



Prof.(Dr.) S. I. Unhale

Publication of Research Papers:

UGC listed journals	: 10
Peer reviewed journals	: 02
Non-peer reviewed journals	: 05
Conference proceedings	: 03

List of Publication of Research Papers:

- Hayman Thabet, S.D. Kendre and S.I. Unhale; Numerical Analysis of Iterative Fractional Partial Integro-Differential Equations, *Journal of Mathematics*, (2022), 1-14.
- S.I. Unhale and S. D. Kendre; On existence and uniqueness results for iterative mixed integrodifferential equation of fractional order, *J. Appl. Anal.*, 26(2) (2020), 263-272 <https://doi.org/10.1515/jaa-2020-2023>.
- S.D. Kendre and S.I. Unhale; On existence, uniqueness and Ulam's stability results for boundary value problems of fractional iterative integrodifferential equations, *Journal J. Appl. Math. Comput.*, 64 (2020), 503-517, <https://doi.org/10.1007/s12190-020-01366-z>.
- S.I. Unhale and M. A. Joshi; A Statistical Study on Road Accidents in Ghat Section of Mumbai Pune Expressway, *Utkal Historical Research Journal*, 36, 1(III), (2023), 50-53.
- S.I. Unhale and S.D. Kendre; On Existence and Uniqueness results for iterative fractional integrodifferential equation with deviating arguments, *Applied Mathematics E-Notes*, 19(2019), 116-127.
- S.I. Unhale and S.D. Kendre; On Controllability of Mixed Iterative Integrodifferential Equations of Fractional Order, *Malaya Journal of Matematik*, 1 (2019), 679-688.
- S.I. Unhale and S.D. Kendre; Existence and Uniqueness Results for Iterative Volterra Integrodifferential Equation of Fractional Order, *Communications on Applied Nonlinear Analysis*, 25(1) (2018), 81-91.
- S.I. Unhale and S.D. Kendre; Numerical Solution of Nonlinear Fractional Integro-differential Equations by Collocation method, *Malaya Journal of Matematik*, 6(1) (2018), 73-79.
- S.I. Unhale; Numerical Solution of Nonlinear Fractional Integrodifferential Equation by Fractional Power Series Method, *Printing Area*, International Research Journal, Special Issue, 2018, 85-91.
- Subhash I. Unhale and Sadikali L. Shaikh; Applications of the Sumudu Transform to Groundwater Flow and Solute Transport Modelling, *International Journal of Research and Analytical Reviews*, 5(4) 2018, 554-558.



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Janardan Bhagat Shikshan Prasarak Sanstha's

CHANGU KANA THAKUR

**ARTS, COMMERCE AND SCIENCE COLLEGE, NEW PANVEL
(AUTONOMOUS)**

Re-accredited 'A+' Grade by NAAC (3rd Cycle - CGPA 3.61)

'College with Potential for Excellence' Status Awarded by UGC

'Best College Award' by University of Mumbai

- S.I. Unhale and N.D. Mokal; An Assessment of Student Project using Fuzzy Logic based on Grading System, *Anugoonj*, (6), 2016-2017, 31-35.
-
- S.I. Unhale and N.D. Mokal; Evaluation of Faculty Performance by Using Fuzzy Logic in Educational Institutions, *Anugoonj*, (5), 2015-2016, 33-39.
- S.I. Unhale and N.D. Mokal; A New Approach for Fuzzy Traffic Signal Control, *Anugoonj*, (4), 2014-2015, 30-34.
- S.I. Unhale and N.D. Mokal; Fuzzy Logic Control of Washing Machine, *Anugoonj*, (3), 2013-2014, 30-35.
- S.I. Unhale and M.A. Joshi; Fast Food: Need of Trend, *Anugoonj*, (2), 2012-2013, 62-64.
- Unhale S.I. and Chaudhary M.S.; On distributional generalised Laplace transformation', *The Journal of the Indian Academy of Mathematics*, 30 (2) 2008, 403-412.

Publications in Conference Proceedings (03)

- Feedback Management System: Our Initiative
- Planning, Execution and feedback for effective Teaching-Learning process: Our Initiative
- Applications of Differential Equation for corruption & Population growth & decay

Books authored:

Edited book by National publisher: 10

List of Books authored:

- Calculus I, Sheth Publishers Pvt. Ltd.
- Calculus II, Sheth Publishers Pvt. Ltd.
- Computer Oriented Statistical techniques, Sheth Publishers Pvt. Ltd.
- Mathematical & Statistical Techniques-I, Sheth Publishers Pvt. Ltd.
- Mathematical & Statistical Techniques-II, Sheth Publishers Pvt. Ltd.
- Calculus II, Sheth Publishers Pvt. Ltd.
- Mathematical & Statistical Techniques, Sem. I, Universal Publishing House
- Mathematical & Statistical Techniques, Sem II, Universal Publishing House
- Business Mathematics, Sheth Publishers Pvt. Ltd.
- Calculus I, Sheth Publishers Pvt. Ltd.



