



# Kirori Mal College

(University of Delhi)

University of Delhi, Delhi-110007

(Phone No. - 011-7121 9084 : Email - principal@kmc.du.ac.in)



Print Date : 03-04-2026

## 1. Personal Profile

Title: **Dr.** First Name: **PREMPAL** Last Name: **SINGH**

Designation: **ASSISTANT PROFESSOR** Mobile No. -----

Phone No. (Office) ----- Phone No. (Residence): -----

Email: **prempal@kmc.du.ac.in** Webpage: -----

Facebook: ----- Twitter: -----

LinkedIn: ----- Instagram: -----

Youtube: ----- Research Gate Link: -----

Google Scholar Link: -----

Address: -----



## 2. Educational Qualifications

Degree/ Certification	Institution	Year
M. Sc. Mathematics	D N College Meerut, C C S University Meerut	2001
B. Sc.	D P B S P G College Anoopshahr Bulandshahr Uttar Pradesh	1999
Ph. D. (Non -Linear Dynamical Systems and Chaos Synchronization)	Department of Mathematics (UNIVERSITY OF DELHI)	2010

## 3. Career Profile & Administrative Assignments

Category	Role/ Designation	Department/ Committee	Date From - To	Remarks
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS KIRORI MAL COLLEGE, DELHI	09.Sep.2022 - Till date	Permanent Faculty
ADMINISTRATIVE ASSIGNMENTS	ASSISTANT PROFESSOR	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi	06.Jan.2018 - Till date	Guest- Faculty

CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS COLLEGE, DELHI	KALINDI	22.Feb.2011 - 08.Sep.2022	Ad- hoc Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS COLLEGE, DELHI	SHIVAJI	01.Sep.2010 - 21.Feb.2011	Ad- hoc Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS COLLEGE, DELHI	KALINDI	25.Jul.2007 - 25.Jul.2009	Ad- hoc Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS COLLEGE, DELHI	HINDU	24.Aug.2013 - 15.Nov.2013	Guest Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS COLLEGE, DELHI	KALINDI	08.Aug.2010 - 21.Feb.2011	Guest- Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS ATMA RAM SANATAN DHARMA COLLEGE, DELHI		25.Aug.2010 - 15.Nov.2010	Guest Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS ATMA RAM SANATAN DHARMA COLLEGE, DELHI		08.Jun.2011 - 23.Mar.2011	Guest Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS ZAKIR HUSAIN DELHI COLLEGE, DELHI		18.Aug.2009 - 23.Mar.2010	Guest Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS COLLEGE, DELHI	P.G.D.A.V.	18.Aug.2009 - 23.Mar.2010	Guest Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS COLLEGE, DELHI	KALINDI	18.Jan.2006 - 24.Jul.2007	Guest Faculty
CAREER PROFILE	ASSISTANT PROFESSOR	MATHEMATICS SHYAM LAL COLLEGE (EVENING), DELHI		16.Oct.2004 - 15.Dec.2005	Guest Faculty
ADMINISTRATIVE ASSIGNMENTS	COORDINATOR	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi		01.Feb.2023 - Till date	Teacher- In-charge
ADMINISTRATIVE ASSIGNMENTS	CO-COORDINATOR	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi		01.Mar.2022 - 31.Jan.2023	Teacher-In- charge
ADMINISTRATIVE ASSIGNMENTS	NODAL OFFICER	MATHEMATICS Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi		12.Aug.2022 - 31.Aug.2022	University Examination of NCWEB, PG Centre, North Campus University of Delhi
ADMINISTRATIVE ASSIGNMENTS	CONVENER	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi		08.Feb.2024 - 08.Feb.2024	One Day Orientation Programme
ADMINISTRATIVE ASSIGNMENTS	NODAL OFFICER	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi		01.Jul.2023 - 01.Jul.2024	Conducted Eight Activities Viksit Bharat @ 2047 as Convener

