




## Shivaji College Faculty Details Proforma



<b>Title</b>	Dr	<b>First Name</b>	Neetu	<b>Last Name</b>	Rani	<b>Photograph</b>
<b>Designation</b>		Assistant Professor				
<b>Address</b>		Department of Mathematics Shivaji College (University of Delhi) New Delhi - 110027 India				
<b>OfficePhone No.</b>		011 25116644				
<b>Residence</b>		---				
<b>Mobile</b>		---				
<b>Email</b>		neetu.october@gmail.com				
<b>Web-Page</b>						
<b>Educational Qualifications</b>		M.Sc., M.Phil., Ph.D.				
<b>Degree</b>	<b>University/Institute</b>			<b>Year</b>		
<b>Ph.D.</b>	Kurukshetra University, Kurukshetra			2009		
<b>M.Phil./M.Tech.</b>	Kurukshetra University, Kurukshetra			1998 (Topper of University)		
<b>PG</b>	Kurukshetra University, Kurukshetra			1997 (Gold Medalist)		
<b>UG</b>	Kurukshetra University, Kurukshetra			1995		
<b>Any Other Qualification</b>	CSIR/UGC (NET)			1997		
<b>Career Profile</b>						
Teaching Experience :- 20 Years						
<b>Name of the University / College / Institution</b>	<b>Position held</b>	<b>Duration of Service</b>		<b>Period</b>		
		<b>From</b>	<b>To</b>	<b>Years</b>	<b>Months</b>	
Shivaji College, University of Delhi	Assistant Professor	21-03-14	Ctd.	6	3	
Keshav Mahavidyalaya, University of Delhi	Assistant	23-07-12	20-03-14	1	8	

	Professor				
Keshav Mahavidyalaya, University of Delhi	Assistant Professor	19-01-11	07-11-11	-----	10
Keshav Mahavidyalaya, University of Delhi	Assistant Professor	23-11-10	15-12-10	-----	1
Hansraj College, University of Delhi	Assistant Professor	21-07-10	18-11-10	-----	4
University Inst. of Engg. & Tech., Kurukshetra University	Lecturer	14-09-04	11-12-09	5	3
Shri Krishan Institute of Engg. & Tech., Kurukshetra	Lecturer	01-09-99 07-09-00 03-02-03 18-08-03 07-02-04 01-07-04 02-08-04	19-07-00 31-12-02 30-06-03 16-12-03 30-05-04 01-08-04 13-09-04	4	6
University College, Kurukshetra University	Lecturer	11-11-97 19-11-98	31-03-98 31-03-99	-----	9
Arya Girls College, Shahabad	Lecturer	10-07-98	10-11-98	-----	4

#### Administrative Assignments

- Deputy Superintendent of Examinations, Shivaji College, May-June 2018
- Teacher In-charge, Department of Mathematics, Shivaji College [1<sup>st</sup> April 2019-30<sup>th</sup> April 2020]

#### Areas of Interest/Specialisation

Seismology, Applied Mathematics, Operational Research

#### Subjects Taught

Differential Equations, Calculus, Multivariate Calculus, Probability Theory and Statistics, Business Mathematics, Numerical Analysis, Group Theory, Ring Theory, Linear Algebra, Number Theory, Real Analysis, Engineering Mathematics, Representation of Finite Groups, Module Theory, Research Methodology.

**Innovation Project/Research Projects (Major Grants/Research Collaboration)**

**Publications Profile (Research Papers/Books)**

**Published Research Papers**

- Neetu Rani; July-December 2017; Migration of Agricultural Population to Non-Agricultural Sector: A Mathematical Study; Indian Journal of Industrial and Applied Mathematics; Indian Society of Industrial and Applied Mathematics; 8(2) pp 201-211
- Neetu Garg; June 2009; Existence of longitudinal waves in pre-stressed anisotropic elastic medium; J Earth Sys Sc; Indian Academy of Sciences, Bangalore; 118 (6) pp 677-687
- Neetu Garg; Jan 2007; Effect of initial stress on harmonic plane homogeneous waves in viscoelastic anisotropic media; J of Sound and Vibration; Elsevier-Sc Direct; 303 pp 515-525
- M D Sharma & Neetu Garg; Apr 2006; Wave velocities in a pre-stressed anisotropic elastic medium; J Earth Sys Sc; Indian Academy of Sciences, Bangalore; 115 (2) pp 257-265