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• **Mr. S. L. Khairnar**

Publication of Research Papers:

UGC listed journals	:	05
Peer reviewed journals	:	02

List of Publication of Research Papers:

- Mr. S.L. Khairnar,; Analysis And Simulation Of A SEIR Model For Covid-19 Virus In Pune, Educreator Research Journal,, (2022).
- Mr. S.L. Khairnar,; Extrapolating data by using polynomials: A case study on Panvel Tahsil Population, Educreator Research Journal,, (2022).
- S.I. Unhale, S.L. Khairnar and M.A. Joshi; Study On Impact of Sound Frequency on Human Well Being Using Randomized Block Design
- Mr. S.L. Khairnar & Mrs. M.A.Joshi; Enhancing Mathematical Education for Students through the Integration of Software Tools
- Mr. S.L. Khairnar & Mrs. M.A.Joshi; Exploring Population Dynamics in Nashik District: Applying Polynomial Extrapolation
- Mr. S.L. Khairnar & Mrs. M.A.Joshi; Temporal Analysis Of COVID-19 Cases And Recovery Trends In Panvel City: A Spline Curve Approach

Books authored:

Edited book by National publisher:	:06
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List of Books authored:

Name of the Author	Title of the book/ chapter published	Title of the paper	Title of the proceeding of the conference	ISBN/ ISSN No.	Name of the publisher
Dr. S.I. Unhale and Mr. S.L. Khairnar	Mathematical and Statistical Techniques- I	Mathematical and Statistical Techniques- I	-	ISBN-978-93-5576-348-8	Sheth Publisher
Dr. S.I. Unhale and Mr. S.L. Khairnar	Mathematical and Statistical Techniques- II	Mathematical and Statistical Techniques- II	-	ISBN-978-93-5576-850-6	Sheth Publisher
Dr. S.I. Unhale and Mrs. N.R. Gharat	Calculus- I	Calculus- I	-	ISBN-978-93-5576-340-2	Sheth Publisher



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'Best College Award' by University of Mumbai

Dr. S.I. Unhale and Mrs. N.R. Gharat	Calculus- II	Calculus- II	-	ISBN- 978-93- 5576- 218-4	Sheth Publisher
Dr. S.I. Unhale and Mr. S.L. Khairnar	Algebra-I	Algebra-I	-	ISBN- 978-93- 5576- 333-4	Sheth Publisher
Dr. S.I. Unhale and Mr. S.L. Khairnar	Discrete Mathematics	Discrete Mathematics	-	ISBN- 978-93- 5576- 226-9	Sheth Publisher

- **Ms. N. C. Patil**

List of Publication of Research Papers:

- Ms. Neha Patil, Computational evaluation of dominant eigenvalue and its corresponding eigenvector using power method, *Mukt Shabd Journal*, 12(IV), 238-243, 2023 <https://shabdbooks.com/volume-12-issue-4-april-2023/>

- **Mrs. N. R. Gharat**

Publication of Research Papers:

Non-peer reviewed journals	:	06
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List of Publication of Research Papers:

- Mrs. N. R. Gharat , Dr. S. I. Unhale; Profit maximization in a manufacturing factory by using Linear programming, *Anugoonj*, 2022-2023
- Mrs. N. R. Gharat , Dr. S. I. Unhale; Application of Warshall Algorithm for providing shortest path to ambulance during emergency to get to and fro from patients home to hospital, *Anugoonj*, 2021-2022
- N.D. Mokal and S.I. Unhale; An Assessment of Student Project using Fuzzy Logic based on Grading System, *Anugoonj*, (6), 2016-2017, 31-35.



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- Calculus II, Sheth Publishers Pvt. Ltd.

- **Mrs. M. A. Joshi**

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Peer reviewed journals	:	01

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- S.I. Unhale and M. A. Joshi; A Statistical Study on Road Accidents in Ghat Section of Mumbai Pune Expressway, *Utkal Historical Research Journal*, 36, 1(III), (2023), 50-53.
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- Dr. S.I. Unhale & Mrs. M.A. Joshi, A Statistical study on road accidents in Ghats section of Mumbai-pune expressway, *Utkal Historical Research journal*, ISSN: 0976-2132
2023, Vol 36, NO.1(III), Pg no. 50-53
- S.I. Unhale, S.L. Khairnar and M.A. Joshi; Study On Impact of Sound Frequency on Human Well Being Using Randomized Block Design
- Mr. S.L. Khairnar & Mrs. M.A.Joshi; Enhancing Mathematical Education for Students through the Integration of Software Tools
- Mr. S.L. Khairnar & Mrs. M.A.Joshi; Exploring Population Dynamics in Nashik District: Applying Polynomial Extrapolation



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- Computer Oriented Statistical techniques, Sheth Publishers Pvt. Ltd.