

# PRAMITI



## DEPARTMENT OF MATHEMATICS AND HUMANITIES



*"Mathematics is the language with which god has written the universe."*  
- Galileo Galilei



2022



# Welcome Note



## *From the Head of the Department*

The Department of Mathematics and Humanities has been working on various initiatives to improve and modernize the department, and one of those is Pramiti (which in Sanskrit mean Right Conception), which shows all the events that took place in the department during the previous academic year. This document is an attempt to bridge the gap between the administration and the public by providing all the necessary information. It provides an overview of activities that took place during the past year and serves as a creative corner, promoting creativity among students and hence, enhancing positivity.

The Department published more than thirty-nine (39) papers which is a substantial increase from the previous academic year. The department has recently been granted INR 70 Lakh through the FIST program of the Department of Science and Technology. As a result, we will be able to establish two computational laboratories for students that will assist in resolving time complexities during the course of large computations. The department has inaugurated Ramanujan Bust in the ground floor's foyer which inspires students by showcasing the life of Ramanujan and his contributions in the respective field.

The department is proud of its own flagship program, 5-year Integrated Master of Science. The program started in 2007 and was revised in 2019 with a focus on societal and industrial needs. In response to a recent increase from 60 to 75 students, the Department adopted methods to handle them efficiently. Recent placement records prove that mathematicians are in high demand and that they create a positive influence at work by solving real-world problems within specified time-frames. Additionally, we offer Ph.D. programs in Mathematics, English, and Management which are designed for students who wish to continue their studies after post-graduation. Out of 72 enrolled Ph.D. Students, more than 80% of them are receiving financial support from Government/ Semi Government Organizations/Institutions.

The National Education Policy 2020 envisions new ideas for modernizing the curriculum, which I believe will benefit the upcoming batches and aid them in defining their careers more precisely.

To conclude, I would like to thank my team for their dedication and hard work while creating and finalizing this document. It would not have materialized without their relentless support and commitment. I expect that the reader finds the project informative and enlightening.



# About



## Vision

To be a model for excellence in educational research in Mathematics and Humanities in order to meet the changing needs of society.

## Mission

To become an exemplary Centre of Excellence for research and training in the Mathematical Sciences and Humanities by promoting learning, growth and development of young minds and finding solutions to scientific, technological and real-life problems.

In 2021, the Department of Mathematics & Humanities received its current status. Since 2009, it has been Applied Mathematics & Humanities, and before that, it was part of the Applied Sciences and Humanities Department. Throughout these years, the department has evolved into one of the epicenters of research in India. Since 2007, the department has been offering its own 5 years Integrated M.Sc. Degree Program in Mathematics, in which students are enrolled through Joint Entrance Examination (JEE Mains). The department offers courses in Mathematics, English, and Management to undergraduate and postgraduate students in Engineering and other Science courses. A number of alumni from this department have attained prestigious positions in teaching and research in India and abroad.

The department has highly qualified faculty members including three Professors, three Associate Professors, and twelve Assistant Professors, who have extensive expertise in Fluid Mechanics, Special functions, Algebra, Integral Transforms, Approximation theory, Mathematical modeling, Magnetic fluid dynamics, Biomathematics, Data Mining, Finite element modeling, Techno innovation to Techno Entrepreneurship General Management, Entrepreneurship, Marketing, Postmodern Fiction, and Indian English fiction.

More than 270+ students have enrolled in the department for Five Years Integrated M.Sc., and 82+ Ph.D. students are presently pursuing research. In total, 710+ papers have been published by the Department in the reputed SCI/SCIE and Scopus indexed journals. During the last five years, the department has published 106 H index papers and 85 i10 index papers. A total of INR 2,06,00,000/- worth of projects have been carried out by the department in the last five years funded by different agencies such as Department of Science and Technology (DST), NBHM, ISRO and GUJCOST. So far, the department has produced 97 Ph.D. students specializing in Mathematics, Management, and English and the department has a good placement record as well.



# Academics

## Doctor of Philosophy

Department offers Ph.D. programmes in three streams: Mathematics, Management, and English. The department provides excellent research opportunities to students in aforementioned fields. It is noteworthy that the faculty members pursue research in a wide range of areas such as fluid mechanics, special functions, algebra, integral transforms, approximation theory, mathematical modeling, magnetic fluid dynamics, biomathematics, data mining, finite element modeling, techno innovation to techno entrepreneurship general management, entrepreneurship, marketing, postmodern fiction and Indian English fiction, among others. Several scholars have achieved very good positions in academia and industry. Admissions are usually made twice a year and are notified by the institute on a regular basis. Students will also be admitted to individual faculties under their designated projects, and after evaluating their performance, they will be converted to regular Ph.D. programs.

## Integrated Master of Science

The Department's flagship program, the Five-Year Integrated Master in Science Mathematics, was created in 2007 in order to meet the need for quality mathematicians. It is a 10 semester program, where in the first nine semesters, students will study the regular courses offered by the department and other departments (as electives), and in the last semester, they will work on a dissertation in their area of interest under the faculty of the department (or any other faculty from a reputed institute). The curriculum of the course was revised in 2019 in order to meet the societal demands, which, at present, exceed the standard requirement of the graduate. Students have been placed in good companies in the past, and they continue to do so. The institute offers admission through JoSAA and 75 seats are available throughout the country.

Furthermore, the department supports and runs regular courses as a part of the academic degree requirements as required by each department in addition to the above programs.





# Faculty



**Dr. A. K. Shukla**  
**Professor (Mathematics)**  
Area of Research  
Special functions, Integral transforms & Fractional Calculus



**Dr. V. H. Pradhan**  
**Professor (Mathematics)**  
Area of Research  
Fluid dynamics in porous media with relevance to ground water flow and petroleum recovery, Numerical techniques



**Dr. Neeru Adlakha**  
**Professor (Mathematics)**  
Area of Research  
Mathematical and Computational, Biology Bio-informatics / Biomathematics / Bio-computing, Data mining, Finite element modeling



**Dr. Hemant P. Bulsara**  
**Associate Professor (Management)**  
Area of Research  
Techno innovation to Technoentrepreneurship through Techno Business incubation, Marketing Entrepreneurship Strategy, Supply Chain Management (SCM), General Management



**Dr. Sushil Kumar**  
**Associate Professor (Mathematics)**  
Area of Research  
Mathematical Modeling, Bio-Mechanics, Fractional Differential equations, Moving boundary problems, Numerical techniques, Radial basis function, Chebyshev polynomial  
<https://sites.google.com/view/sushil/home>



**Dr. Jayesh M. Dhodiya**  
**Associate Professor (Mathematics)**  
Area of Research  
Advanced Operation Research, Optimization Technique, Mathematical Modeling and Simulation, Knowledge Based System, Data Mining  
<https://sites.google.com/view/drjayeshmdhodiya/home>





**Dr. Urvashi Kaushal**  
Assistant Professor(English)

Area of Research

Post Modern Fiction, Indian English Fiction and Feminist Literature, Themes in Diaspora literature.

<https://sites.google.com/view/drurvashi-kaushal/home>



**Dr. Twinkle R. Singh**  
Assistant Professor (Mathematics)

Area of Research

Fluid flow through Porous media, Non-linear partial differential equations, Burger's equation, Groundwater recharge phenomenon, Analytical approximate Methods, Mathematical Modeling



**Dr. Ranjan Kumar Jana**  
Assistant Professor (Mathematics)

Area of Research

Special Functions and Integral Transform, Operations Research, Mathematical Physics, Fractional Calculus, Mittag-Leffler function Numerical Weather Prediction, Ramanujan's Mathematics.

<https://sites.google.com/amhd.svnit.ac.in/drranjankumarjana/home>



**Dr. Ramakanta Meher**  
Assistant Professor (Mathematics)

Area of Research

Differential Equations, Fractional Differential Equations, Fluid Dynamics, Fluid flow through Porous Media, Approximation theory, Numerical Analysis

<https://sites.google.com/site/drramakan-tameher>



**Dr. Indira P. Debnath**  
Assistant Professor (Mathematics)

Area of Research

Mathematical Programming Problems, Non-smooth Optimization, Fractional Programming problems, Interval-Valued Optimization, Generalized Convexity, I-fuzzy/Fuzzy Optimization, Variational Control Problems

<https://sites.google.com/view/dr-indira-tripathi/home>



**Dr. Shailesh Kumar Srivastava**  
Assistant Professor (Mathematics)

Area of Research

Trigonometric Approximation theory





**Dr. Raj Kamal Maurya**  
**Assistant Professor (Mathematics)**  
Area of Research  
Reliability Theory and Survival Analysis, Estimation under various Censoring, Competing Risk, Optimum Plan  
<https://sites.google.com/view/dr-raj-kamal-maurya/home>



**Dr. Amit Sharma**  
**Assistant Professor (Mathematics)**  
Area of Research  
Algebraic Coding Theory: Constructions of error-correcting codes such as linear codes over finite rings, skew codes, quantum codes  
<https://www.apsharma.com/>



**Dr. Sudeep Singh Sanga**  
**Assistant Professor (Mathematics)**  
Area of Research  
Queueing Theory  
<https://sites.google.com/view/sudeepsingh-sanga/home>