ADMINISTRATIVE ASSIGNMENTS	CONVENER	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi	01.Aug.2023 - 01.Nov.2023	Admissions 2023- 2024 NCWEB PG Centre, North Campus University of Delhi
ADMINISTRATIVE ASSIGNMENTS	CONVENER	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi	01.Jul.2024 - 31.Oct.2024	Admission 2024-2025 NCWEB PG Centre North Campus University of Delhi
ADMINISTRATIVE ASSIGNMENTS	CO-COORDINATOR	KIRORI MAL COLLEGE University of Delhi Examination Evaluation Centre KMC	15.May.2024 - 15.Sep.2024	CEC- University of Delhi Examination May- June (2023- 2024)
ADMINISTRATIVE ASSIGNMENTS	MEMBER	COMMITTEE FOR COMMON COURSES KIRORI MAL COLLEGE	16.May.2023 - Till date	SEC & VAC Courses offered by Kirori Mal College
ADMINISTRATIVE ASSIGNMENTS	MEMBER	PORTAL COMMITTEE KIRORI MAL COLLEGE	03.Mar.2023 - Till date	ERP & SEC, VAC, GE Preferences
ADMINISTRATIVE ASSIGNMENTS	MEMBER	IQAC KIRORI MAL COLLEGE	04.Jul.2023 - 30.Jun.2025	Criteria III & VI, NIRF & India Today
ADMINISTRATIVE ASSIGNMENTS	MEMBER	CAREER DEVELOPMENT CELL KIRORI MAL COLLEGE	02.Aug.2024 - Till date	Committee for skilled courses
ADMINISTRATIVE ASSIGNMENTS	MEMBER	STUDENT UNION ACTIVITIES COMMITTEE KIRORI MAL COLLEGE	02.Aug.2024 - Till date	Student Union Activities
ADMINISTRATIVE ASSIGNMENTS	MEMBER	MEDIA COMMITTEE KIRORI MAL COLLEGE	16.May.2023 - 30.Jun.2024	Report of Events
ADMINISTRATIVE ASSIGNMENTS	MEMBER	G20 COMMITTEE KIRORI MAL COLLEGE	19.Jan.2023 - 26.Sep.2023	Poster & Certificate Design
ADMINISTRATIVE ASSIGNMENTS	MEMBER	MATHEMATICS KIRORI MAL COLLEGE	15.Aug.2023 - 30.Jun.2024	Department of Mathematics Staff Advisor
ADMINISTRATIVE ASSIGNMENTS	CO-COORDINATOR	UNIVERSITY OF DELHI KIRORI MAL COLLEGE	15.Dec.2024 - Till date	Co- Coordinator CEC EXAMINATION Dec/Jan 2024-25
ADMINISTRATIVE ASSIGNMENTS	DEPUTY SUPERINTENDENT	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi	15.Nov.2024 - Till date	Examination Dec/Jan 2024-2025 and Examination May/June 2024-2025
ADMINISTRATIVE ASSIGNMENTS	MEMBER	QURIOSITY: THE QUIZ SOCIETY KIRORI MAL COLLEGE	12.Sep.2024 - Till date	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	EDP CELL KIRORI MAL COLLEGE	12.Aug.2025 - Till date	EDP Cell, Kirori Mal College
ADMINISTRATIVE ASSIGNMENTS	CONVENER	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi	20.Jul.2023 - Till date	Convenor Admission committee of all Post-graduate Course at NCWEB PG, University of Delhi

ADMINISTRATIVE ASSIGNMENTS	CONVENER	NCWEB, DU Non Collegiate Womens Education Board Post-Graduate Centre North Campus University of Delhi	15.Jul.2023 - Till date	Convenor, PG Grievance Redressal Committee, NCWEB, University of Delhi
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#### 4. Other Profiles

##### Other Profile Name/ Description

##### AREAS OF INTEREST/ SPECIALIZATION

1. Operator Theory
2. Non- linear Dynamical Systems and Chaos Synchronization
3. Differential Equations and Mathematical Modelling
4. Vedic Mathematics and Astronomy
5. Traffic Flow in India
6. Air Pollution Problem in India
7. Risk Assessment Analysis and Floods
8. History of Indian Monuments and Scientific Architecture
9. Threads of Ancient Indian Mathematics from Vedic to Modern Era
10. Mathematical Modelling of Covid- 19 etc.

##### MEMBERSHIPS IN ACADEMIC/ PROFESSIONAL BODIES

1. Life time Member **Vibha Vigyan Bharti**, India.
2. Life time member of **Bharat Shikshan Mandal**.
3. Vedic Ganit, Co- coordinator Delhi Prant, **Shiksha Sanskriti Utthan Nyas**, Delhi.
4. Coordinator, Ancient Indian Mathematics group, **Bhartiya Vidhya Addhyan Kendra**, Delhi.
5. Member of Indian Society for Mathematical Modeling and Computer Simulation (**ISMMACS**).
6. Member **Indraprastha Addhyan Kendra** , Delhi.

