List of Ph.D. Scholars of the Department of Mathematics

| S.No. | Name of the | Name of the | Registration Number | Year of | Title of the thesis |
|-------|-----------------------------|---------------------------------------|----------------------|---------|---|
| | Scholar | Supervisor/s | | Award | |
| 1 | Dr. Shelly Arora | Dr. V.K. Kukreja Dr. S.S. Dhaliwal | PTU/Ph.D./07.04.03 | 2007 | Solutions of partial differential equations involving diffusion dispersion phenomenon using weighted residual methods |
| 2 | | Dr. R.K. Mishra Dr. S.S. Dhaliwal | SLIET/Ph.D./07.07.06 | 2011 | Investigation on certain cosmological models of general theory of relativity for existence of dark matter in the universe due to variable constants |
| | Dr. Arunesh Kumar Pandey | Dr. R.K. Mishra Dr. T.N. Pandey | SLIET/Ph.D./14/07 | 2014 | Certain investigations on hidden connections between Finsler geometry & theory of relativity along with study of various cosmological consequences |
| | Dr. Sukhwinder Singh | Dr. S.S. Dhaliwal Dr. Sushma Gupta | SLIET/Ph.D./15/07 | 2011 | Some differential subordinations and their applications to the study of univalent and multivalent functions |
| 5 | Dr. Sanjeev Kumar | Dr. S.S. Dhaliwal | SLIET/Ph.D./34/08 | 2012 | Development and analysis of new iterative methods for numerical solution of non-linear equations |
| 6 | Dr. Rajni Sharma | Dr. J.R. Sharma Dr. R.K. Guha | SLIET/Ph.D./38/08 | 2012 | Iterative methods for the solution of nonlinear equations |
| 7 | Dr. Sabina | Dr. Vinod Mishra | SLIET/Ph.D./47/08 | 2012 | Wavelet-Galerkin technique for solving certain numerical differential equations and inverse ill-posed problems |
| 8 | Dr. Puneet Gupta | Dr. J.R. Sharma Dr. R.K. Guha | SLIET/Ph.D./62/08 | 2014 | Numerical solutions of nonlinear equations: Some improved iterative methods |
| 9 | Dr. Bharti Gupta | Dr. V.K. Kukreja | SLIET/Ph.D./80/08 | 2015 | Applications of orthogonal Spline collocation method for the solution of Diffusion problems |
| | Dr. Ajay Kumar Mittal | Dr. V.K. Kukreja | SLIET/Ph.D./94/09 | 2015 | Solution of two point boundary value problems by orthogonal collocation on finite elements using Hermite basis |
| 11 | Dr. Rupinderjit Kaur | Dr. Mandeep Singh | SLIET/Ph.D./115/09 | 2014 | Inequalities involving matrix functions |

| 12 | Dr. Harpreet Kaur | Dr. Vinod Mishra Dr. R.C. Mittal, IIT | SLIET/Ph.D./116/09 | 2015 | Haar wavelet technique for solving certain differential, integral and integro-differential equations |
|----|----------------------------|--|--------------------|------|--|
| 13 | Dr. Sarika Verma | Dr. S.S. Dhaliwal Dr. Sushma Gupta | PMA-1002 | 2015 | Study of some integral operators involving analytic functions |
| 14 | Dr. Chanchal | Dr. R.K. Mishra | PMA-1003 | 2015 | Certain aspects of the expansion of Bianchi I & II universes with |
| 15 | Dr. Raj Kumar | Dr. S.S. Dhaliwal Dr. Sushma Gupta | PMA-1004 | 2015 | Convolution properties of some univalent harmonic functions |
| 16 | Dr. Gurbinder Kaur | Dr. R.K. Guha Dr. J. Dhar, IIITM | PMA-1005 | 2017 | Hybrid approach of conventional time series and ANN soft computing techniques for forecasting NSE and BSE stocks |
| 17 | Dr. Dinesh Kumar | Dr. S.S. Dhaliwal Dr. J.N. Sharma, | PMA-1006 | 2015 | Analysis of wave propagation through visco-thermo-elastic materials |
| 18 | Dr. Ishfaq Ahmad Ganaie | Dr. V.K. Kukreja | PMA-1007 | 2015 | Solution of differential equations using Hermite collocation method |
| 19 | Dr. Himani Arora | Dr. J.R. Sharma | PMA-1101 | 2017 | Some improved classes of Iterative methods for solving nonlinear equations |
| 20 | Dr. Rajinder Pal | Dr. Mandeep Singh | PMA-1102 | 2019 | On matrix inequalities |
| 21 | Dr. Avtar Chand | Dr. R.K. Mishra Dr. J.R. Sharma | PMA-1301 | 2019 | Certain investigation on dark energy cosmological models in alternative theories of gravitation |
| 22 | Dr. Dimple Rani | Dr. Vinod Mishra | PMA-1305 | 2020 | Laplace transform based numerical solutions of certain differential and integral equations |
| 23 | Dr. Anchal Aggarwal | Dr. Mandeep Singh Dr. Dr. J.S. | PMA-1501 | 2021 | Operators and associated norm inequalities |
| 24 | Dr. Deepak Kumar | Dr. J.R. Sharma | PMA-1502 | 2020 | Development and analysis of some efficient iterative methods for solving nonlinear equations |
| 25 | Dr. Sunil Kumar | Dr. J.R. Sharma | PMA-1601 | 2021 | Development of some improved classes of numerical methods for solving nonlinear equations |
| 26 | Dr. Deepali | Dr. S.S. Dhaliwal Dr. Sushma Gupta | PMA-1303 | 2021 | Some aspect of univalent harmonic mappings |