**Dr. Saroj R. Yadav**  
**Assistant Professor (Mathematics)**  
Area of Research  
Mathematical Modeling, Non-Linear Partial Differential Equations, Fractional Differential Equations, Analytical Approximate Methods, Numerical Methods, Fluid Dynamics, Fluid Flow through Porous Media



**Dr. Vaishali S. Dhingra**  
**Assistant Professor (Management)**  
Area of Research  
Professional Ethics, Economics and Business Management, Innovation, Incubation and Entrepreneurship, Marketing Management, Personnel Management Organization Management Project Appraisal.  
<https://sites.google.com/view/drvaishalisdhingra-management/home>



**Dr. Sourav Gupta**  
**Assistant Professor (Mathematics)**  
Area of Research  
Linear Water Wave Theory, Integral Equations, Numerical Analysis  
<https://sites.google.com/amhd.svnit.ac.in/dr-sourav-gupta>

## Teaching Assistants



**Dr. Srinivas Rapeli**



**Dr. Sonalika Singh**



**Dr. Krupa Desai**



**Dr. Rakesh L. Das**



**Mr. Rathod  
Sudhakar Krishanrao**



**Dr. K. Bhagirathkumar  
Jetubhai**



**Dr. Syeda B. S. Mansur**



**Ms. Unnati Kaniya**



**Ms. Gandhi Aazmin**



**Ms. Pradnya Patel**

## Non-Teaching Staff



**Mr. Divyesh P. Patel**



**Mrs. Crissie Christian**



**Mr. Jitendra J. Patel**



**Mr. Pramod R. Solanki**



# Responsibilities

Sr. No	Duties Assigned	Name
1.	In Charge, Management (UG/PG)	Dr. H. P. Bulsara
2.	In Charge, English (UG/PG)	Dr. U. Kaushal
3.	PG. In-charge (Mathematics)	Dr. R. K. Meher
4.	Secretary, Department Meeting	Dr. Indira P. Debnath
5.	Member Secretary, DAAC	Dr. U. Kaushal
6.	UG In-charge (Mathematics)	Dr. Jayesh M. Dhodiya
7.	Coordinator, Research Project	Dr. R. K. Jana, Prof. V. H. Pradhan, Dr. Jayesh M Dhodiya
8.	Coordinators, Ph. D Credit, Progress Seminars & Registration	Prof. A. K. Shukla, Dr. T. R. Singh
9.	Coordinators, Teachers' Evaluation	Prof. A. K. Shukla, Prof. V. H. Pradhan, Prof. Neeru Adlakha, Dr. R. K. Meher
10.	Coordinator, Annual Report, Faculty/ Student related data, MIS etc.	Dr. S. Kumar, Dr. Shailesh Kumar Srivastava, Dr. Indira P. Debnath, Dr. Sudeep Singh Sanga, Dr. Vaishali Dhingra
11.	Coordinators, Work Load & Time Table	
	Mathematics	Prof. A. K. Shukla, Dr. T. R. Singh, Dr. Indira P. Debnath, Dr. Amit Sharma
	Management	Dr. H. P. Bulsara
	English	Dr. U. Kaushal
12.	Department Examinations Cell	Dr. S. Kumar, Dr. Shailesh Kumar Srivastava, Dr. Sudeep Singh Sanga, Dr. Vaishali S Dhingra, Dr. Sourav Gupta
13.	Students' Grievances Committee	Prof. A. K. Shukla, Prof. V. H. Pradhan, Prof. Neeru Adlakha, Dr. H. P. Bulsara, Dr. R. K. Meher, Dr. Jayesh M. Dhodiya
14.	Website Management	Dr. H. P. Bulsara, Dr. Sourav Gupta, Dr. Amit Sharma, Dr. Vaishali S Dhingra, Dr. Jayesh M Dhodiya

15.	Coordinators, Magazine, Department Annual Booklet	Dr. U. Kaushal, Dr. Indira P. Debnath, Dr. Saroj R. Yadav, Dr. Raj Kamal Maurya, Dr. Jayesh M Dhodiya
16.	Coordinators, Training and Placement	Dr. U. Kaushal, Dr. T. R. Singh, Dr. R. K. Jana, Dr. Sudeep Singh Sanga, Dr. Vaishali S Dhingra
17.	Coordinators, TEQIP, CCE	Dr. R. K. Jana, Dr. Raj Kamal Maurya
18.	Coordinators, Maintenance, Cleaning & Gardening	Dr. R. K. Jana, Prof. Neeru Adlakha, Dr. S. Kumar, Dr. Amit Sharma, Dr. Jayesh M Dhodiya
19.	Coordinators, Services to Community & Tribal Development	Dr. H. P. Bulsara, Dr. R. K. Jana, Dr. Jayesh M Dhodiya
20.	Finance Committee (DOC & Annual Plan Grant)	Prof. A. K. Shukla, Prof. V. H. Pradhan, Prof. Neeru Adlakha, Dr. H. P. Bulsara, Dr. S. Kumar, Dr. Jayesh M Dhodiya, Dr. T. R. Singh
21.	Purchase Committee	Prof. A. K. Shukla, Prof. V. H. Pradhan, Prof. Neeru Adlakha, Dr. H. P. Bulsara, Dr. S. Kumar, Dr. Jayesh M Dhodiya, Dr. U. Kaushal
22.	Coordinators, Stock Verification	Prof. Neeru Adlakha, Dr. T. R. Singh, Dr. Amit Sharma, Dr. Raj Kamal Maurya
23.	Department Library Committee	Dr. Sourav Gupta, Dr. Raj Kamal Maurya
24.	Lab In-charges, Computer Lab	Dr. S. Kumar (Mathematics), Dr. H. P. Bulsara (Management), Dr. U. Kaushal (English Language Lab)
25.	Mathematics and Humanities related event organization and Day Celebrations: (Teachers Day Celebration, Mathematics Day Celebration, Expert Talk organization, Workshop organization, etc.)	Prof. A. K. Shukla, Prof. V. H. Pradhan, Dr. R. K. Meher, Dr. U. Kaushal, Dr. T. R. Singh, Dr. Vaishali S Dhingra, Dr. Sudeep Singh Sanga, Dr. Saroj Yadav, Dr. Jayesh M Dhodiya
26.	Coordinators B. Tech-I / M.Sc-I (Mathematics)	Dr. Shailesh Kumar Srivastava, Dr. Saroj R. Yadav
	Advisor	Prof. V. H. Pradhan



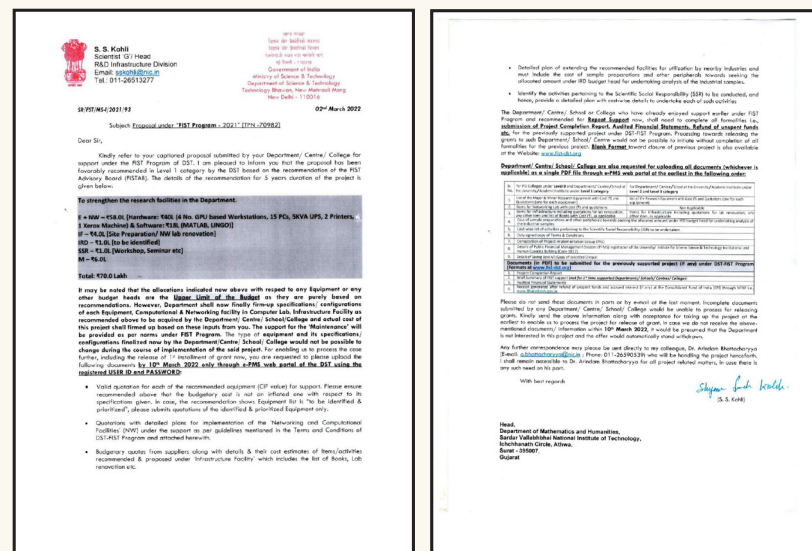
27.	Committee for NET/ GATE Examination preparation	Prof. V. H. Pradhan, Prof. Neeru Adlakha, Dr. S. Kumar, Dr. Jayesh M Dhodiya, Dr. Indira P. Debnath, Dr. Shailesh Kumar Srivastava Dr. Amit Sharma, Dr. Raj Kamal Maurya, Dr. Sudeep Singh Sanga, Dr. Sourav Gupta, Dr. Saroj R. Yadav
28.	Faculty Advisors	
	M.Sc. 1 <sup>st</sup> Year	Prof. A. K. Shukla
	M.Sc. 2 <sup>nd</sup> Year	Dr. S. Kumar
	M.Sc. 3 <sup>rd</sup> Year	Prof. V. H. Pradhan
	M.Sc. 4 <sup>th</sup> Year	Dr. R. K. Jana
	M.Sc. 5 <sup>th</sup> Year	Prof. Neeru Adlakha



# Projects

## DoMH received DST FIST

In response to the proposal submitted by the Department of Mathematics and Humanities, SVNIT, Surat, Rs. 70 Lakh will be granted to strengthen the research facilities in the Department. Specifically, the amount recommended for a 5-year duration will be spent on purchasing the latest equipment as well as net-working and computing facilities. Additionally, the funds will be spent on renovation of the Networking Laboratory, Industrial R & D, and activities pertinent to Scientific Social Responsibilities and Maintenance. Research scholars and faculty of the Department can utilize these facilities to enhance their research work in various fields of Mathematics. On this occasion, Dr. R. V. Rao, In-charge director of SVNIT, congratulated Dr. Jayesh M Dhodiya, Head DoMH, and faculty members of the department and extended his best wishes.