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

**Conference Presentations (Research Papers) / Attended**

- Neetu Rani ; May 9-11, 2020 ; Participated in the Online International Conference and Presented a Research Paper entitled “Geometrical Description of Vedic Fire Altar-Falcon” ; The Online International Conference “VEDIC KNOWLEDGE: THE HIGHEST CONTRIBUTION OF ARYAVARTA TO THE WORLD” organized by PCM SD College for Women, Jalandhar.
- Neetu Rani ; November 9-10, 2019 ; Presented a Research Paper in 3<sup>rd</sup> International Conference on “Innovations in Science, Engineering & Technology”; A Multi-Disciplinary Conference for all Disciplines including Engineering & Technology (ICISSET-2019) organized by Department of Chemistry, Arya P. G. College, Panipat, Haryana, India.
- Neetu Rani ; June 1-3, 2018 ; Presented a Research Paper entitled “Waves Propagation in Microstretch Thermoelastic Medium” ; The 33<sup>rd</sup> Annual Conference of The Ramanujan Mathematical Society held at Department of Mathematics, University of Delhi, Delhi.
- Neetu Rani ; May 01-02, 2017 ; Presented a Research Paper entitled “Mathematical description of some facts related to agricultural sector”; Research Scholar Seminar &

Annual Conference of the Society of Mathematical Sciences (Delhi) organized by Department of Mathematics, University of Delhi, Delhi.

- Neetu Rani ; January 30-31, 2016 ; Presented a Research Paper entitled “A Mathematical Study of Banking Sectors in India”; RAOA 2016-International Conference on Recent Advances in Optimization Theory and Applications organized by Department of Operational Research, Faculty of Mathematical Sciences, University of Delhi, Delhi.
- Neetu Rani ; Dec 17-22, 2012 ; Attended ‘The legacy of Srinivasa Ramanujan’ International Conference organized by the University of Delhi held at Department of Mathematics, University of Delhi.
- Neetu Rani; Dec 18-20, 2008; Effect of initial stress on SH-waves; Pre-ICM International Convention on Mathematical Sciences held at Department of Mathematics, University of Delhi.
- Neetu Rani; Dec 19-22, 2007; Influence of Initial Stress on Wave Polarizations in a Pre-stressed Anisotropic Elastic Medium; International Conference on advances in Mathematics: Historical Developments and Engineering App held at G B Pant University of Agriculture and Technology-Pantnagar; p 158.
- Neetu Rani; Dec 8-9, 2007; Elastic waves in an initially-stressed anisotropic medium; 9th National Conference on information tech and operational research app held at Graduate school of business & administration-Greater Noida; p 28.
- Neetu Rani; Dec 20-22, 2006; Effect of initial stress on harmonic plane homogeneous waves in viscoelastic anisotropic media; National Conference on History of Mathematics and Recent Developments held at Department of Mathematics, Maharishi Dayanand University, Rohtak.

**Quality Improvement Programmes / Refresher Courses / Short Term Courses / Workshops Attended/Organized**

- Participated in One Week Faculty Development Programme on “Open Source Tools for Research” from June 08 – June 14, 2020 organized by Teaching Learning Centre, Ramanujan College, University of Delhi, sponsored by Ministry of Human Resource Development, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT).
- Participated in Two Weeks Faculty Development Programme on “MANAGING ONLINE CLASSES and CO-CREATING MOOCS:2.0” from May 18 – June 03, 2020 organized by Teaching Learning Centre, Ramanujan College, University of Delhi, sponsored by Ministry of Human Resource Development, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT).
- Participated in Two Day Webinar “Myths and truths of fitness and corrective exercises for various body deformities” held during 12<sup>th</sup> – 13<sup>th</sup> May, 2020 organized by Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, A Centre of MHRD, Govt. of India, under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT).
- Participated in Three Day Webinar “Covid 19: Challenges and Road Ahead” held during 7<sup>th</sup> – 9<sup>th</sup> May, 2020 organized by Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, A Centre of MHRD, Govt. of India, under Pandit

Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT).