## SUBJECTS TAUGHT

### **M. Sc. Mathematics:**

1. Semester IV : Control Theory and Optimization Techniques [2017-2018, 2019-2020]
2. Semester I: Differential Equations [2018- 2019]
3. Semester II: Introduction to Topology [2022-2023]
4. Semester III: Methods of Applied Mathematics [2021- 2022, 2023-2024, 2024-2025]
5. Semester III: Theory of Bounded Linear Operators [2022- 2023]
6. Semester IV: Dynamical Systems [2021-2022, 2023- 2024]

### **B. Sc. (H) Mathematics:**

1. Calculus
2. Algebra
3. Analysis- I, II, III
4. Differential Equations and Mathematical Modelling -I
5. Differential Equations and Mathematical Modelling -I
6. Group Theory- I
7. Group Theory- II
8. Riemann Integration
9. Ring Theory -I
10. Ring Theory -II
11. Complex Analysis
12. Metric Space
13. Discrete Mathematics
14. Numerical Analysis, etc. (almost all existing papers)

### **B. Sc. (H) Physics:**

1. Analysis and Statistics

### **B. Sc. Physical. Science:**

1. Calculus
2. Algebra
3. Analysis- I, II
4. Differential Equations

### **B. A. Prog.:**

1. Calculus
2. Algebra
3. Analysis
4. Differential Equations

### **B. Com.(H):**

1. Business Mathematics

### **B. Com Prog.:**

1. Business Mathematics and Statistics

### **B. A. (H) Economics:**

1. Analysis and Linear Algebra

### **B. Sc. (H) Computer Science:**

1. Algebra

### **B. Sc. (H) Statistics:**

1. Linear Algebra

### **B. Voc. Web Designing:**

1. Business Mathematics and Statistics
2. R- Programming

### **B. Voc. Printing:**

1. Fundamentals
2. of Basic Mathematics and Statistics

### **Value Addition Courses (VAC):**

1. Vedic Mathematics – I
2. Vedic Mathematics - II
3. Vedic Mathematics - III
4. Vedic Mathematics - IV

### **Skill Enhancement Course (SEC):**

1. Latex and HTML
2. R- Programming

### **Generic Elective (GE):**

1. Linear Algebra
2. Linear Programming

## FACULTY DEVELOPMENT PROGRAM (FDP) ORGANIZED

1. **Coordinator, Two Week** Interdisciplinary Online **Faculty Development Programme** in collaboration with Mahatma Hansraj Faculty Development Centre (A Centre of Ministry of Education, Govt. of India under PMMMNMTT Scheme) on “*MOOC’s, E-Content Development, Research Methodology and Statistical Tools in Open Education World*” 3<sup>rd</sup> August, 2021 (Tuesday) to 17<sup>th</sup> August, 2021 (Tuesday)
2. **Member**, Organizing Committee, **One Week** Faculty Development Programme in collaboration with Mahatma Hansraj Faculty Development Centre (MHRFDC) Hansraj College, University of Delhi, On “Recent Trends in Research Methodology, E- Content, Mathematical and Statistical Methods in Open Education World” (December 17-23, 2019)

