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| **Title** | **Dr.** | **First Name** | **PRACHI** | **Last Name** | **SACHAN** | Photograph | |
| **Date of Birth** | | **04-May-1993** | | | |  | |
| **Designation** | | **Assistant Professor (Regular)** | | | |
| **Permanent Address** | | **D/o Mukesh Sachan, Sajeti, Sajeti Kanpur Nagar, Uttar Pradesh, India. Pin Code -208001.** | | | |
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| **Experience: -** | | | | | | | |
| Working as Assistant Professor in Galgotias University, Grater Noida, 1-Aug.2022 to 6-Sep. 2022. | | | | | | | |
| Working as guest lecturer in Zakir Husain College Delhi from Feb.-2022 to July-2022. | | | | | | | |
| Working as guest lecturer in Rajkiya Engineering College, Banda from Sep.-2016 to May-2017. | | | | | | | |
| **Educational Qualifications** | | | | | | | |
| **Degree** | | **Institution** | | | **Year** | | **% Percentage** |
| **Ph. D.** | | **University of Delhi,**  **Delhi, India** | | | **January, 2022, (Awarded)** | |  |
| **M.Sc. Mathematics** | | **IIT Kharagpur,**  **West Bengal, India** | | | **2016** | | **6.64** |
| **B.Sc.** | | **D.A.V College Kanpur,**  **C.S.J.M.U. Kanpur, U.P. India.** | | | **2012** | | **59.3** |

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|  | **DESHBANDHU COLLEGE**  **(UNIVERSITY OF DELHI)**  **KALKAJI, NEW DELHI - 110019**  **Faculty Details Proforma for College Website** |

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| **Title of the Thesis:** The Basins of Convergence in Axisymmetric Restricted Five-Body-Problem, Under the supervision of Prof. Rajiv Aggarwal |
| **Areas of Interest / Specialization** |
| * Abstract Algebra, Linear Algebra, Real Analysis, and Restricted Five-Body-Problem |
| * **Software** **skill:** Mathematica, LATEX, and C Programming Language, R-programming language |
| **Publications Profile** |
| **Research Paper in International Journals (SCI):**   1. Md Sanam Suraj, Prachi Sachan, Euaggelos E. Zotos, Amit Mittal, Rajiv Aggarwal (2018): On the fractal basins of convergence of the libration points in the axisymmetric five-body problem: The convex configuration, International Journal of Non-Linear Mechanics, Elsevier. 109, 80—106.   doi: <https://doi.org/10.1016/j.ijnonlinmec.2018.11.005>   1. Md Sanam Suraj, Prachi Sachan, Euaggelos E. Zotos, Amit Mittal and Rajiv Aggarwal, (2019): On the Newton-Raphson basins of convergence associated with the libration points in the axisymmetric restricted five-body problem: the concave case, International Journal of Non-Linear Mechanics, Elsevier, 112, 25--47, doi: <https://doi.org/10.1016/j.ijnonlinmec.2019.02.013> 2. Md Sanam Suraj, Prachi Sachan, Amit Mittal and Rajiv Aggarwal, (2019) The effect of small perturbations in the Coriolis and centrifugal forces in the axisymmetric restricted five-body problem, Astrophysics and space science, 364:1—13. <https://doi.org/10.1007/s10509-019-3528-x> 3. Md Sanam Suraj, Rajiv Aggarwal, Amit Mittal, Md Chand Asiqe and Prachi Sachan, (2019), On perturbed photogravitational restricted five-body problem: The analysis of fractal basins of convergence, Astrophysics and Space Science 364:1—15. <https://doi.org/10.1007/s10509-019-3573-3> 4. Prachi Sachan, Md Sanam Suraj, Rajiv Aggarwal, Amit Mittal, Md Chand Asiqe: On the axisymmetric restricted five-body problem within the frame of variable mass: the convex case: New Astronomy, Volume - 99 <https://doi.org/10.1016/j.newast.2021.101697> 5. Prachi Sachan, Md Sanam Suraj, Rajiv Aggarwal, Amit Mittal; Md Chand Asique. A study of the axisymmetric restricted five-body problem within the frame of variable mass: The concave case. ICARUS (In Process). |

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| **Conferences and Seminars** |
| 1. Participated and presented a paper entitled “The libration pints in the axisymmetric restricted five-body problem” in International Conference on Applicable Mathematics, Department of Mathematics Motilal Nehru College University of Delhi. (19-20 February, 2018), New Delhi, India. 2. Participated in National research Scholars' Seminar, Department of Mathematics, University of Delhi (December 28, 2018), New Delhi, India. 3. Participated and presented a paper entitled “The effect of small perturbations in the Coriolis and centrifugal forces in the axisymmetric restricted five-body problem” in International Conference on Applicable Mathematics, Department of Mathematics Ramanujan College University of Delhi, (19--21 December, 2019), New Delhi, India. 4. Participated and presented a paper entitled “On the axisymmetric restricted five-body problem within the frame of variable mass” in International Conference on Physics, Society and Technology, Department of Physics Deshbandhu College University of Delhi, (17--19 January, 2019), New Delhi, India. |

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| **Workshop Attended** |
| 1. Attended workshop on "Mathematical Modelling and Computational Techniques Using Mathematica" held at Zakir Husain College, University of Delhi from March 30-31, 2017. 2. Attended workshop on "Numerical Techniques for Differential Equations" held at Department of Mathematics Visvesvaraya National Institute of Technology, Nagpur, India. 3. Participated in the "Teacher's Enrichment Workshop on The Differential Equations, Mathematical Modelling and Analysis" held at Deshbandhu College, New Delhi during July 24--29, 2018. 4. Participated in ACITE recognized short term course on Climate Change and Disaster Management through ICT conducted by Rural Development Department from 03.10.2016 to 07.10.2016 at Rajkiya Engineering College Banda Uttar Pradesh. 5. Participated in ACITE recognized short term course on Skill India through ICT conducted by Rural Development Department from 27.02.2017 to 03.03.2017 at Rajkiya Engineering College Banda Uttar Pradesh. |

**Signature**