



# Kirori Mal College

(University of Delhi)

University of Delhi, Delhi-110007

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



Print Date : 15-04-2026

## 1. Personal Profile

Title: **Dr.** First Name: **NEHA** Last Name: **AGRAWAL**

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

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

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



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

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

Youtube: ----- Research Gate Link: <https://www.researchgate.net/profile/Neha-Agrawal-30>

Google Scholar Link: <https://scholar.google.com/citations?user=FINGQVMAAAAJ&hl=en>

Address: -----

## 2. Educational Qualifications

| Degree/ Certification    | Institution                             | Year |
|--------------------------|---|------|
| Ph.D.                    | University of Delhi                     | 2020 |
| M.Phil.                  | University of Delhi                     | 2010 |
| M.A. Mathematics         | Kirori Mal College, University of Delhi | 2008 |
| B.A. (Hons.) Mathematics | Kirori Mal College, University of Delhi | 2006 |

## 3. Career Profile & Administrative Assignments

| Category                   | Role/ Designation   | Department/ Committee                 | Date From - To            | Remarks |
|----------------------------|---------------------|---------------------------------------|---------------------------|---------|
| CAREER PROFILE             | ASSISTANT PROFESSOR | MATHEMATICS KIRORI MAL COLLEGE, DELHI | 10.Oct.2012 - Till date   |         |
| CAREER PROFILE             | ASSISTANT PROFESSOR | MATHEMATICS MIRANDA HOUSE, DELHI      | 02.Jan.2012 - 09.Oct.2012 |         |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER              | IQAC KIRORI MAL COLLEGE, DELHI        | 04.Jul.2023 - 30.Jun.2025 |         |

|                            |                       |  |                              |  |
|----------------------------|-----------------------|--|------------------------------|--|
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | RESEARCH COUNCIL<br>KIRORI MAL COLLEGE,<br>DELHI                                     | 13.Jun.2023 -<br>Till date   |  |
| ADMINISTRATIVE ASSIGNMENTS | DEPUTY SUPERINTENDENT | EXAMINATION COMMITTEE<br>KIRORI MAL COLLEGE,<br>DELHI                                | 12.Oct.2023 -<br>Till date   | Deputy Superintendent in<br>University Under- Graduate<br>Semester Examinations Nov./<br>Dec., 2023 and May/June 2024. |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | PORTAL COMMITTEE<br>KIRORI MAL COLLEGE,<br>DELHI                                     | 03.Mar.2023 -<br>25.Jun.2025 |  |
| ADMINISTRATIVE ASSIGNMENTS | CONVENER              | QURIOSITY: THE QUIZ<br>SOCIETY KIRORI MAL<br>COLLEGE                                 | 12.Sep.2024 -<br>Till date   | Curiosity: The Quiz Society  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | TIME TABLE COMMITTEE<br>KIRORI MAL COLLEGE,<br>DELHI                                 | 18.May.2023 -<br>Till date   |  |
| ADMINISTRATIVE ASSIGNMENTS | CO-CONVENER           | PORTAL COMMITTEE<br>KIRORI MAL COLLEGE   | 02.Aug.2024 -<br>25.Jun.2025 |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | ALUMNI COMMITTEE<br>KIRORI MAL COLLEGE,<br>DELHI                                     | 16.Mar.2023 -<br>30.Jun.2024 |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | COORDINATING<br>COMMITTEE FOR<br>INFORMATION AND<br>TECHNOLOGY Kirori Mal<br>College | 25.Jun.2025 -<br>Till date   |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | MEDIA COMMITTEE KIRORI<br>MAL COLLEGE, DELHI   | 11.Aug.2023 -<br>25.Jun.2025 |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | FOREIGN LANGUAGE<br>COURSES COMMITTEE<br>Kirori Mal College                          | 26.Jun.2024 -<br>Till date   |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | G20 COMMITTEE KIRORI<br>MAL COLLEGE, DELHI   | 19.Jan.2023 -<br>26.Sep.2023 |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | MEDIA COMMITTEE KIRORI<br>MAL COLLEGE, DELHI   | 02.Feb.2023 -<br>17.May.2023 |  |
| ADMINISTRATIVE ASSIGNMENTS | COORDINATOR           | EXAMINATION COMMITTEE<br>Kirori Mal College  | 29.Jan.2025 -<br>Till date   | Coordinator, IA/CA, Kirori Mal<br>College  |
| ADMINISTRATIVE ASSIGNMENTS | COORDINATOR           | EDP CELL Kirori Mal College  | 12.Aug.2025 -<br>Till date   | Coordinator, EDP Cell, Kirori<br>Mal College   |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | STANDING COMMITTEE<br>FOR MONITORING<br>ADMISSIONS KIRORI MAL<br>COLLEGE, DELHI      | 01.May.2016 -<br>30.Apr.2017 |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER                | ERP ISSUES COMMITTEE<br>Kirori Mal College   | 23.May.2025 -<br>Till date   | Member, ERP Issues<br>Committee, Kirori Mal College  |