- Participated in One Day Faculty Development Programme: National Webinar entitled "Towards Excellence in Higher Education in India in the 21<sup>st</sup> Century: Challenges and Opportunities" organized by Guru Angad Dev Teaching Learning Centre SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of MHRD held on May 1, 2020.
- Participated in One Day Faculty Development Programme: National Webinar entitled "Challenges & Opportunities before Indian Higher education due to Covid-19" organized by Guru Angad Dev Teaching Learning Centre SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of MHRD held on May 2, 2020.
- Participated in One Day Webinar "Leadership Role in Uncertain Times" held on 30<sup>th</sup> April, 2020 organized by Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, A Centre of MHRD, Govt. of India, under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT).
- Participated in One Day Webinar "Teachers and Technology: The Road Ahead" held on 25<sup>th</sup> April, 2020 organized by Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, A Centre of MHRD, Govt. of India, under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT).
- Organized as Coordinator the Annual Finance Fest "FINANZEN" of Finance and Investment Cell, Shivaji College, University of Delhi, held on 24<sup>th</sup> February, 2020.
- Organized as Convenor a Seminar for students on " Use of GIS, GPS and Remote Sensing in Precision Agriculture" organized by Department of Mathematics, Shivaji College, University of Delhi, held on 22<sup>nd</sup> January, 2020.
- Participated in Faculty development Program on "Research Methodology and Data Analysis Using SPSS/R" held on November 14-20, 2019 organized by Shivaji College (University of Delhi) in collaboration with Mahatma Hansraj Faculty Development center (MHRFDC), Hansraj College under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT).
- Organized as convenor the annual festival INFINITY 2019-20 of Department of Mathematics, Shivaji College, University of Delhi, held on 4<sup>th</sup> October, 2019.
- Organized as convenor a seminar for students on "Development of Mathematics through Generations" organised by Department of Mathematics, Shivaji College, University of Delhi, held on 9<sup>th</sup> September, 2019.
- Organized as convenor a seminar for students on "A Role of Statistics on Big Data" organised by Department of Mathematics, Shivaji College, University of Delhi, held on 8<sup>th</sup> August, 2019.
- Coordinated in One week Faculty Development Programme on "Biomathematics" organised by Shivaji College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, A Centre of MHRD, Govt. of India under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, from 1<sup>st</sup> August to 7<sup>th</sup> August, 2019.
- Participated in the Teacher Enrichment Workshop on "Algebra & its applications" organised by National Centre for Mathematics (A joint centre of TIFR and IIT Bombay), Advanced Training in Mathematics, held at Shivaji College, University of Delhi from May 06-11, 2019.

- Attended One-day workshop on R-Software organised by Department of Mathematics, Janki Devi Memorial College, University of Delhi, held on 15<sup>th</sup> January, 2019.
- Participated in the One-Week Professional Development Programme for Senior Faculty organized by the UGC-HRDC, Jamia Millia Islamia, New Delhi from 24<sup>th</sup> December to 31<sup>st</sup> December, 2018.
- Participated in the Ten Days Faculty Development Programme entitled 'University Functioning and Blended Learning' organized by Guru Angad Dev Teaching Learning Centre of MHRD, SGTB Khalsa College, University of Delhi on 8<sup>th</sup> December-20<sup>th</sup> December 2018.
- Participated in the One Week Faculty Development Programme entitled 'Emerging Areas of Engagement in Pedagogy and Research' jointly organized by Shyam Lal College, University of Delhi, Guru Angad Dev Teaching Learning Centre of MHRD, SGTB Khalsa College, University of Delhi and National Institute of Educational Planning and Administration held at SLC University of Delhi on 24-30 November 2018.
- Worked as a Resource Person in the INSPIRE Science Camp 2018 (Innovation in Science Pursuit for Inspired Research), Department of Science & Technology (DST), Govt. of India, held at Shivaji College, University of Delhi, from July 16-20,2018.
- Participated in Faculty Development Programme on Statistical Computing Software 'R' organized by the Department of Mathematics, Keshav Mahavidyalaya, University of Delhi, held on 24.03.2017.
- Attended a workshop for teachers on "Exploring Maths for Digital India" organized by Rajyoga Education & Research Foundation at Brahmakumaris, Gyan-Vigya Bhawan, Delhi, held on 22.11.2017.
- Worked as a Co-convener in organizing a Seminar on "Mathematics: Historic and Current Perspectives" in Shivaji College to celebrate Golden Jubilee year of Department of Mathematics, Shivaji College, University of Delhi held on November 10, 2017.
- Worked as a Resource Person and member of organizing committee in the 2<sup>nd</sup> INSPIRE Internship Science Camp 2016 (Innovation in Science Pursuit for Inspired Research), organized by Shivaji College, University of Delhi held from December 14-18, 2016.
- Worked as a Resource Person and member of organizing committee in the INSPIRE Science Camp 2015 (Innovation in Science Pursuit for Inspired Research), organized by Shivaji College, University of Delhi held from December 19-23, 2015.
- Worked as a Convener in organizing a One Day Workshop for Mathematics (Hons.) students in Shivaji College, University of Delhi held on October 27, 2015.
- Participated in Faculty Development Programme on Statistical Computing Software 'R' organized by the Department of Mathematics, Keshav Mahavidyalaya, University of Delhi, held on 24.03.2017.
- Attended a workshop for teachers on "Exploring Maths for Digital India" organized by Rajyoga Education & Research Foundation at Brahmakumaris, Gyan-Vigya Bhawan, Delhi, held on 22.11.2017.
- Attended Three weeks Refresher Course in Mathematical Sciences, UGC-sponsored and organized by Centre for Professional Development in Higher Education, University of Delhi, held from 30.08.2016 to 20.09.2016.