## WORKSHOP/ SEMINAR/ CONFERENCE/ WEBINAR ORGANIZED

1. **Coordinator**, One Day National Seminar on the theme “*Rise and Lead: Young Women Pioneering Technology, Business and Public Life*” organized by Non-Collegiate Women Education Board (NCWEB) in collaboration with National Commission for Women’s & University of Delhi, on May 5, 2024.
2. **Convener**, One Day Orientation Programm on Viksit Bharat @ 2047 organized by Non-Collegiate Women Education Board (NCWEB), University of Delhi, on February 8, 2024.
3. **Convener**, Two Day National Seminar on the theme “*Women in decision making Roles in Corporates*”, organized by Non-Collegiate Women Education Board (NCWEB) in collaboration with National Commission for Women’s & University of Delhi, on November 24- 25, 2023.
4. **Coordinator**, Three Day Workshop on Vedic Mathematics organised by Kirori Mal College in collaboration with Value Addition Courses Committee, University of Delhi from April 11-13, 2023.
5. **Coordinator**, “Guidelines preparation workshop for Vedic Mathematics- I”, Kirori Mal College, University of Delhi, Value Addition Committees, University of Delhi and Faculty of Vedic Mathematics of various Colleges of the University, January 23, 2023.
6. **Convener**, Two Day National Seminar on the theme “*Footprints of Women in Making of Bharat*” organised by Non-Collegiate Women Education Board (NCWEB) in collaboration with ICSSR, Centenary Celebration Committee University of Delhi and Akhil Bhartiya Rashtirya Shakikshik Mahasangh (ABRSM) on November 11- 12, 2022.
7. **Coordinator**, Two Days Orientation cum Workshop on “????? ?????? ?????? ????? ?? ???” (10<sup>th</sup> February, 2022 & 11<sup>th</sup> February, 2022).
8. **Convener**, Organizing Committee, Online Paper Presentation under the aegis of Azadi Ka Amrut Mahotsav, Celebrating 75 years of Indian Independence on the theme of History of Indian Mathematics and Scientific Evolutions, October, 9, 2021.
9. **Co-Convener**, Paper work payment for TA/DA/Honorarium for Resource Persons in National Seminar “Engendering Law and Crimes against Women: Challenge and Prospectus, February, 12, 2020.
10. **Co-Convener**, Paper work related to payment for TA/DA/Honorarium for Resource Persons in one day Legal Awareness Programme supported by WDC, March, 4, 2020.
11. **Member**, Organizing Committee, Webinar, *Understanding the Corona Virus: Some Good News*, Resources Person: Prof. Dinesh Singh, Tuesday, 5th May 2020.
12. **Member**, organizing team, Academic Programme Committee, Publication Committee, Guests/ Speakers committee, Technical Committee, etc. in UGC sponsored National Seminar on Recent Developments in Mathematics, January 12-13, 2017.
13. **Member**, organizing team, Academic Programme Committee, Skill Development Workshop on LATEX and Statistical Techniques, Department of Mathematics and Computer Science, October 24- 25, 2016.

## CONTRIBUTION TOWARDS DEVELOPMENT OF E-CONTENTS/ MOOCS

### Modelling of Mathematics using Mathematica: (Undergraduate Practical Work)

1. B.Sc. Hons. Mathematics, Semester- I: **Calculus and Algebra**
2. B. Sc. Hons. Mathematics, Semester- II: **Differential Equations and Real Analysis**
3. GE Mathematics Semester- II: **Differential Equations**
4. B. Sc. Hons. Mathematics, Semester VI: **Complex Analysis**

E - Resource Prepared for **Department of Mathematics, Kalindi College University of Delhi.**

## UG/ PG RESEARCH PROJECTS/ INTERNSHIPS

### Internship in “Mathematical Modelling”

1. Mr. Manish, Course-B. Sc. (Hons) Mathematics, II Year student of SRM University Sonipat, Haryana. [from 1 July 2023 to 10 August 2023 designated as ‘trainee’ for 40 days]
2. Mr. Vineet, Course-B. Sc. (Hons) Mathematics, II Year student of SRM University Sonipat, Haryana. [from 1 July 2023 to 10 August 2023. designated as ‘trainee’ for 40 days]
3. Mr. Vipul Tehria, Course-B. Sc. (Hons) Mathematics, II Year student of Hansraj College, University of Delhi. [from 25 June 2023 to 25 August 2023 designated as ‘trainee’ for 60 days]

## CERTIFICATE COURSE/ SHORT TERM COURSE ORGANIZED

**Member, organizing team** of three Day **Workshop cum certificate course** on “Vedic Mathematics”, October 30- November 1, 2017, Department of Mathematics, Kalindi College, University of Delhi.

## FIELD TRIPS ORGANIZED

**Member organizing team** of Department of Mathematics, Kalindi College, University of Delhi, Educational Field Trip to Jaipur. [March 30- 31, 2019].

## AWARDS AND DISTINCTIONS

1. Secured **First position** in M. Sc. Mathematics in D. N. College Meerut in 2000-2001.
2. Secured **First position** in School in U. P. Board, Class XII Examination, in 1995-96.

