


SHYAM LAL COLLEGE (EVE.)

UNIVERSITY OF DELHI

Faculty Proforma



Title	Dr.	First Name	Bharti	Last Name		Photograph
Designation		Associate Professor				
Address		Department of Mathematics Shyam Lal College (Evening) (University of Delhi) G.T. Road, Shahdara Delhi – 110032				
Phone No	Office					
	Residence					
	Mobile					
Email	Web-Page	bharti@shyamlale.du.ac.in				
Educational Qualifications						
Degree	Institution				Year	
Ph.D. (Mathematics)	University of Delhi, Delhi				2011	
M.Sc.(Mathematics) (Gold Medalist)	Guru Jambheshwar University of Science & Technology, Hisar, Haryana				2005	
Bachelor's in Arts	Maharshi Dayanand University, Rohtak				2003	
NET	CSIR				2006	
One Year Computer Course on 'Computer Operations and Applications'	HARTRON, Ministry of Haryana, Govt. of India.				2001	
Career Profile						
<ul style="list-style-type: none"> • Associate Professor, Department of Mathematics, Shyam Lal College (Evening), University of Delhi – September 2019 to till date. • Assistant Professor, Department of Mathematics, Shyam Lal College (Evening), University of Delhi – November 2008 to September 2019. • Assistant Professor, Department of Mathematics, Zakir Husain Delhi College, University of Delhi – November 2006 to November 2008. 						
Administrative Assignments						
<ul style="list-style-type: none"> • Teacher in charge, Department of Mathematics, Shyam Lal College (Eve), University of Delhi in academic session 2010-11, 2012-13, 2014-15, 2016-17, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24. • Co-Coordinator, Internal Quality Assurance Cell (IQAC), Shyam Lal College (Evening), University of Delhi in academic session 2020-21, 2021-22, 2022-23, 2023-24. 						

- **Convener, Alumni Committee**, Shyam Lal College (Evening), University of Delhi in academic session 2022-23, 2023-24
- **Convener, Time-Table Committee**, Shyam Lal College (Evening), University of Delhi in academic session 2021-22, 2023-24.
- **Convener, Computer Software & Website Committee**, Shyam Lal College (Evening), University of Delhi in academic session 2019-20, 2020-21 and 2021-22.
- **Convener, B.A.(Prog.) Admission Committee**, Shyam Lal College (Evening), University of Delhi in academic session 2016-17 and 2021-22.
- **Convener, W.U.S. & Health Awareness Committee**, Shyam Lal College (Evening), University of Delhi in academic session 2013-14, 2014-15 & 2015-16.
- **ANO/Caretaker, NCC Girls Unit**, Shyam Lal College (Day & Evening), University of Delhi in academic session 2014-15 & 2015-16.
- **Convener, Day-Care Center Committee**, Shyam Lal College (Evening), University of Delhi in academic session 2012-13 & 2013-14.
- **In-Chagre, NSS**, Shyam Lal College (Evening), University of Delhi in academic session 2014-15.
- **Secretary, Staff Association**, Shyam Lal College (Evening) in the academic session 2010-11 and 2011-12.
- **Member**, Lodging Committee, International Conference on Operator Theory and Related Areas(ICOTRA) organized by the Department of Mathematics, University of Delhi, during January 9 – 12, 2008.
- **Secretary, Student's Union** (November 2005 to October 2006), Meghdoot Hostel, University of Delhi.

Areas of Interest / Specialization

- **Nonlinear Dynamical Systems**
- **Chaos Theory**

Subjects Taught

- **Elementary Linear Algebra**
- **Network Flows**
- **Statistics**
- **Computer Algebra Systems**
- **Transportation and Network Flow Problems**
- **Analytic Geometry and Applied Algebra**
- **Calculus**
- **Algebra**
- **Analysis**
- **Boolean Algebra**

Publications

1. Saha, L.M., Mohanty, R.K. & Bharti (2009). Hyperbolicity and Chaos in Discrete Systems. *International Journal of Applied Mathematics and Mechanics*, 5(5), 48 – 56.
2. Saha, L.M ., Bharti & Yuasa, Manabu (2010). Energy Variability in Chaotic Dynamical Systems. *Science and Technology*, 22, 1 – 8.

3. Saha, L.M., Bharti & Mohanty, R. K. (2010). Study of Bifurcations and Hyperbolicity in Discrete Dynamical systems. *Iranian Journal of Science & Technology*, transaction A, 34(A1), 1-12.
4. Yuasa, M., Bharti & Saha, L.M. (2011). Energy Variability and Chaos in Ueda oscillator. *Science and Technology*, 23, 1-10.
5. Bharti (2014). Concept of Transient Chaos and Energy Variability in Double Well Duffing Oscillator. *Excellence International Journal of Education and Research*, 2(4), 474-482.

