spread In Himalayan Countries, Advances and Applications in Mathematical Sciences, 21(6): 3249-3263, 2022.</li> <li>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, 27:97-114, 2022.</li> <li>Poonam Garg, Surbhi Madan, Ritu Arora, Dhiraj Kumar Singh, Covid-19 cases in Morocco: A comparative analysis, Results in Nonlinear Analysis, 5(3):337–346, 2022.</li> <li>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, 28:119-134, 2022.</li> <li>Surbhi Madan, Poonam Garg, Ritu Arora and Esha Garg, On Correction of Repeated Burst Errors in Multiple Blocks, Advances and Applications in Discrete Mathematics, 33: 45-71,2022.</li> <li>Ritu Arora, Surbhi Madan, Poonam Garg, and Esha Garg, Multi-block two repeated fixed burst error correcting linear codes, Ratio Mathematica, 43, PP 131-150, 2022</li> <li>Dhiraj Kumar Singh, Shveta Grover, Surbhi Madan, ON SOME PEXIDER TYPE SUM FORM FUNCTIONAL EQUATIONS" Montes Taurus J. Pure Appl. Math. 4 (3), 270–281, 2022.</li> <li>Ritu Arora, Poonam Garg, Surbhi Madan and Dhiraj Kumar Singh, Bounds for Codes Detecting repeated Bursts in Unequal Blocks, Bulletin of the Calcutta Mathematical Society, 115(3): 387–396, 2023.</li> </ol>					

15. Ritu Arora, Poonam Garg and Surbhi Madan, Linear Codes Detecting Repeated b(fixed) Bursts of Unequal Lengths in Distinct Sub-blocks, Advances and Applications in Discrete Mathematics, 40(1), 19–42, 2023.

**Conference/Seminar/Faculty Development Programme/Workshop**

	Career opportunities in Mathematics	Invited Speaker	29-05-2021	Star College Scheme, Shivaji College
	Career opportunities in Mathematics	Invited Speaker	23-06-2021	Star College Scheme, Shivaji College
	Women in Higher Education	Invited Talk	18-08-2021	Rama Devi Bajla Mahila Mahavidyalaya
	Role of Education in Gender equality	Key Speaker	23-11-2021	Monad University
	Software R	Resource person	14-02-2022, 18-02-2022, 21-02-2022, 26-02-2022	Zakir Hussain College and Spoken Tutorial IIT Bombay
	Digital upskilling workshop	Resource person	15-02-2022	Botany Department, Zakir Hussain College, University of Delhi.
	Bounds for Codes Blockwise Correcting Repeated Burst Errors	Presented a paper	3-4, 03-2022	UGC
	On linear codes blockwise correcting repeated burst errors	Presented a paper	31-03-2022	UGC
	Lecture on MS-Excel	Resource Person	21-05-2022	JDMC

**Research Guidance (Supervision of Doctoral Thesis/Dissertations)**

**Awards and Distinctions**

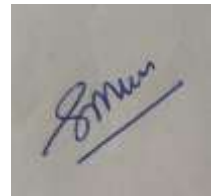
	1.	Best Display	Innovation Project	University of Delhi	22.02.2015
	2.	Best Innovative Idea	Innovation Project	University of Delhi	22.02.2015
	3.	Teaching Excellence Award for Innovation	Innovation Project	University of Delhi	1.05.2015

**Memberships**

- Life Member, Vijnana Parishad of India
- Life Member, Ramanujan Mathematical Society
- Life Member, Academy of Discrete Mathematics and Applications
- Review Editor in Statistics (specialty section of Frontiers in Applied Mathematics and Statistics)

**Other Academic Activities**

**Cultural/Extracurricular Activities**



**Signature of Faculty Member**