- Attended One Day Workshop on “Computational Optimization” organized by Department of Mathematics, Sri Venkateswara College, University of Delhi held on February 05, 2016.
- Organized One Day Workshop for Mathematics (Hons.) Students of Shivaji College, University of Delhi, on 27<sup>th</sup> October, 2015
- Attended One month Orientation Course, UGC-sponsored and organized by Centre for Professional Development in Higher Education, University of Delhi, held from 8.06.2015 to 4.07.2015
- Attended Three days training course on MATLAB Fundamentals, organized by MathWorks Training Services, held at Computer Center, University of Delhi, from 7.5.2015 to 9.5.2015
- Attended Three weeks Refresher Course in Mathematical Sciences, UGC-sponsored and organized by Centre for Professional Development in Higher Education, University of Delhi, held from 24.11.2014 to 13.12.2014
- Attended Two days Workshop on “Theory of Equations” organized by Department of Mathematics, Shivaji College, University of Delhi, Delhi, held from 16.10.14 to 17.10.14.
- Attended Three days Workshop on “Foundation Course : Building Mathematical Ability” organized by Centre for Professional Development in Higher Education, University of Delhi, Delhi, held from 24.06.13 to 26.06.13.
- Attended Two weeks Workshop in “Instructional School for Teachers in Group Theory” organized by Department of Mathematics, University of Delhi, Delhi, held from 03.06.13 to 15.06.13.
- Attended Three days Workshop on “Foundation Course : Information Technology” organized by Centre for Professional Development in Higher Education, University of Delhi, Delhi, held from 12.06.13 to 14.06.13.
- Attended One day Workshop on “Mathematica” organized by the Department of Mathematics, Acharya Narendra Dev College, University of Delhi, Delhi, held on 1.03.13.
- Attended One week National Workshop on “Differential Equations, Computing and Modeling” conducted at the Department of Mathematics, University of Delhi, Delhi, held from 20.12.10 to 24.12.10.
- Attended One week Quality Improvement Programme on “Applied Numerical Methods” held from 7.7.08 to 11.7.08 in the Department of Technology, Roorkee (Uttarakhand).
- Attended One month summer school organized by University Grant Commission especially for science teachers at Academic Staff College, Kurukshetra University to encourage research in science fields during June, 2008.
- Organized and attended one day workshop on “Patent Awareness” at University Institute of Engineering & Technology, Kurukshetra University, and sponsored by Patent Information Centre, HSCST, DST, Hisar, Haryana and TIFAC, DST, Govt. of India, New Delhi on April 05, 2008.
- Attended One week short term course on “Digital Signal Processing Using MATLAB” conducted by Electronics and Communication Engineering Department from 23.07.07 to 27.07.07 at National Institute of Technical Teachers’ Training and Research, Chandigarh.