## OTHERS

### Other Career Profile and Administrative Assignments in Kalindi College, University of Delhi.

[from 2006- 2006 to September, 08, 2022]

1. **Convener** of “Theme of Today Committee” for website of Kalindi College, University of Delhi from October 1, 2021 to September, 08, 2022.
2. **Co-Convener**, Categorization and Software Development Committee for Management Information System, Kalindi College, University of Delhi.
3. **Convener** Mathematics Society, Department of Mathematics, Kalindi College, University of Delhi for Academic Year 2020- 21.
4. **Editor**, Mathematics Newsletter, Palette-o-Math, Department of Mathematics, Kalindi College, University of Delhi, February- 2018.
5. Appointed as Convener/ Member for preparing question papers for various courses by Department of Mathematics/University of Delhi. from 2012-2013 to till date.
6. Member Admission Committee, Kalindi College, University of Delhi from 2006- 2007 to 2022-2023.
7. **Member IQAC team**, Kalindi College, University of Delhi from 2015- 2016 to September 08, 2022.
8. **Member Website Committee**, Kalindi College, University of Delhi from 2016- 2017 to September 08, 2022.
9. Representative Departmental of Mathematics for Website Committee, Kalindi College, University of Delhi from 2018- 2019 to September 08, 2022.
10. **Convener e- resource Committee**, Department of Mathematics Kalindi College, University of Delhi from 2018- 2019 to September 08, 2022.
11. **Member Research Committee**, Kalindi College, University of Delhi from 2016- 2017 to 2018- 2019.
12. Member/special invitee, Canteen Committee, Kalindi College, University of Delhi from 2012- 2013 to 2015- 2016.
13. **Convener/Co- convener/ Member**, Face Painting and Tattoo Making Committee, Kalindi College, University of Delhi from 2010- 2011 to January, 2020.
14. **Convener/Co- convener/ Member**, Seating and Shamiyana Committee for various events in Kalindi College, University of Delhi from 2010- 2011 to September 08, 2022.
15. **Convener/Co-convener/Member** in various Discipline Committees for several events in Kalindi College, University of Delhi from 2006- 2007 to September, 08, 2022.

### CONTRIBUTION TOWARDS DEVELOPMENT OF E-CONTENTS/ MOOCS

**Modelling of Mathematics using Mathematica:** (Undergraduate Practical Work) B.Sc. Hons. Mathematics, Semester- I: Calculus and Algebra

## 5. Research Guidance

Year	Guide For	Title of the Dissertation/ Thesis	Scholar Name	Status
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## 6. Research Projects

Year	Title of Project	Sponsorship Agency	Duration	Amount Sanctioned	Date of Sanction
2021	Developing Mathematical Kits to Visualise UG Mathematics	Institution of Eminence, University of Delhi	1 Year	1, 75000	30.Nov.2021
2021	Mathematical Modelling of COVID- 19 Spreading with Asymptomatic Infected and Interacting Peoples in India: Future behaviour and Sensitivity Analysis	Kalindi College, University of Delhi	1 Year	6000	19.Aug.2021

2021	History of Indian Monuments and Scientific Architecture	Kalindi College, University of Delhi	1 Year	24000	18.Aug.2021
2019	Mathematical Modelling of Natural Resources and its impact on future Population Growth in India	Kalindi College, University of Delhi	1 Year	6000	10.Sep.2019
2018	Mathematical Modelling of Air Pollutants: An Application to Indian National Capital Territory Delhi	Kalindi College, University of Delhi	1 Year	9000	15.Oct.2018
2018	Modelling for the Future Flood Vulnerability and Risk Assessment Analysis: Yamuna Catchment Area of NCT of Delhi	Kalindi College, University of Delhi	1 Year	27000	15.Oct.2018
2017	History of Indian Mathematics: Vedic to Modern	Kalindi College, University of Delhi	1 Year	10000	30.Jun.2017
2016	Mathematical Modelling and Transportation Problems in India	Kalindi College, University of Delhi	1 Year	7000	21.Jul.2016
2016	Differential Equations and Mathematical Modelling: Case Study Traffic Flow in Delhi	Kalindi College, University of Delhi	1 Year	47000	21.Jul.2016