## Sanctioned



### Dr. Sushil Kumar

Dr. Sushil Kumar received MATRICS Research Grant of INR 6,60,000/- for a research project titled “Numerical Simulation of cancer treatment therapies hyperthermia and chemotherapy in multi-dimensional irregular domain” from Science and Engineering Research Board (SERB), Department of Science and Technology (DST), India.

### Dr. Urvashi Kaushal

Principal Investigator for a project titled “A Need Based Approach to Understanding the Employability Skills of Engineers” with Rs. 50,000/- grant-in-aid sanctioned by Grand Academic Portal.



### Dr. Saroj R. Yadav

Dr. Saroj R. Yadav received the Seed Money/Research Grant of INR 8,30,000/- for a research project proposal titled “Mathematical Treatment to phenomenon arising in fluid flow through porous media including dynamic capillary pressure effect” from SVNIT, Surat.

### Dr. Vaishali S. Dhingra

Dr. Vaishali S. Dhingra received Seed Money/Research Grant of INR 9,50,000/- for a research project proposal titled “Exploring the Impact of Global Oil Price and Innovation for Sustainability: Evidence From BRICS Economies” from SVNIT, Surat.





# Placements (M.Sc. Final Year)



## **Rutvij Prashant Tole**

- Company : BYJU'S
- Designation : Associate content developer



rutvij.tole@gmail.com



## **Anjali Ranjan Santosh Kumar Pal**

- Company : Tata consultancy services
- Designation : Assistant Software Engineer



anjaliranjana025@gmail.com



## **Parvathy A**

- Company : UGAM Solutions
- Designation : Analyst



parvathia.1998@gmail.com



## **Vatsal Moradiya**

- Company : Searce Inc.
- Designation : ML Engineer



vmvatsalmoradiya13@gmail.com



## **Shashank Gupta**

- Company : Wipro
- Designation : Project Engineer



guptashashank552552@gmail.com



### **Priyanka Bhattar**

- Company : Kantar
- Designation : Business Analyst



priyankabhattar24@gmail.com



### **Baisane Jaykumar Haribhai**

- Company : Infosys
- Designation : System Engineer



jaybaisane77@gmail.com



### **Chaluvagali Meghna**

- Company : Ugam Solutions
- Designation : Analyst



meghnachaluvagali1002@gmail.com



### **Vishal Agarwal**

- Company : Deloitte USI
- Designation : Business Technical Analyst



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### **Vishal Choudary**

- Company : Searce
- Designation : Business Technical Analyst




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### **Ishika Bhatt**


- Company : Searce
- Designation : Analyst Client Operation

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### **Purva Sehgal**


- Company : Searce
- Designation : Analyst Client Operation

 [purva.sehgalsnp@gmail.com](mailto:purva.sehgalsnp@gmail.com)



### **Shubham Vinit**


- Company : BYJUS
- Designation : Content Developer

 [sv4326@gmail.com](mailto:sv4326@gmail.com)



### **Ashwany Kumar Verma**


- Company : Deloitte USI
- Designation : Analyst

 [ashwin2567@gmail.com](mailto:ashwin2567@gmail.com)



### **Harsh Kale**

- Company : Ugam Solutions
- Job description : Analyst

 [harshkale4321@gmail.com](mailto:harshkale4321@gmail.com)



### **Jordan Nitnaware**

- Company : Ugam Solutions
- Designation : Analyst



jordannit1999@gmail.com



### **Shaurya Khandelwal**

- Company : Samsung
- Designation : Software Development Engineer



shauryakhandelwal9@gmail.com



### **Sangani Bhavin Pravinbhai**

- Company : Tata Consultancy Services R&D
- Designation : Software Development Engineer