|                            |             |                                       |                         |  |
|----------------------------|-------------|---------------------------------------|-------------------------|--|
| ADMINISTRATIVE ASSIGNMENTS | MEMBER      | MATHEMATICS KIRORI MAL COLLEGE, DELHI | 01.May.2022 - Till date | Time Table Committee, Department of Mathematics, Kirori Mal College                                |
| ADMINISTRATIVE ASSIGNMENTS | COORDINATOR | OTHERS Kirori Mal College             | 06.Dec.2024 - Till date | Evaluation of SEC/VAC/AEC answer scripts for Semester Examinations Nov-Dec 2024 and May-June 2025. |

#### 4. Other Profiles

##### Other Profile Name/ Description

##### AREAS OF INTEREST/ SPECIALIZATION

Non Linear Dynamical Systems and Chaos Theory

##### SUBJECTS TAUGHT

Abstract Algebra  
 Linear Algebra  
 Differential Equations  
 Numerical Analysis  
 Mechanics  
 Discrete Mathematics  
 Analysis  
 Calculus  
 Probability and Statistics  
 Linear Programming and Applications  
 Computer Algebra Systems

##### AWARDS AND DISTINCTIONS

Secured Third position in M.A. Mathematics in University of Delhi in the year 2008.

##### WORKSHOP/ SEMINAR/ CONFERENCE/ WEBINAR ORGANIZED

Coordinator in Three day Workshop for educators on Vedic Mathematics organised by Value Addition Courses Committee (VACC), University of Delhi in collaboration with Kirori Mal College, University of Delhi from April 11 - April 13, 2023.

##### OTHERS

Co- coordinator, Aikyam under the aegis of G20 University Connect organised by Steering Committee, G20 University Connect in collaboration with Kirori Mal College, University of Delhi, on the occasion of celebrating India's Presidency of G20 on May 10-May 11, 2023.

#### 5. Research Guidance

| Year | Guide For | Title of the Dissertation/ Thesis | Scholar Name | Status |
|------|-----------|-----------------------------------|--------------|--------|
|------|-----------|-----------------------------------|--------------|--------|

#### 6. Research Projects

| Year | Title of Project   | Sponsorship Agency    | Duration | Amount Sanctioned | Date of Sanction |
|------|--|-----------------------|----------|-------------------|------------------|
| 2024 | Synergy of Vision and Mission: Exploring the VACs in the NEP-UGCF at the University of Delhi | KMC Research Projects | 1 Year   | 8000              | 01.May.2024      |