Conferences/Seminars/Lectures Organization

1. August 29, 2014, Organized a Lecture on ‘Stress Assessment and Management’ by Dr. Mina Chandra, Psychiatrist, RML Hospital, New Delhi as Convener, WUS and Health Awareness Committee, Shyam Lal College(E), DU.
2. Aug. 18, 2017, Organized and participated in a one day seminar on ‘Recent Trends in Mathematics’ by Department of Mathematics, Shyam Lal College(e), University of Delhi
3. September 9, 2019, Organized a One-Day Seminar on “Applications of mathematics in Day-to-Day Life” on behalf of Convener & TIC, Department of Mathematics, Shyam Lal College(E), University of Delhi.
4. February 13, 2020, Organized as TIC, Dept. of Mathematics a Memorial Lecture of Dr. V.K. Tyagi by Prof. Dinesh Singh, Ex. VC, DU on Gandhi and Life in collaboration with Eco-Club, Shyam Lal College(E), University of Delhi.
5. August 10-17, 2020, Organized as Convener, Computer Software and Website Committee, a One Week Faculty Development Programme on ‘Online Teaching Platforms’ in Shyam Lal College(Eve.), University of Delhi.
6. December 5, 2023, Organized as Convener of Mathematical Society “EUREKA”, an event **Apti-Mind Challenge**, for under-graduate college students for showcase their mathematical skills.
7. February 27, 2023, Organized as Convener of Mathematical Society “EUREKA”, **Mathematical Carnival**, the annual fest featured three events **Brain Battle**, **Checkmate Champions** and **Play with Maths**, each designed to challenge and showcase participants’ mathematical prowess.

Papers/Lectures Presentation

1. January 9-12, 2008, Presented a research paper entitled Hyperbolicity and Chaos in Discrete Systems in the International Conference on Operator Theory and Related Areas organized by Department of Mathematics, University of Delhi, Delhi – 110007.
2. March 31-April 2, 2008, Presented a talk entitled Fractal Structure of Discrete Maps and Construction of Hyperbolic Sets in the Research Scholars’ Seminar organized by the Department of Mathematics, University of Delhi, Delhi – 110007.
3. March 17-19, 2010, Participated and Presented a Paper entitled ‘Transient Chaos and Energy Variability in Nonlinear Dynamical Systems’ in the Workshop cum training programme on Modern Trends in Celestial Mechanics and Astronomy (WMTCSMA) held at Conference Centre, University of Delhi, organized by Deshbandhu College (University of Delhi), Delhi – 110019.
4. September 9, 2019, Participated and Presented a paper entitled “Mathematical Modelling: Connection of Mathematics with Real World” in the seminar on Applications of Mathematics in Day-to-Day Life organized by the Department of Mathematics and IQAC, Shyam Lal College(E), University of Delhi.

5. November 8-10, 2019, Participated and Presented a paper entitled ‘Energy Variability Leading to Chaos in a Double Well Duffing Oscillator’ in the National Conference on Advances in Mathematical Analysis and its Applications (NCAMAA-2019) organized by PGDAV College, University of Delhi.
6. December 19-21, 2019, Participated and Presented a paper entitled ‘Transient Chaos Phenomenon in a Double Well Duffing Oscillator’ in the International Conference on Applicable Mathematics (ICAM-2019) organized by Ramanujan College, University of Delhi.
7. August 11, 2020, Given two Lectures as Resource Person on ‘Google Classroom’ in the One Week Faculty Development Programme on ‘Online Teaching Platforms’ organized by Computer Software and Website Committee, Shyam Lal College(Eve.), University of Delhi.
8. August 16, 2020, Given one Lecture as Resource Person on ‘Insert Learning’ in the One Week Faculty Development Programme on ‘Online Teaching Platforms’ organized by Computer Software and Website Committee, Shyam Lal College(Eve.), University of Delhi.
9. February 8-10, 2024, Participated and Presented a paper entitled ‘Energy Variability and Transient Chaos in Ueda Oscillator’ in the International Conference on Advances in Pure & Applied Mathematics (ICAPAM) organized by Shyam Lal College, University of Delhi.

Awards and Distinctions

- First prize for securing the highest marks in all the exams of SERC School 2010 sponsored by DST, Gov. of India, held at Centre for Mathematical Sciences (CMS), South Pala Campus, Pala, Kerala during April 12, 2010 to May 14, 2010.
- Third prize in the LaTeX Software Training Programme held on weekends of SERC School 2010 sponsored by DST, Gov. of India, held at Centre for Mathematical Sciences (CMS), South Pala Campus, Pala, Kerala during April 12, 2010 to May 14, 2010.
- Gold Medal for scoring the first position in M.Sc.(Mathematics) from G.J.U. Hisar (2003-05).
- First prize for being the College topper in B.A. session 2000-2003.

Association With Professional Bodies

- **Life-Time Membership of MathTech Thinking Foundation(MTTF)**

Signature of Faculty Member