100bhavinsangani@gmail.com



### **Urvashi Joshi**

- Company : Aakash Institute
- Designation : Faculty



urvashij06@gmail.com



### **Akshay Kishore**

- Company : Federal Bank
- Designation : Junior Officer




akshaykishor21@gmail.com





**Ronak Sharma**


- Company : Myclassroom
- Designation : Faculty

 ronak426sharma@gmail.com

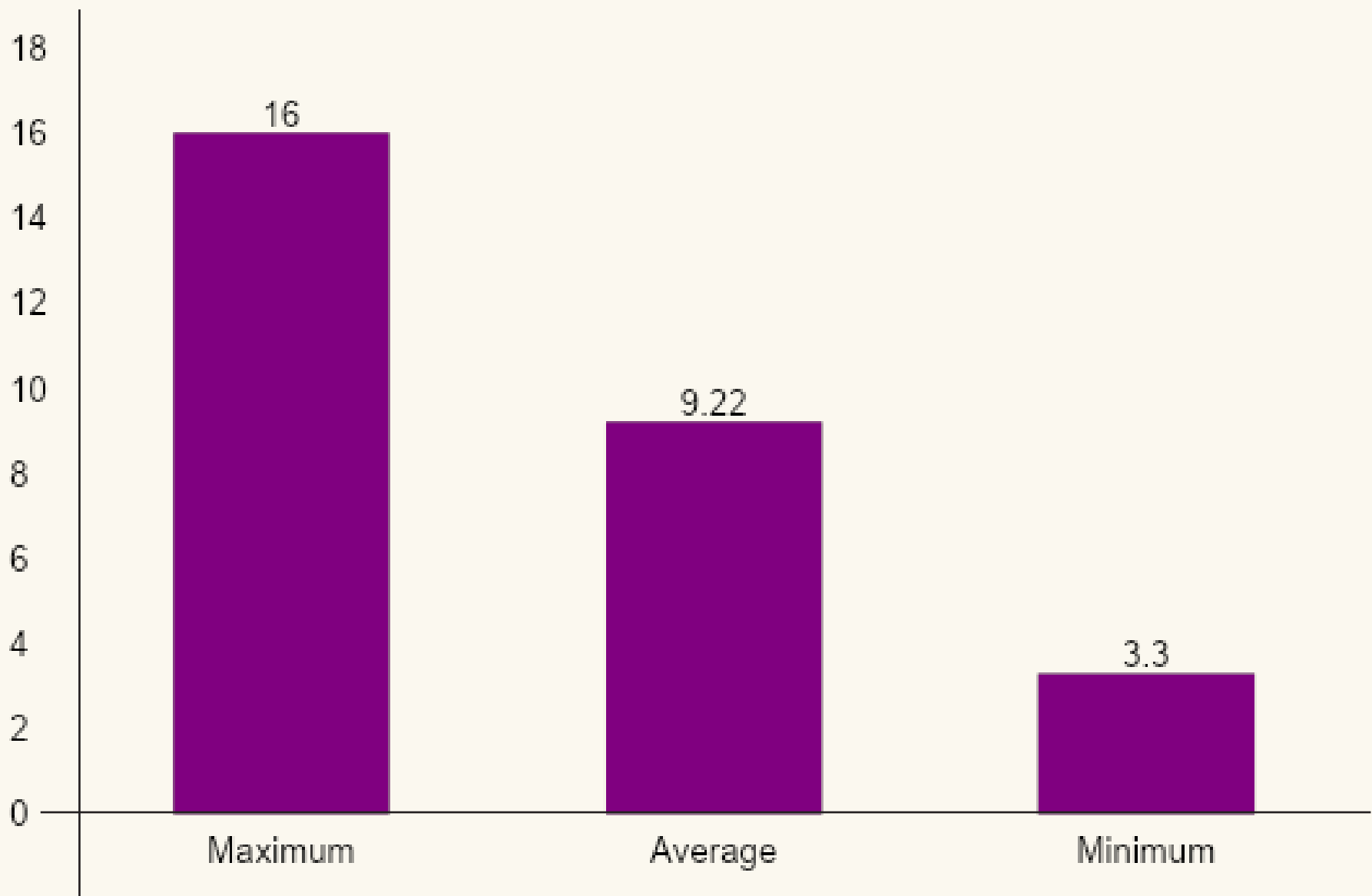


**Saubhagya Tripathi**

- Company : Myclassroom
- Designation : Faculty

 saubhagyasvnit2001@gmail.com

**Placement Salary Details**



# Research Publications

## Publications

- Vinod K Jatav and A. K. Shukla "Some results on a class of polynomials  $L_n\{\alpha,\beta\}(x)$ ". National Academy of Science Letters, <https://doi.org/10.1007/s40009-021-01082-7> (2021).
- Rachana Desai and A.K.Shukla(2021), A Note on  $pRq(\alpha,\beta;z)$  Function, Journal of Indian Mathematical Society, Vol. 88, Nos. 3-4 (2021), 288-297.
- Ankit Pal, R. K. Jana and A.K.Shukla, "Some results on the  $pRq(\lambda,\mu;z)$  function involving Pathway fractional integral operator and statistical distribution," SeMA Journal, <https://doi.org/10.1007/s40324-021-00274-x> (Springer) 2021
- Ankit Pal, R. K. Jana, Ghazi S. Khammash and A. K. Shukla, "Generalization of  $pRq(\alpha,\beta;z)$  function and its properties with some applications," Georgian Mathematical journal, November 3, <https://doi.org/10.1515/gmj-2021-2112> (2021)
- Ankit Pal, R. K. Jana and A. K. Shukla, "Generalized integral transform and fractional calculus properties involving extended  $pRq(\alpha,\beta;z)$  function," Journal of the Indian Mathematical Society, Vol. 89, Nos. 1-2 (2022), 100-116.
- A Sharma, N Adlakha (2022) A Model for Analysis of Gene Expression in the Cell Involving Protein Degradation, Advances in Systems Science and Applications 22 (1), 65-79, 2022
- Bulsara H. P., & Vaghela P. S. (2022), "Millennials' Online Purchase Intention Towards Consumer Electronics: Empirical Evidence from India." Indian Journal of Management, 52(2), 53-70. (SCOPUS indexed, ABCD list)
- Bulsara H. P., & Pandya E. A. (2021). "An Exploration of Antecedents of Initial Trust in M-Payments." Journal of Electronic Commerce in Organisations (JECO), 19(4), 80-102. (SCOPUS indexed)
- Bulsara H. P., Matharu M., Krystyna Tarasova, Olha Rulinska, & Inna Gogol (2021), "An Exploratory Study Of Theories Of Green Marketing And Its Practices." Independent Journal Of Management & Production, 12(6), s431-s444 (Indexed in Web of Science, ESCI)
- Rupali Gupta, Sushil Kumar (2022) Numerical simulation of variable-order fractional differential equation of non-linear Lane-Emden type appearing in astrophysics. International Journal of Nonlinear Sciences and Numerical Simulation.
- Hitesh bansu, Sushil Kumar, "Numerical Solution of Space-Time Fractional Klein-Gordon Equation by Radial Basis Functions and Chebyshev Polynomials." Int. J. Appl. Comput. Math 7, 201 (2021). <https://doi.org/10.1007/s40819-021-01139-7>
- Rohit Verma, Sushil Kumar, "Computational Study on Skin Tissue Freezing Using Three-Phase Lag Bioheat Model." ASME. J. Heat Transfer. November 2021; 143(11): 111201. DOI: <https://doi.org/10.1115/1.4051764>
- Surbhi Tilva, Jayesh Dhodiya, "Multi-objective assignment problem solved by hybrid Jaya algorithm," Journal of Interdisciplinary Mathematics, Taylor & Francis. 25:1, 109-121, 2022 DOI: 10.1080/09720502.2021.2015092.
- Vandana Y. Kakran, Jayesh M. Dhodiya, "Multi-Objective Capacitated Solid Transportation Problem with Uncertain Variables," International Journal of Mathematical, Engineering and Management Sciences, Vol.6, No.5, 1406-1422, 2021, <https://doi.org/10.33889/IJMEMS.2021.6.5.085>
- Sunil B. Bhoi, Jayesh M. Dhodiya, "Multi-Objective Faculty Course Assignment Problem with Result and Feedback Based Uncertain Preferences," International Journal of Mathematical, Engineering and Management Sciences Vol. 6, No. 4, 1055-1075, 2021, <https://doi.org/10.33889/IJMEMS.2021.6.4.062>
- Sosa, J. M. and Dhodiya, J. M. (2021) "Genetic algorithm-based solution of multi-objective stochastic transportation problem," Int. J. Advanced Operations Management, Vol. 13, No. 2, pp.113-128
- Dhiren Pandit, Jayesh Dhodiya, Yogeshwari Patel (2022), Molecular cancer classification on microarrays gene expression data using wavelet-based deep convolutional neural network, <https://doi.org/10.1002/ima.22780>, Wiley. (SCI and Scopus).
- Tailor A. R., Dhodiya J. M., Multi-objective Assignment Problems and Their Solutions by Genetic Algorithm. In: Patnaik S., Tajeddini K., Jain V. (eds) Computational Management. Modeling and Optimization in Science and Technologies, vol 18. pp 409-428, Springer, Cham (2021), [https://doi.org/10.1007/978-3-030-72929-5\\_19](https://doi.org/10.1007/978-3-030-72929-5_19)
- Kakran V.Y., Dhodiya J.M., Uncertain Multi-objective Transportation Problems and Their Solution. In: Patnaik S., Tajeddini K., Jain V. (eds) Computational Management. Modeling and Optimization in Science and Technologies, vol 18. pp 359-380 Springer, Cham, 2021, Cham. [https://doi.org/10.1007/978-3-030-72929-5\\_17](https://doi.org/10.1007/978-3-030-72929-5_17)
- Tilva S., Dhodiya J. M., Role of Evolutionary Approaches to Solving Multi-objective Optimization Problems. In: Patnaik S., Tajeddini K., Jain V. (eds) Computational Management. Modeling and Optimization in Science and Technologies, vol 18. pp 429-453 Springer, Cham, 2021, Cham. [https://doi.org/10.1007/978-3-030-72929-5\\_20](https://doi.org/10.1007/978-3-030-72929-5_20)

- Urvashi Kaushal, "Writing and Space: Writing the City by Stuti Khanna: Review Article", *Rupkatha Journal on Interdisciplinary Studies in Humanities*, Vol. 13, No. 4, 2021. 1-4, DOI: <https://doi.org/10.21659/rupkatha.v13n4.23>
- U. Kaushal and Pratima Shah, "Understanding the Needs of Engineering Students: With Reference to Communication Skills" *Gap Bodhi Taru A Global Journal Of Humanities (UGC CARE LISTED)*, Volume - IV Issue III September-December - 2021 pp. 53- 67.
- Anila Pillai and U. Kaushal, "Myth Theory: A Study towards Mythic Tale and It's Reach in Today's Life" *IJELLH* September 2021, Vol.9 issue 9, pp. 8-21.
- U. Kaushal and Toran Talwar, "Exploring the Communication Skills of Indian Engineering Undergraduates: A Partial Ethnographic Study" in *Higher Education, Skills and Work-Based Learning*, (SCOPUS and ESCI INDEXED) Emerald Publishing Limited 2042-3896 <https://doi.org/10.1108/HESWBL-09-2020-0217>.
- Krupali Parekh and Urvashi Kaushal, "Exploring a Sense of Place and Nationalism in Sorayya Khan's Five Queens Road" in *International Journal of Recent Advances in Multidisciplinary Topics* vol. 2 issue 6 June 2021. pp-292-296.
- Archana Varsoliwala and Twinkle R. Singh, "Analysis of Brain Tumor Growth Model by Adomian Decomposition Method," *International Journal of Dynamical Systems and Differential Equations*, Article in press.
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## Conference Presentations

- Akshara Makrariya, Neeru Adlakha, Shishir Kumar Shandilya, 3D Spherical-Thermal Model of Female Breast in Stages of Its Development and Different Environmental Conditions, International Conference on Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy, VIT, Bhopal, 217-227, December, 2021, Springer, Singapore
- Bagdi H., Bulsara H. P., Sharma L., (2021). The Change in Learning Practices of Students' Amid the COVID-19 Pandemic from Traditional to E-Learning. Management Functions in COVID-19 Era. 108 - 120.
- Rohit Verma, Sushil Kumar, Numerical study on heat distribution in biological tissues based on three phase lag bio-heat model, Paper presented in International Conference on Mathematical Sciences, held at Department of Mathematics & Humanities, S. V. National Institute of Technology Surat during October 07-09 2021 .
- Bhagya Shree Meena, Solution of Two Dimensional Time-Space Fractional Telegraph Equations using Radial Basis Functions and Chebyshev Polynomials, Paper presented in International Conference on Mathematical Sciences, held at Department of Mathematics & Humanities, S. V. National Institute of Technology Surat during October 07-09 2021
- Rakesh Kumar Mena, Sushil Kumar, Solution of Fractional Order SIR Epidemic Model using Residual Power Series Method, Paper presented in International Conference on Mathematical Sciences, held at Department of Mathematics & Humanities, S. V. National Institute of Technology Surat during October 07-09 2021
- Rohit Verma, Sushil Kumar, Numerical study on heat distribution in biological tissues based on three phase lag bio heat model, Paper presented in International Conference on Mathematical Sciences, held at Department of

Mathematics & Humanities, S. V. National Institute of Technology Surat during October 07–09 2021.