| 7. Publications               |  |  |   |   |                          |
|-------------------------------|--|--|---|---|--------------------------|
| Category                      | Publication Name   | Title  | Name of Author  | Reference Link/ DOI Link  | Publication (Month-Year) |
| JOURNAL PAPER (International) | Hybrid Projective Synchronization between different Dimensional Hyperchaotic Systems using Nonlinear Approach  | Communications of the Korean Mathematical Society              | Neha Agrawal, Renu Gupta, Dinesh Khattar, Govind Singh (First Author)           | <a href="https://doi.org/10.4134/CKMS.C240166">https://doi.org/10.4134/CKMS.C240166</a>                       | July 2025                |
| JOURNAL PAPER (International) | Chaotic Analysis of a New 3D System with Exponential Nonlinearity and its Dual Compound Combination Multiswitching Synchronization using Nonlinear Control | International Journal of Applied and Computational Mathematics | Dinesh Khattar, Neha Agrawal, Govind Singh (Joint Author)                       | <a href="https://doi.org/10.1007/s40819-025-01901-1">https://doi.org/10.1007/s40819-025-01901-1</a>           | May 2025                 |
| JOURNAL PAPER (International) | Dual quadratic compound multiswitching anti-synchronization of Lorenz, Rössler, Lü and Chen chaotic systems  | The European Physical Journal B                                | Govind Singh, Dinesh Khattar, Neha Agrawal (Joint Author, Corresponding Author) | <a href="https://doi.org/10.1140/epjb/s10051-024-00855-5">https://doi.org/10.1140/epjb/s10051-024-00855-5</a> | January 2025             |
| JOURNAL PAPER (International) | Qualitative Analysis of a Novel 4D Hyperchaotic System and its Chaos Synchronisation via Active, Adaptive and Sliding Mode Control                         | Indian Journal of Physics                                      | Neha Agrawal, Govind Singh (First Author)                                       | <a href="https://doi.org/10.1007/s12648-024-03140-4">https://doi.org/10.1007/s12648-024-03140-4</a>           | April 2024               |

|                               |   |  |  |   |                |
|-------------------------------|---|--|--|---|----------------|
| JOURNAL PAPER (International) | Anti Difference Quadratic Compound Synchronization of Lorenz, Rossler, Modified Finance and Shimizu- Morioka Chaotic Systems    | Indian Journal of Physics                                      | Dinesh Khattar, Neha Agrawal, Govind Singh (Joint Author)      | <a href="https://doi.org/10.1007/s12648-023-02893-8">https://doi.org/10.1007/s12648-023-02893-8</a> | September 2023 |
| JOURNAL PAPER (International) | Qualitative analysis of a new 6D hyper-chaotic system via bifurcation, the Poincare notion, and its circuit implementation      | Indian Journal of Physics                                      | Dinesh Khattar, Neha Agrawal, Mukul Sirohi (Joint Author)      | <a href="https://doi.org/10.1007/s12648-023-02796-8">https://doi.org/10.1007/s12648-023-02796-8</a> | June 2023      |
| JOURNAL PAPER (International) | Dynamical Analysis of a 5D novel system based on Lorenz system and its hybrid projective synchronization using adaptive control | Pramana  | Dinesh Khattar, Neha Agrawal, Mukul Sirohi (Joint Author)      | <a href="https://doi.org/10.1007/s12043-023-02544-x">https://doi.org/10.1007/s12043-023-02544-x</a> | May 2023       |
| JOURNAL PAPER (International) | Chaos synchronization of a new chaotic system having exponential term via adaptive and sliding mode control                     | Differential Equations and Dynamical Systems                   | Dinesh Khattar, Neha Agrawal, Govind Singh (Joint Author)      | <a href="https://doi.org/10.1007/s12591-023-00635-0">https://doi.org/10.1007/s12591-023-00635-0</a> | April 2023     |
| JOURNAL PAPER (International) | Triple compound combination synchronization of eleven n-dimensional chaotic systems   | International Journal of Dynamics and control                  | Dinesh Khattar, Neha Agrawal, Govind Singh (Joint Author)      | <a href="https://doi.org/10.1007/s40435-023-01140-6">https://doi.org/10.1007/s40435-023-01140-6</a> | February 2023  |
| JOURNAL PAPER (International) | Dual combination-combination anti synchronization of eight fractional order chaotic systems                                     | International Journal of Applied and Computational Mathematics | Ayub Khan, Dinesh Khattar, Neha Agrawal (Corresponding Author) | <a href="https://doi.org/10.1007/s40819-021-01237-6">https://doi.org/10.1007/s40819-021-01237-6</a> | January 2022   |