- Attended Two weeks term course on “AICTE Sponsored Induction Training Programme for Faculty of Engineering Colleges” conducted by Edu. & Edcl. Mgt. Department from 1.03.07 to 12.03.07 at U.I.E.T., Kurukshetra University, Kurukshetra.
- Attended Three days Short Term Training Programme on “Quality Assurance in Technical Education” conducted by Electrical Engineering Department from 27.05.04 to 29.05.04 at S.K.I.E.T., Kurukshetra.
- Attended E-Orientation course conducted by Applied Physics Department, National Institute of Technology, Kurukshetra in September, 2003.
- Coordinated the fest “EXCELSIOR-08, National level Techno-Cultural festival”, held at University Institute of Engineering & Technology, Kurukshetra University, Kurukshetra on 3<sup>rd</sup> – 5<sup>th</sup> April, 2008.

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

#### **Awards and Distinctions**

##### **Academic Awards/Medals and Distinctions**

- Merit position at state level in matric
- College topper in 12<sup>th</sup> and B.Sc.
- Gold medalist in M.Sc.
- University topper in M.Phil.
- Gold medalist in diploma in French
- Gold medalist in advanced diploma in French

##### **Honors and Awards**

- University Post-graduate Scholarship  
Sep 97 to Sep 98
- University Post-graduate Scholarship  
Sep 95 to Sep 97



- Merit Scholarship  
Jun 90 to May 95
- Many Awards and Prizes won in Extra-curricular Activities (Debates, Declamation, Quizzes, Sports, Cultural Competitions)
- Merit certificate for best NSS (National Service Scheme) Volunteer at College Level in 1995

### Memberships

- Life Member of 'Indian Mathematical Society' with Unique Membership Number 'L/2015/107'
- Life Member of 'Ramanujan Mathematical Society' with Membership Number '1418'

### Other Academic Activities

- Subject Expert of UDAAN project, C. B. S. E., MHRD, Govt. of India
- External Subject Expert, Walk-In Interview for recruitment of JRFs Candidates (June 2016), SAG, DRDO, Delhi
- Member, Screening of Mathematics Application forms for the Appointment of Assistant Professors in Shivaji College, during 2017-2018 and 2019-2020
- Acted as Judge for Online National Level Declamation Contest on the topic "Students' Perspective of Online Teaching Learning Method" on 6<sup>th</sup> June, 2020 organized by Department of Mathematics, Mukand Lal National College, Yamunanagar, Haryana, India

### Cultural/ Extracurricular Activities

Currently serving as a convener/member of following committees:

- Member, College Research Cell, Shivaji College
- Convenor, Criteria 4 for Assessment, NAAC Committees for SSR, Shivaji College
- Member, Sports Committee, Shivaji College
- Member, Project Purchase Committee, SERB sponsored MRP No. [EMR(2016)/000455.

Served as Convener/Member of following committees:

- Member, National Service Scheme from April 2018-March 2019, Shivaji College
- Member, Purchase Committee from April 2015-March 2017, Shivaji College
- Member, Canteen Committee from April 2015-March 2017, Shivaji College
- Co-Convener of a seminar entitled "Mathematics: Historic and Current Perspectives" held on 10th November, 2017 at Shivaji College (University of Delhi), New Delhi 110027.
- Resource person in 3rd INSPIRE INTERNSHIP SCIENCE CAMP sponsored by Department of Science and Technology (DST) from July 16-20, 2018 organized at Shivaji College.
- Resource person in 2nd INSPIRE INTERNSHIP SCIENCE CAMP sponsored by Department

of Science and Technology (DST) from December 14-18, 2016 organized at Shivaji College.

- Resource person in 1st INSPIRE INTERNSHIP SCIENCE CAMP sponsored by Department of Science and Technology (DST) from December 19-23, 2015 organized at Shivaji College
- Member, Time-table Committee from April 2014-March 2016, Shivaji College
- Member, Cultural Committee from April 2015-March 2016, Shivaji College
- Member, Project Purchase Committee, UGC sponsored MRP No. [42-• 42(2013)/SR]

*Neetu Rani*

**Signature of Faculty Member**