- Kakran V. Y., Dhodiya J. M., “A belief-degree based multi-objective solid transportation problem with constraint parameters under multi-choice environment” presented in “International Conference on Mathematical Sciences (ICMS-2021)” hosted online by Department of Mathematics and Humanities, S. V. National Institute of Technology, Surat, 395007, Gujarat, India during 07–09 October 2021.
- Kakran V. Y., Dhodiya J. M., “A belief-degree based environment for Multi-objective Capacitated Transportation Problem with” presented in international conference on “Advanced Engineering Optimization through Intelligent Techniques (AEOTIT)” conducted by the Department of Mechanical Engineering, S. V. National Institute of Technology, Surat, 395007, Gujarat, India during 28–30 January 2022.
- Kakran V. Y., Dhodiya, J. M., “Uncertain Multi-objective Interval Solid Transportation Problem and its Solution” presented in International Conference on “Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022)” held by Department of Mathematics and Humanities & Department of Physics, S. V. National Institute of Technology, Surat, 395007, Gujarat, India during 05–06 February 2022.
- Kakran V. Y., Dhodiya J. M., “Solution of Uncertain Multi-objective Capacitated Transportation Problem with Dependent Optimistic-constrained Model” presented in International Conference on “Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022)” held by Department of Mathematics and Humanities & Department of Physics, S. V. National Institute of Technology, Surat, 395007, Gujarat, India during 05–06 February 2022.
- Aaishwarya Bajaj and Jayesh M. Dhodiya, “Solution of Fuzzy Multi Objective Travelling Salesman Problem by Multi Objective Quasi Oppositional Jaya Algorithm” presented in international conference on “Advanced Engineering Optimization through Intelligent Techniques (AEOTIT)” conducted by the Department of Mechanical Engineering, S. V. National Institute of Technology, Surat, 395007, Gujarat, India during 28–30 January 2022.
- Aaishwarya Bajaj and Jayesh M. Dhodiya, “Solution of Fuzzy Constrained Multi-Objective Solid Travelling Salesman Problem by Multi-Objective Quasi Oppositional Jaya Algorithm” presented in International Conference on “Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022)” held by Department of Mathematics and Humanities & Department of Physics, S. V. National Institute of Technology, Surat, 395007, Gujarat, India during 05–06 February 2022.
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- Tilva S., Dhodiya J., “Developing a meta-heuristic algorithm for solving fuzzy project scheduling problems using exponential membership function” presented in “International Conference on Mathematical Sciences (ICMS-2021)” hosted online by Department of Mathematics and Humanities, S. V. National Institute of Technology, Surat, 395007, Gujarat, India during 07–09 October 2021.
- Tilva S., “Multi-objective Project Schedule Problem Solved by Hybrid Jaya Algorithm” presented in International Conference on “Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022)” held by Department of Mathematics and Humanities & Department of Physics, S.V.National Institute of Technology, Surat, 395007, Gujarat, India during 05–06 February 2022.
- Tilva S., Dhodiya J., “Developing a Meta-heuristic Algorithm for solving the Complex Assignment Problem” presented in International Conference on “Mathematical Modelling and Simulation in Physical Sciences (MMSPS2022)” held by Department of Mathematics and Humanities & Department of Physics, S. V. National Institute of Technology, Surat, 395007, Gujarat, India during 05–06 February 2022.
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- Tilva S., Dhodiya J., “Fuzzy project schedule problem is solved by hybrid jaya algorithm” in international conference on “International Conference on Data Analytics and Computing (ICDAC2022)”, hosted online by the Wenzhou Kean University, Wenzhou, China, during 28–29 May 2022.
- Patel Yogeshwari F, Jayesh M. Dhodiya , Analysis of Steady-State Heat Transfer in a Rectangular Moving Porous Fin Using Semi-analytical Approach presented at 2<sup>nd</sup> International Conference on Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022) SardarVallabhbhai National Institute of Technology, Surat during



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- Patel Yogeshwari F, Jayesh M. Dhodiya ,Exact Solution of Fractional Coupled Drinfeld'sSokolov-Wilson System using Semi Analytical Approach presented at International Conference on Fractional Calculus- 2022, University of Hyderabad during January 18 - 19, 2022.
- Anita Ravi Tailor, Jayesh M. Dhodiya , Solution of multi-objective multi-choice assignment problem using genetic algorithm based approach, The 2<sup>nd</sup> International Conference on "Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022)" 05-06 Feb 2022, SVNIT, Surat.
- Anita Ravi Tailor, Jayesh M. Dhodiya , Evaluation and selection of Software component under multiple applications using genetic algorithm based hybrid approach, The 2<sup>nd</sup> International Conference on "Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022)" 05-06 Feb 2022, SVNIT, Surat.
- Anita Ravi Tailor, Jayesh M. Dhodiya, Solution of fuzzy multi-objective multichoice assignment problem using Genetic algorithm based approach, 1<sup>st</sup> International conference on Mathematical Engineering and Management Sciences, 25-26 June 2022, DQM Research Centre, Serbia.
- Sunil Bhoi and Jayesh Dhodiya, Uncertain Multi-objective Student Project Assignment Problem with Result and Feedback based Preferences, 2<sup>nd</sup> International Conference on Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022) February 05-06 2022, SVNIT, India,
- Sunil Bhoi and Jayesh Dhodiya, Multi-objective Decision Making by Fuzzy Programming Approach with Exponential Membership Function, 2<sup>nd</sup> International Conference on Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2022) February 05-06 2022 SVNIT, India.
- Parekh K.S., Kaushal U. (2022). From Marginalization to Independence: Journey of a Mother and a Nation. Gender Equity: Challenges and Opportunities: Proceedings of 2<sup>nd</sup> International Conference of SardarVallabhbhai National Institute of Technology, Surat, Eds. Mahajan V., Chowdhury A., Kaushal U., Jariwala N., Bong S.A. Springer, Singapore. [https://doi.org/10.1007/978-981-19-0460-8\\_27](https://doi.org/10.1007/978-981-19-0460-8_27). pp 271-281.
- Pillai A. A., Kaushal U. (2022). She Education, Not Necessarily a Job Quotient. Gender Equity: Challenges and Opportunities: Proceedings of 2<sup>nd</sup> International Conference of SardarVallabhbhai National Institute of Technology, Surat, Eds. Mahajan V., Chowdhury A., Kaushal U., Jariwala N., Bong S.A. (eds) Springer, Singapore. [https://doi.org/10.1007/978-981-19-0460-8\\_6](https://doi.org/10.1007/978-981-19-0460-8_6) . pp 63- 76.
- Pallavi Panda and Urvashi Kaushal presented a paper on "Locating the Roots of Gender based violence: Reading MeenaKandaswamy's When I hit You" in International Conference Cartographies of Gender Based Violence: Literary Reflections from South Asia and Beyond organised by IIT Patna on 12-13 March 2022.
- Mithun G. Vasava and Urvashi Kaushal presented a paper on " Questionable Representation of Culture: Analysing Select works of South Asian Diaspora Writers in International Conference Cartographies of Gender Based Violence: Literary Reflections from South Asia and Beyond organised by IIT Patna on 12-13 March 2022.
- Anila Pillai and Urvashi Kaushal presented a paper on "Manasa-Vacha Karmana Dhira Karna: An Embodiment of Loyalty and Candour" in 2<sup>nd</sup> PAN NIT International Conference on Global Restructuring from 7-9 Jan 2022.
- VasavaMithunbhai G. and Urvashi Kaushal presented a paper on "Re-orientalism in the the movie The White Tiger" in 2<sup>nd</sup> PAN NIT International Conference on Global Restructuring from 7-9 Jan 2022.
- Kiran kumar F. Vaghela and Urvashi Kaushal presented a paper on "Students' Employability: An Empirical Study" in 2<sup>nd</sup> PAN NIT International Conference on Global Restructuring from 7-9 Jan 2022.
- Parul Pandey and Urvashi Kaushal presented a paper on "Decoding the Degree vs. Skills Debate" in 2<sup>nd</sup> PAN NIT International Conference on Global Restructuring from 7-9 Jan 2022.
- Jyoti Yadav, Twinkle R. Singh (2022), An approximate analytical solution of water transport in an unsaturated porous medium by Modified Variational Iteration Method" is presented at International Conference on Congress on Research in Engineering, Science and Management (CRESM 2022), organized by Padre Conceicao College of Engineering, Verna, Goa, March 10-12 2022.
- Jyoti Yadav, Twinkle R. Singh (2022), Study on a motion of immiscible fluids with some inclination effect in the porous medium is presented at the 5<sup>th</sup> International E-Conference on Mathematical Advances and Applications (ICOMAA 2022), held on May 11-14 2022, Istanbul, Turkey, and in conference proceedings.
- Jani Haresh P., Twinkle R. Singh (2022), Hybrid analytical method for solving time fractional Swift-hohenberg equation is presented in in international conference on dynamical systems, control theory and their applications organised by Indian Institute of Technology, Roorkee during 1- 3 July 2022.
- Jani Haresh P., Twinkle R. Singh (2022), solution of newell- Whitehead -segel equations by ATHPM is presented in fifth international conference on current scenario in pure and applied mathematics, organised by kongunadu arts and science college during 27-28 January 2022.
- Jani Haresh P., Twinkle R. Singh (2022), Hybrid analytical method to compare concentration in longitudinal dispersion phenomenon is presented in international conference on mathematical analysis and applications organised by University of Kalyani during 28-29 June 2022.
- Jani Haresh P., Twinkle R. Singh (2022), comparison of concentration in longitudinal dispersion phenomenon by Aboodh transform homotopy perturbation method with numerical method is presented in second international conference on computational sciences-modelling, computing and soft computing organised by manipal institute of technology, manipal, during March 28-30 2022.
- Archana C. Varsoliwala, Twinkle R. Singh (2022), Mathematical modeling of tsunami wave propagation at mid ocean and its amplification and run-up on shore is presented in " 8<sup>th</sup> International Conference on Mathematics



and Computing (ICMC 2022)” Organized by Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore, Tamil Nadu, India, January 6 – 8 2022.