|                               |  |  |  |   |                |
|-------------------------------|--|--|--|---|----------------|
| JOURNAL PAPER (International) | Anti difference Multiswitching compound-compound combination synchronization of seven chaotic systems                            | Differential Equations and Dynamical Systems                   | Ayub Khan, Dinesh Khattar, Neha Agrawal (Corresponding Author) | <a href="https://doi.org/10.1007/s12591-021-00583-7">https://doi.org/10.1007/s12591-021-00583-7</a> | September 2021 |
| JOURNAL PAPER (International) | Dual combination - combination Multiswitching synchronization of eight fractional order hyperchaotic nonlinear dynamical systems | International Journal of Applied and Computational Mathematics | Ayub Khan, Dinesh Khattar, Neha Agrawal (Corresponding Author) | <a href="https://doi.org/10.1007/s40819-019-0722-z">https://doi.org/10.1007/s40819-019-0722-z</a>   | September 2019 |
| JOURNAL PAPER (International) | Synchronization of a new fractional order chaotic system   | International Journal of Dynamics and Control                  | Ayub Khan, Dinesh Khattar, Neha Agrawal (Corresponding Author) | <a href="https://doi.org/10.1007/s40435-017-0389-4">https://doi.org/10.1007/s40435-017-0389-4</a>   | December 2017  |
| JOURNAL PAPER (International) | Synchronization between two non - identical fractional order hyperchaotic systems  | Journal of Mathematical and Computational Science              | Ayub Khan, Dinesh Khattar, Neha Agrawal (Corresponding Author) | <a href="https://doi.org/10.28919/jmcs/3601">https://doi.org/10.28919/jmcs/3601</a>                 | March 2018     |
| JOURNAL PAPER (International) | Hybrid Projective Synchronization between the fractional order systems   | Journal of Mathematical and Computational Science              | Ayub Khan, Dinesh Khattar, Neha Agrawal (Corresponding Author) | <a href="https://doi.org/10.28919/jmcs/3591">https://doi.org/10.28919/jmcs/3591</a>                 | February 2018  |
| JOURNAL PAPER (International) | Synchronization of Genesio and Lu chaotic dynamical systems via active control   | International Journal of Applied Mathematics                   | Ayub Khan, Dinesh Khattar, Neha Agrawal (Corresponding Author) | 10.12732/ijam.v29i2.1   | April 2016     |

## 8. Books

| Category             | Book Name    | Title                                       | Name of Author  | ISSN/ ISBN Number |
|----------------------|--------------|---|-----------------|-------------------|
| BOOK (International) | Ring Theory  | Dinesh Khattar, Neha Agrawal (Joint Author) | Springer Nature | 978-3-031-29439-6 |
| BOOK (International) | Group Theory | Dinesh Khattar, Neha Agrawal (Joint Author) | Springer Nature | 978-3-031-21306-9 |

|                    |                           |   |                     |                   |
|--------------------|---------------------------|---|---------------------|-------------------|
| BOOK<br>(National) | Elementary Linear Algebra | Dinesh Khattar, Neha Agrawal, Prempal Singh<br>(Joint Author)   | Ane Books Pvt. Ltd. | 978-81-19160-65-5 |
| BOOK<br>(National) | Linear Algebra            | Dinesh Khattar, Abhishek Tandon, Neha Agrawal<br>(Joint Author) | Ane Books Pvt. Ltd. | 978-93-94883-35-2 |
| BOOK<br>(National) | Ring Theory               | Dinesh Khattar, Neha Agrawal<br>(Joint Author)                  | Ane Books Pvt. Ltd. | 978-93-90658-48-0 |
| BOOK<br>(National) | Group Theory              | Dinesh Khattar, Neha Agrawal<br>(Joint Author)                  | Ane Books Pvt. Ltd. | 978-93-90658-94-7 |