## 7. Publications

Category	Publication Name	Title	Name of Author	Reference Link/ DOI Link	Publication (Month-Year)
JOURNAL PAPER (International)	Non- linear dynamical systems and chaos synchronization	International Journal of Bifurcation and Chaos	Prempal Singh, Dr. Ayub Khan (First Author)		August 2008
JOURNAL PAPER (International)	Chaos synchronization and linear feedback control	International Mathematical Forum	Prempal Singh, Dr. Ayub Khan (First Author)		September 2010
JOURNAL PAPER (International)	Study of chaos synchronization	synchronization, 2009, Applied Mathematical Sciences	Prempal Singh, Dr. Ayub Khan (First Author)		September 2010
JOURNAL PAPER (International)	Non- Linear Dynamical Systems and Chaos Synchronization	International Journal of Artificial Life Research	Prempal Singh, Dr. Ayub Khan (First Author)		September 2010

JOURNAL PAPER (International)	Chaos Synchronization in Lorenz System	International Journal of Applied Mathematics	Prempal Singh, Dr. Ayub Khan (First Author)		July 2015
JOURNAL PAPER (College)	Chaos synchronization in Non-linear Dynamical Systems	Yearly Academic Journal, NSRDM	Prempal Singh, Dr. Ayub Khan (First Author)		August 2017
JOURNAL PAPER (National)	Traffic Forecast in Large Scale Freeway Networks	Kalindi College NSRDM	Prempal Singh (Sole Author)		September 2017
JOURNAL PAPER (National)	Mathematical Modeling and Traffic Flow in Delhi	Yearly Academic Journal, NSRDM	Prempal Singh (Sole Author)		August 2018
CONFERENCE PAPER/ PROCEEDINGS (International)	Chaos synchronization via linear state error feedback control	International Conference on Operator Theory and Related Areas, University of Delhi,	Prempal Singh, Dr. Ayub Khan (First Author)		January 2008
CONFERENCE PAPER/ PROCEEDINGS (International)	Chaos synchronization	International conference on Mathematics; University of Jammu, Jammu	Prempal Singh, Dr. Ayub Khan (First Author)		March 2008
CONFERENCE PAPER/ PROCEEDINGS (International)	Study of synchronization	International Conference on Recent Trends in Mathematics and its Applications; Jamia Millia Islamia University, New Delhi	Prempal Singh, Dr. Ayub Khan (First Author)		March 2009
CONFERENCE PAPER/ PROCEEDINGS (International)	Study of chaos synchronization in various non- linear Dynamical systems	International Conference on Recent Trends in Mathematics and its Applications; South Asian University, New Delhi	Prempal Singh, Dr. Ayub Khan (First Author)		November 2017
CONFERENCE PAPER/ PROCEEDINGS (National)	Chaos Synchronization in various Dynamical Systems	The 33rd Annual Conference of the Ramanujan Mathematical Society	Prempal Singh, Dr. Ayub Khan (First Author)		June 2018
CONFERENCE PAPER/ PROCEEDINGS (National)	Mathematical Modeling of Air Pollutants: An Application to NCT Delhi	National Conference on Emerging Trends in Information Technology (NCETIT- 2019)	Prempal Singh, Dr. Ayub Khan (Sole Author)		August 2019

CONFERENCE PAPER/ PROCEEDINGS (National)	Mathematical Modelling of Air Pollution	National Conference on Advances in Mathematical Analysis and Its Application NCMAA-2019	Prempal Singh, Dr. Ayub Khan (Sole Author)		November 2019
CONFERENCE PAPER/ PROCEEDINGS (International)	Vedic Mathematics an Analysis and Applications in Modern Era	International Sanskrit Conference on Global Thinking of Sanskrit Knowledge and Science	Prempal Singh (Sole Author)		March 2020
CONFERENCE PAPER/ PROCEEDINGS (National)	History of Indian Monuments and Scientific Architecture	Conference Bharat Manthan, 2022, Azadi Ka Amrit Mahotsav	Prempal Singh (Sole Author)		June 2022
CONFERENCE PAPER/ PROCEEDINGS (National)	Mathematical Modelling of COVID- 19 Spreading with Asymptomatic Infected and Interacting Peoples in India: Future behavior and Sensitivity Analysis	Two Days National Webinar "Socio- Economic- Political Implications of Covid- 19 on Women in India"	Prempal Singh (Sole Author)		June 2021
CONFERENCE PAPER/ PROCEEDINGS (National)	Digital learning and Empowering Girls in the Corporate World	Non-Collegiate Women Education Board (NCWEB)	Dr. Prempal Singh (Sole Author)		November 2023
CONFERENCE PAPER/ PROCEEDINGS (National)	Space Technology: Renaissance of Ancient Indian legacy of Astronomical Studies	Indraprastha Adhyayan Kendra	Dr. Prempal Singh (Sole Author)		April 2024