- J. B. Gajera and R. K. Jana, A study on Turan type inequalities for Generalized Caputo fractional derivative operators presented at International Conference on Mathematical Sciences (ICMS-2021 held at SVNIT, Surat during October 07-09 2021. (Paper presented by J. B. Gajera)
- M. Kumar and R. K. Jana, Application of homotopy analysis method for solving forced KdV equation arising superthermal plasmas presented at International Conference on Applied Mathematics (ICAM-2022), held at Vidyasagar University, Midnapore, during June 08-09 2022. (Paper presented by M. Kumar)
- R. Mondal, R. K. Jana and M. K. Maiti, An EOQ model for deteriorating items with imprecise demand and freshness under trade credit policy, presented at International Conference on Applied Mathematics (ICAM-2022), held at Vidyasagar University, Midnapore, during June 08-09 2022. (Paper presented by R. Mondal)
- Shailesh Kumar Srivastava and Sachin Devaiya, On T2 -Strong Convergence of Numerical Sequences, AIP Conference Proceedings 2435, 020036 (2022); <https://doi.org/10.1063/5.0083598>.
- Shailesh Kumar Srivastava and Sachin Devaiya, Error Estimation of Signals (Functions) Belonging to Class  $W(L^p, \Psi(t), \beta)$  for Hump Matrices, AIP Conference Proceedings 2435, 020043 (2022); <https://doi.org/10.1063/5.0083602>.
- Yadav Saroj R. and V. N. Mishra (2021), An Analytic expression for the Frontal Flow Period in 1D Counter-Current Imbibition including Dynamic capillary pressure into saturated Homogeneous Porous Media, In AIP Conference Proceedings 2364, 020004, Volume 2021, pp. 02000-1 to 02000-45.
- Yadav Saroj R. (2021), Fingero-Imbibition phenomenon under co-current flow condition during immiscible two phase flow through homogeneous porous media, Proceeding of International Conference on Mathematical Modelling and Simulation in Physical Sciences (MMSPS-2021), 17- 18 April, SVNIT, Surat, India, ISBN 978-81-928100-1-0 pp: 467-471.
- Sudeep Singh Sanga, Cost optimization for single unreliable server double orbit retrial queueing model, 27<sup>th</sup> International Conference of IAPS (online) on Recent Advances in Mathematics & Computational Optimizations Jointly organized by School of Computational and Integrative Sciences, Jawaharlal Nehru University, New Delhi, India & International Academy of Physica Sciences (IAPS) during 26-28 October 2021.
- Sudeep Singh Sanga, Fuzzy modeling for single server queue with double orbit and balking, International Conference on Mathematics Applied in Life Sciences Organized by IASI University of Life Sciences, Romania during 23-24 June 2022.
- Ramakanta Meher, L. Verma, Solution of Fuzzy differential equation using Homotopy Analysis method, AIP Conference Proceedings.
- Ramakanta Meher, P. Sattanpara, Computational study of Klein-Gordon equation using Homotopy Analysis Method, AIP Conference Proceedings.
- Bulsara H. P., Sharma L., Bagdi H., (2021), Role of Non-Profit Organisations in Catalyzing Social Entrepreneurship: A Case Study From Uttar Pradesh, India. RTMSS 2021 Conference (pp. 208-228), National Institute of Technology, Hamirpur.
- Aaishwarya Bajaj and Jayesh M. Dhodiya, “Aspiration Level based Multi Objective Quasi Oppositional Jaya Algorithm for Multi Objective Solid Travelling Salesman Problem” presented in National Symposium on “Recent Trends in Mathematical Sciences (RTMS-2022)” held by Department of Mathematics, Ganpati University, Mehsana, 384012, Gujarat, India during 30 April, 2022.
- Aniket Todkar and Jayesh M. Dhodiya, “Aspiration level-based non-dominated sorting genetic algorithm- II & III to solve fuzzy multi-objective shortest path problem” presented in National Symposium on “Recent Trends in Mathematical Sciences (RTMS-2022)” held by Department of Mathematics, Ganpati University, Mehsana, 384012, Gujarat, India during 30 April, 2022.
- M. Kumar, R. K. Jana and P. Chatterjee, Soliton solution of damped KdV equation in unmagnetized super thermal plasmas: Adomian decomposition method, presented at Virtual national conference on Plasma Science and Applications (PSA-2021), held at SVNIT, Surat during December 20-21, 2021. (Paper presented by M. Kumar)

## Authored Books

- Ramakanta Meher: “An Introduction to Calculus of variations and Integral Equations,” Sciendo-2021, De Gruyter Publications, Poland, June 2021, DOI: <https://doi.org/10.2478/9788366675445>
- Ramakanta Meher: Numerical Approximation of Linear and Nonlinear Integral Equations, Central West Publishing, Australia. July 2021, ISBN-10 : 1922617105, ISBN-13 : 978-1922617101
- Ramakanta Meher: “Applied Integral Equations,” Sciendo-2021, De Gruyter Publications, Poland, October 2021, DOI: <https://doi.org/10.0000/9788366675575>

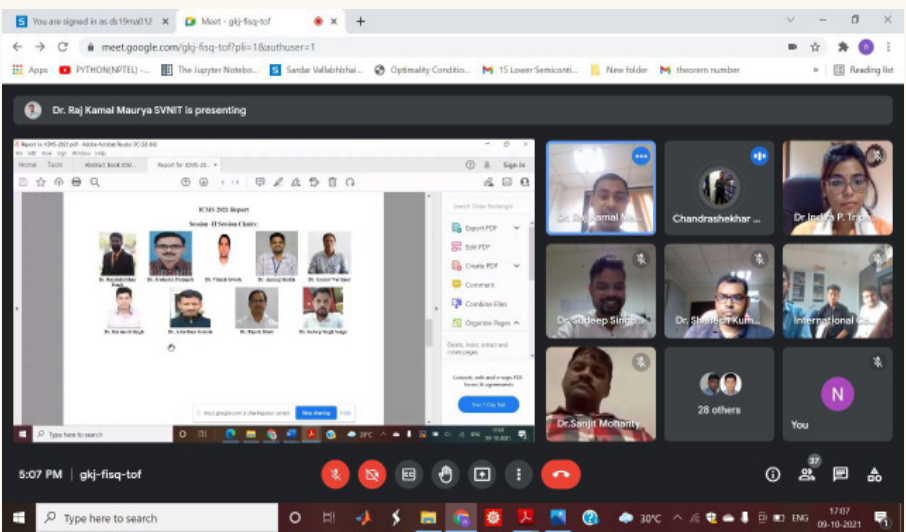
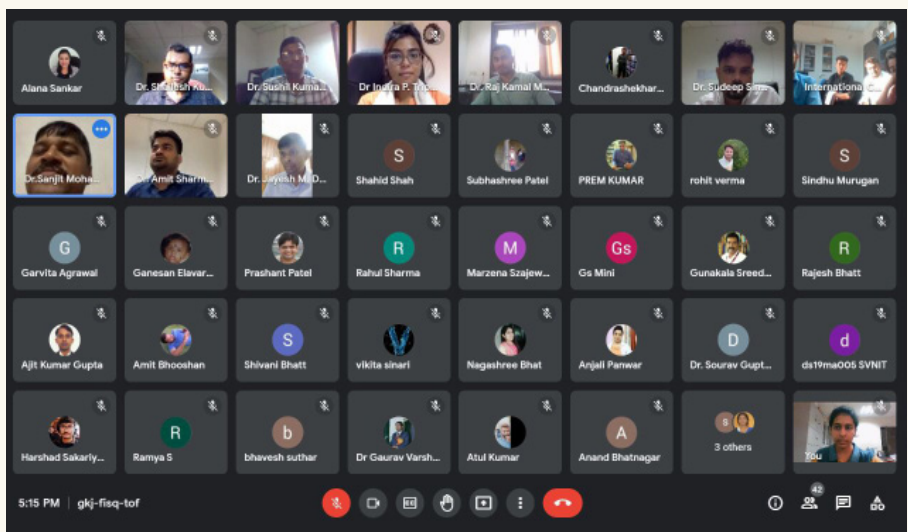
# Activities

The events organized by department are as follows

## International Conference on Mathematical Sciences 2021

It is a matter of pride and privilege to organize the three-day International Conference on Mathematical Sciences (ICMS-2021) as a part of SVNIT Surat's Diamond Jubilee celebrations. A major objective of this conference was to bring academic scientists, engineers, and industry researchers together to exchange knowledge, experience, and research results, and to explore practical challenges encountered and solutions adopted in the field of mathematical sciences. This conference served as a forum for mathematicians across the globe to foster links and col-

laboration through discussions, exchange of ideas and presentations of research findings. This conference featured a keynote speech followed by 11 invited talks. In addition to UAE and USA, speakers from Romania, Mexico, Sweden and other countries also spoke. In India, we have speakers from Aligarh, Kanpur, Roorkee, and Delhi. Our sincere gratitude goes out to the participants for their overwhelming response.