## 9. Faculty Achievements

| Year | Category of Achievement                               | Role        | National/<br>International<br>etc. | Name   | Date From-<br>To          |
|------|---|-------------|------------------------------------|--|---------------------------|
| 2024 | ONLINE CERTIFICATE COURSE/ TRAINING PROGRAMS ATTENDED | PARTICIPANT | National                           | NEP 2020 Orientation and Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of UGC       | 07.May.2024 - 16.May.2024 |
| 2024 | WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED                | PARTICIPANT | National                           | Collecting Stories under Digital District Repository Project of Azadi ka Amrit Mahotsav                                  | 06.May.2024 - 07.May.2024 |
| 2022 | FACULTY DEVELOPMENT PROGRAM ATTENDED                  | PARTICIPANT | National                           | Significance of Vedic Mathematics in Modern Era  | 05.Dec.2022 - 10.Dec.2022 |
| 2022 | FACULTY INDUCTION PROGRAM ATTENDED                    | PARTICIPANT | National                           | Four Week Faculty Induction/ Orientation Programme for Faculty in Universities/ Colleges/ Institutes of Higher Education | 20.Sep.2022 - 19.Oct.2022 |
| 2022 | REFRESHER COURSE ATTENDED                             | PARTICIPANT | National                           | Two Week Interdisciplinary Refresher course in Advanced Research Methodology   | 27.Oct.2022 - 10.Nov.2022 |
| 2020 | FACULTY DEVELOPMENT PROGRAM ATTENDED                  | PARTICIPANT | National                           | Faculty Development Programme on R   | 11.May.2020 - 15.May.2020 |
| 2020 | FACULTY DEVELOPMENT PROGRAM ATTENDED                  | PARTICIPANT | National                           | Role of LaTeX in Scientific Writing  | 19.Jun.2020 - 21.Jun.2020 |
| 2020 | FACULTY DEVELOPMENT PROGRAM ATTENDED                  | PARTICIPANT | National                           | Twelve Day Faculty Development Programme on SCILAB   | 22.May.2020 - 02.Jun.2020 |
| 2020 | FACULTY DEVELOPMENT PROGRAM ATTENDED                  | PARTICIPANT | National                           | Ten Day Faculty Development Programme on R Programming   | 08.Jun.2020 - 17.Jun.2020 |
| 2020 | FACULTY DEVELOPMENT PROGRAM ATTENDED                  | PARTICIPANT | National                           | Seven Days Online FDP on ICT: Instructional Design, Development and Learning Analytics                                   | 24.Jul.2020 - 30.Jul.2020 |

|      |   |             |               |  |                           |
|------|---|-------------|---------------|--|---------------------------|
| 2020 | WEBINAR ATTENDED  | PARTICIPANT | National      | Role of ICC and Prevention, Prohibition and Redressal of Sexual harassment of Workmen at Workplace | 22.May.2020 - 22.May.2020 |
| 2020 | WEBINAR ATTENDED  | PARTICIPANT | National      | Breast Cancer Awareness Webinar  | 24.Oct.2020 - 24.Oct.2020 |
| 2020 | WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED                          | PARTICIPANT | International | International Workshop on Numerical Methods in Scientific Computing (IWNMSC- 2020)                 | 21.Feb.2020 - 22.Feb.2020 |
| 2019 | INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED | PARTICIPANT | International | International Conference on Physics, Society and Technology - 2019                                 | 17.Jan.2019 - 19.Jan.2019 |
| 2019 | INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED | PARTICIPANT | National      | National Conference on Advances in Mathematical Analysis and its Applications                      | 08.Nov.2019 - 10.Nov.2019 |
| 2018 | INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED | PARTICIPANT | National      | National Research Scholars' Seminar  | 28.Dec.2018 - 28.Dec.2018 |
| 2017 | SEMINAR ATTENDED  | PARTICIPANT | National      | National Seminar on Recent Developments in Mathematics   | 12.Jan.2017 - 13.Jan.2017 |
| 2020 | ONLINE CERTIFICATE COURSE/ TRAINING PROGRAMS ATTENDED           | PARTICIPANT | National      | Introduction to Computer Algebra System: Maxima (An open source software)                          | 27.Jun.2020 - 18.Jul.2020 |
| 2013 | ONLINE CERTIFICATE COURSE/ TRAINING PROGRAMS ATTENDED           | PARTICIPANT | National      | Instructional School for Teachers in Group Theory  | 03.Jun.2013 - 15.Jun.2013 |
| 2015 | ONLINE CERTIFICATE COURSE/ TRAINING PROGRAMS ATTENDED           | PARTICIPANT | National      | MATLAB Fundamentals  | 07.May.2015 - 09.May.2015 |
| 2010 | WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED                          | PARTICIPANT | National      | Workshop on Information Literacy and Competency  | 23.Feb.2010 - 23.Feb.2010 |
| 2016 | WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED                          | PARTICIPANT | National      | Workshop on LaTeX and HTML   | 27.Aug.2016 - 27.Aug.2016 |
| 2014 | WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED                          | PARTICIPANT | National      | Workshop on Teaching Methodology for Maths for Visual Impairment                                   | 12.Mar.2014 - 13.Mar.2014 |

**Dr. NEHA AGRAWAL**