## 8. Books

Category	Book Name	Title	Name of Author	ISSN/ ISBN Number
BOOK (National)	Elementary Linear Algebra	Prof. Dinesh Khattar, Dr. Neha Agrawal, Dr. Prempal Singh (Joint Author)	Ane Books Pvt. Ltd.	ISBN: 978-81-19160-65-5

## 9. Faculty Achievements

Year	Category of Achievement	Role	National/ International etc.	Name	Date From-To
2024	INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED	RESOURCE PERSON	National	Significance of Vedic Gyan- Parampara in Modern Era	14.Nov.2024 - 20.Nov.2024

2024	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	PARTICIPANT	National	Ancient and Modern Indian Mathematics: Use of Technical Terminology	17.Oct.2024 - 18.Oct.2024
2024	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	RESOURCE PERSON	National	Vedic Mathematics Computation and Applications	17.Oct.2024 - 18.Oct.2024
2024	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	PARTICIPANT	National	Vedic Mathematics	23.Aug.2024 - 24.Aug.2024
2024	INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED	SUBJECT EXPERT	National	certificate course on Vedic Mathematics	15.Jul.2024 - 15.Jul.2024
2024	FACULTY DEVELOPMENT PROGRAM ATTENDED	RESOURCE PERSON	National	Ancient Indian Mathematics	01.Jul.2024 - 07.Jul.2024
2024	INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED	GUEST LECTURER	National	Ancient Mathematics Lecture Series	29.Apr.2024 - 29.Apr.2024
2024	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	RESOURCE PERSON	National	Vedic Mathematics for all	08.Apr.2024 - 08.Apr.2024
2024	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	RESOURCE PERSON	National	Significance of the Study of Scientific Architecture of Ancient Indian Monuments in the light of New National Education Policy 2020	30.Mar.2024 - 31.Mar.2024
2024	INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED	RESOURCE PERSON	National	Ancient and Modern Indian Mathematics	15.Mar.2024 - 15.Mar.2024
2023	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	INVITED SPEAKER	National	International Pi- Day: Swami Bharti Krishna Tirth Ji- Creator of Vedic Ganit	14.Mar.2023 - 14.Mar.2023
2023	INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED	RESOURCE PERSON	National	Vedic Ganit Workshop for Teachers	11.Sep.2023 - 21.Sep.2023
2023	INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED	RESOURCE PERSON	National	Celebrations of the birth anniversary of legendary Mathematician S. Ramanujan & National Mathematics Day	22.Dec.2023 - 22.Dec.2023

2022	REFRESHER COURSE ATTENDED	PARTICIPANT	National	Managing online classes & co- creating MOOCS 21.0	07.Dec.2022 - 21.Dec.2022
2022	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	SUBJECT EXPERT	National	Course Workshop Vedic Mathematics -I	19.Oct.2022 - 19.Oct.2022
2022	FACULTY INDUCTION PROGRAM ATTENDED	PARTICIPANT	National	Induction programme for Faculty in Universities/Colleges/Institutes of Higher Education	20.Sep.2022 - 19.Oct.2022
2022	FACULTY DEVELOPMENT PROGRAM ATTENDED	PARTICIPANT	National	OPTIMIZATION: The OMNIPRESENT	23.Nov.2024 - 23.Nov.2024
2022	FACULTY DEVELOPMENT PROGRAM ATTENDED	PARTICIPANT	National	Applications of AI-Machine Learning and Soft Computing Techniques	29.Jan.2022 - 03.Feb.2022
2025	SEMINAR ATTENDED	PAPER PRESENTER	National	National Seminar on The future of Education in India: Interdisciplinary Prespectives	28.Mar.2025 - 29.Mar.2025

**Dr. PREMPAL SINGH**