| 27 | Dr. Ravneet Kaur | Dr. V.K. Kukreja | PMA-1304 | | Solution of some partial differential equations using finite difference method |
|----|------------------|------------------|----------|------|---|
| 28 | Dr. Yogesh Kapil | Dr. Mandeep | PMA-1401 | 2022 | Operator inequalities |
| 29 | | | | 2022 | Analytic and geometric properties of some univalent harmonic |
| | | Dr. Sushma Gupta | | | functions |
| 30 | Dr. Shallu | Dr. V.K. Kukreja | PMA-1804 | | An approved B-spline collocation method for non-linear partial differential equations |

List of Ph.D. Students of Department of Mathematics (Pursuing)

| Name of the | Name of the | Registration | Title of the Thesis |
|--------------------|---|--|--|
| Scholar | Supervisor/s | Number | |
| Ms. Heena Dua | Dr. R.K. Mishra | PMA-1504 | Certain investigations on cosmological models with billinear deceleration |
| | | | parameter in alternative theories of gravitation |
| Mr. Sonu | Dr. R.K. Guha | PMA-1602 | New products adoption dynamics in competitive environment: innovation |
| | | | diffusion models |
| Ms. Parveen Ansari | Dr. R.K. Guha | PMA-1701 | Best control dynamics with natural enemy and seasonal variations |
| Ms. Narbada Rani | Dr. Vinod Mishra | PMA-1801 | Magic squares and cubes: constructions, properties and applications |
| Ms. Archna Kumari | Dr. V.K. Kukreja | PMA-1802 | Solution of singularly perturbed differential equations using Hermite collocation |
| | | | method |
| Ms. Roji Bala | Dr. Vinod Mishra | PMA-1805 | Fibonacci and Narayana like sequences theory and applications |
| Mr. Harmandeep | Dr. J.R.Sharma | PMA-2011 | On some efficient numerical methods for non –linear equations |
| Mr. Mandeep | Dr. Mandeep Singh | PMA-2012 | Analysis on inertia and determinants of some special matrices |
| Ms. Anju Rani | Dr. Mandeep Singh | PMA-2025 | Operator inequalities involving singular values |
| Ms. Manju Yadav | Dr. S.S. Dhaliwal | PMA-2118 | Mapping properties of some univalent functions |
| | Dr. Sushma Gupta | | |
| Ms. Anita | Dr. V.K. Kukreja | PMA-2121 | Solution of fractional partial differential equations using improvised cubic B- |
| | | | spline collocation method |
| | Scholar Ms. Heena Dua Mr. Sonu Ms. Parveen Ansari Ms. Narbada Rani Ms. Archna Kumari Ms. Roji Bala Mr. Harmandeep Mr. Mandeep Ms. Anju Rani Ms. Manju Yadav | Scholar Ms. Heena Dua Dr. R.K. Mishra Mr. Sonu Dr. R.K. Guha Ms. Parveen Ansari Ms. Narbada Rani Ms. Archna Kumari Ms. Archna Kumari Mr. Harmandeep Mr. Harmandeep Mr. Mandeep Ms. Anju Rani Ms. Anju Rani Ms. Manju Yadav Dr. S.S. Dhaliwal Dr. Sushma Gupta | Scholar Ms. Heena Dua Dr. R.K. Mishra PMA-1504 Mr. Sonu Dr. R.K. Guha PMA-1602 Ms. Parveen Ansari Ms. Narbada Rani Ms. Archna Kumari Ms. Archna Kumari Ms. Roji Bala Dr. Vinod Mishra PMA-1802 Ms. Roji Bala Dr. Vinod Mishra PMA-1805 Mr. Harmandeep Dr. J.R.Sharma PMA-2011 Mr. Mandeep Dr. Mandeep Singh PMA-2012 Ms. Anju Rani Dr. S.S. Dhaliwal Dr. Sushma Gupta |

| 12 | Ms. Mannat Mand | Dr. V.K. Kukreja | PMA-2138 | Analysis of distribution and normalization using statistical techniques in data |
|----|--------------------|--------------------|----------|---|
| | | Dr. Birmohan Singh | | science |
| 13 | Mr. Rahul Sharma | Dr. R.K. Mishra | PMA-2213 | Yet to be decided |
| 14 | Mr. Arbaz Khan | Dr. S. Kumar | PMA-2212 | Yet to be decided |
| 15 | Ms. Navya Jain | Dr. R.K. Mishra | PMA-2224 | Yet to be decided |
| 16 | Ms. Drishti Rajput | Dr. V. Mishra | PMA-2225 | Yet to be decided |
| 17 | Mr. Prem Sagar | Dr. J.R. Sharma | PMA-2310 | Yet to be decided |