After reviewing 176 submitted papers, 142 abstracts were shortlisted for presentation. The academic papers were categorized according to three major thrust areas in the Mathematical Sciences: Applied Mathematics (Track-I), Pure Mathematics (Track-II), and Operations Research and Statistics (Track-III). There were three parallel sessions for paper presentation for Track-I, Track-II, and Track-III. A wide range of sessions were available to delegates, making it difficult for them to choose which sessions to attend. It appears that the delegates were delighted with the level of enthusiasm and professionalism they experienced on the completion day. We were pleased to see our overseas guests connect with people from around the world.

### Resource Persons

Prof. Ayman Rateb Badawi	Prof. Debasis Kundu
Prof. Elisabeth Larsson	Ms. Nidhi Raj
Prof. Hai Q. Dinh	Dr. Ritwik Bhattacharya
Prof. M. Mursaleen	Prof. Uday Singh
Prof. Anuradha Sharma	Prof. Shiv Kumar Gupta
Mr. Karunamay Pathak	-

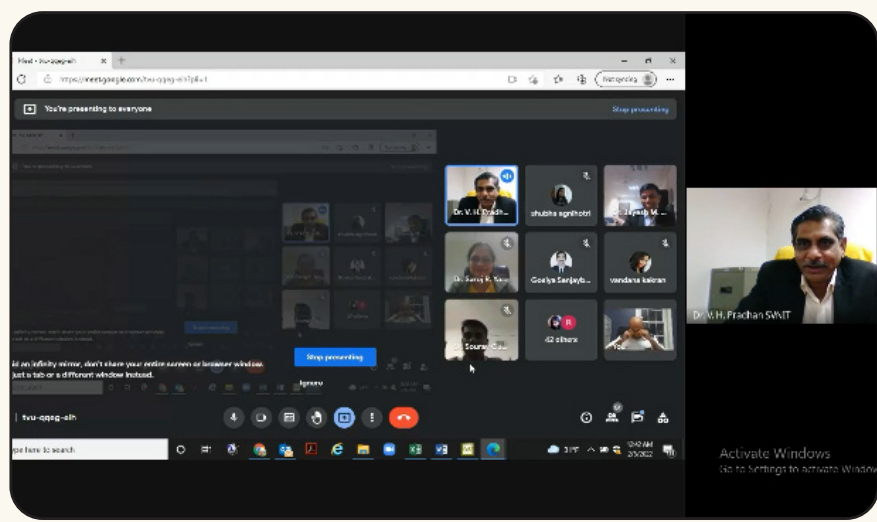
## 2<sup>nd</sup> International Conference (Online mode) on “Mathematical Modelling and Simulation in Physical Sciences (MMSPS 2022)”

We organized the 2<sup>nd</sup> International Conference (Online mode) on “Mathematical Modelling and Simulation in Physical Sciences (MMSPS 2022)”, on 5<sup>th</sup> and 6<sup>th</sup> February 2022. During this conference, academicians, technocrats, and researchers had an opportunity to interact with eminent individuals in mathematics, physics, and allied fields. The topics covered in this International Conference were comprehensive and will be adequate for developing and understanding about new developments and emerging trends in this area. There was one keynote address, two

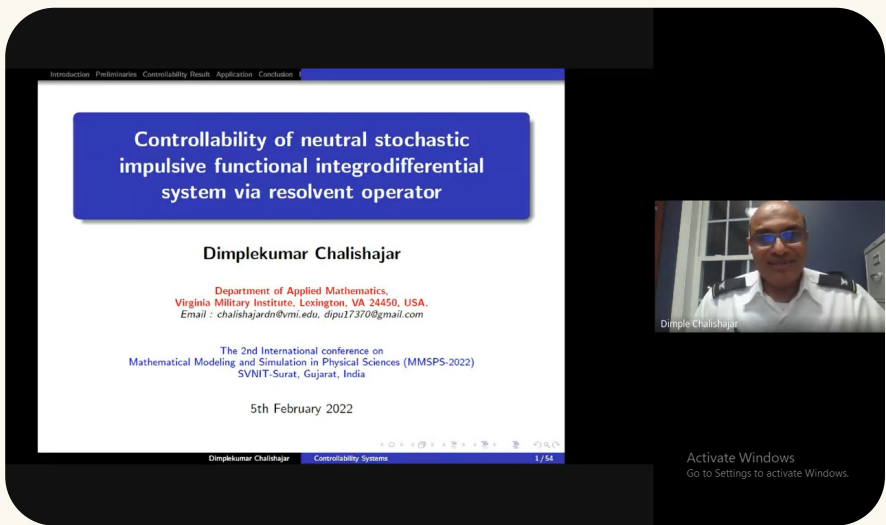
plenary talks, three invited talks, and ten parallel sessions in which the researchers presented their research articles online. An interactive session on “Research Trends And Challenges” between the participants and International researchers was arranged as well. An interactive session was arranged on “Research Trends And Challenges” between the participants and international researchers. Both faculty and students benefited from the interaction between the participants and the experts. The presence of eminent mathematicians, national and international,



on a single platform will help in forming networks to facilitate solving interdisciplinary research problems. It is anticipated that the proceedings of the conference will be of immense use to the participants as well as other researchers working in the field of Mathematical Modeling and Simulation.

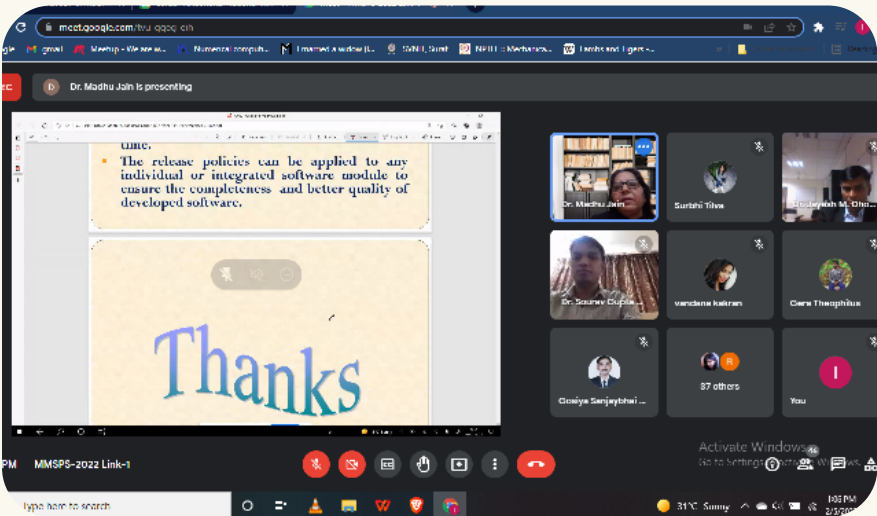


Resource Persons



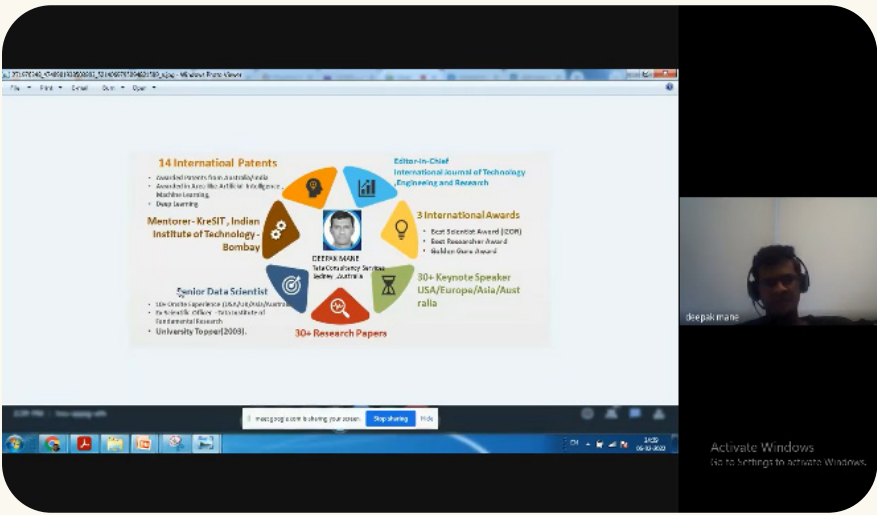
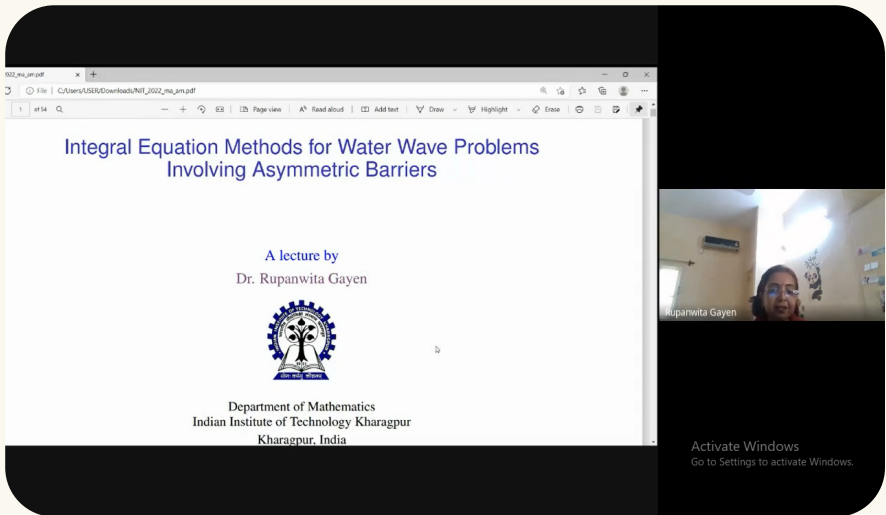
Lt. Col. Prof. Dimplekumar Chalishajar, USA

Prof. Dil Bahadur Gurung, Nepal



Prof. Kasi Viswanadham KNS, Warangal

Dr. Madhu Jain, IIT Roorkee



Dr. Rupanwita Gayen, IIT Kharagpur

Dr. Deepak Mane, TCS Australia



# STTP on Mathematical Tools and Techniques for Scientists & Engineers



Prof. A. K. Shukla and Dr. Ranjan Kumar Jana organized the program as a part of the Diamond Jubilee celebrations during 6<sup>th</sup>–10<sup>th</sup> December, 2021, in collaboration with Center for Continuing Education.

## About

The fundamental objective of this training program was to instill the theoretical foundation of this evergreen area and promote its application in the field of engineering and applied sciences. The program was organised with a deliberate focus on problem solving skills. Furthermore, the training program enabled the participants to learn about recent developments in this field and its applications, which could lead to future collaborations.

## Resource Persons

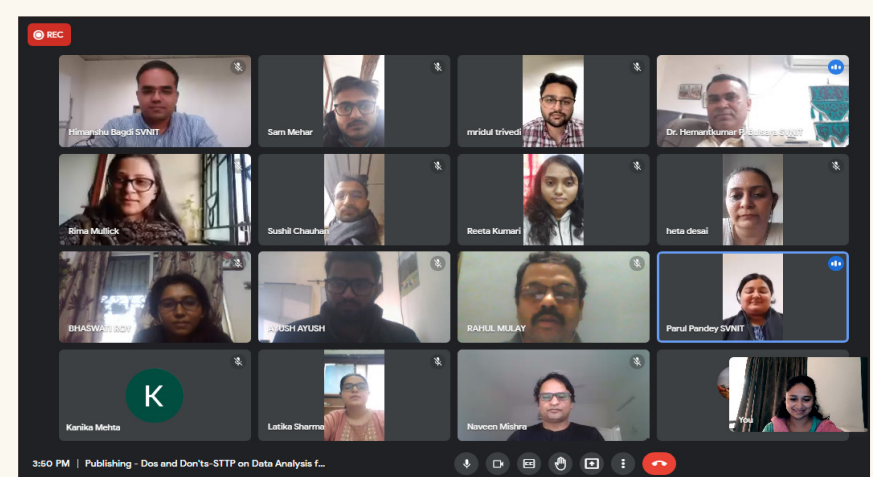
Prof. S. K. Upadhyay	Dr. Dilip Kumar
Prof. Prasanta Chatterjee	Dr. Sushil Kumar
Prof. Subuhi Khan	Dr. Sourav Gupta
Dr. Snigdha Banerjee	Dr. Mahesh Kumar
Dr. J. C. Prajapati	Prof. A. K. Shukla
Dr. Praveen Agarwal	Dr. R.K. Jana

# STTP on Data Analysis for Quantitative & Qualitative Research

The program was organized by Dr. Hemant Kumar Bulsara, Dr. Urvashi Kaushal and Dr. Vaishali S. Dhingra during 13<sup>th</sup> to 17<sup>th</sup> December, 2021 in association with Center for Continuing Education as part of the Diamond Jubilee celebration.

Data analysis is an interdisciplinary field that combines expertise, mathematical knowledge, statistics, scientific methods, processes, algorithms, systems and programming skills to extract meaningful insights from noisy, structured, and unstructured data. The extracted knowledge and actionable insights can be used pragmatically to solve complex, real-life problems. Using the extracted knowledge and actionable insights, one can solve complex, real life problems pragmatically.

The application of these methods is not restricted to any specific field as its scope is vast thus can be applied across a broad range of domains. Over a period of time both qualitative and quantitative research methods have gained their importance in problem solving. This program aims at developing theoretical background, understanding 'why' for the use of statistical techniques and its application to enhance distinctive research acumen and competency. The participants gain an opportunity to interact with the eminent resource persons and discuss their research related issues with them. They were able to enhance their analytical skills and thereby bring spark of validity and reliability to their own research work through this program.



## Resource Persons

Dr. Amit Shankar	Dr. Arun Kumar Kaushik
Dr. Hemantkumar P. B	Dr. Shampy Kamboj
Dr. Saurabh Agarwal	Dr. Dhaval Maheta
Dr. Hitesh Parmar	Dr. Neha Raval

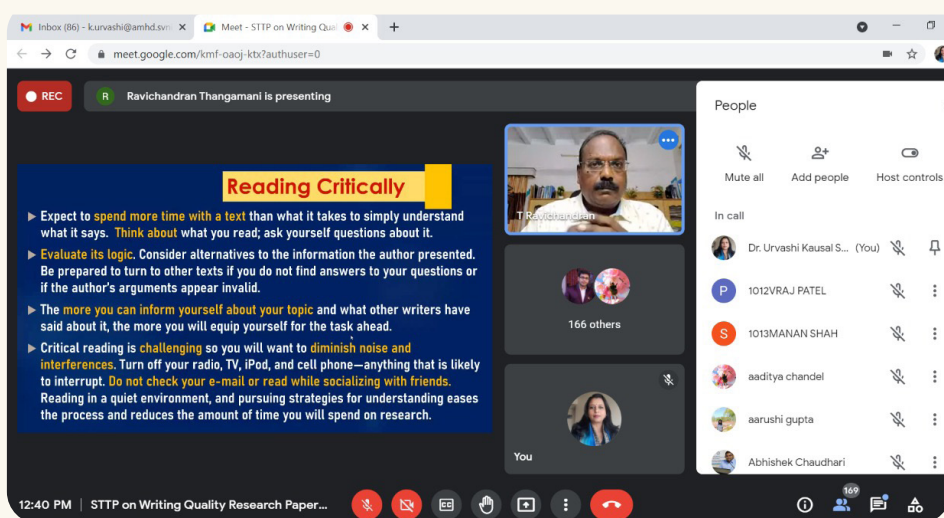
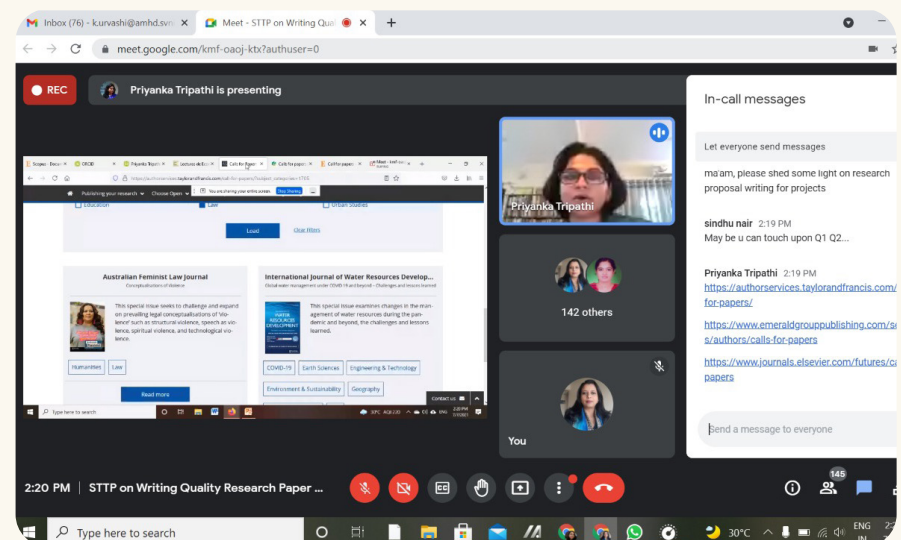


# STTP on Writing Quality Research Paper and Proposal

This program was organized by Dr. Urvashi Kaushal during 6<sup>th</sup>–10<sup>th</sup> July 2021 in association with the Center for Continuing Education as a part of Diamond Jubilee Celebration.

## About

The dissemination of research through the writing and publication of papers helps us reach the global audience. In the era of UGC, AICTE, and MHE requiring Indian researchers to publish their papers and theses in internationally renowned journals, writing quality research papers, theses, and books is becoming increasingly difficult. The majority of researchers enrolled in PhD courses have difficulty writing precise, objective, accurate, and referenced papers. The five-day program was attended by 198 participants. By inviting the most prolific writers and best teachers, this program provided insights into the problems faced by Indian multidisciplinary researchers.



## Resource Persons

Prof. T. Ravichandran, IIT Kanpur	Dr. Madhumeeta Sinha, EFLU
Dr. Priyanka Tripathi, IIT Patna	Prof. R.V. Rao, SVNIT, Surat
Dr. G. Muruganantham, NIT Trichy	Dr. Madhavi Kesari Reddy, NIT, Warangal
Dr. N. Sudarshana, IIT Kanpur	Dr. Ajit K. Mishra, IIT-BHU
Dr. Gunjan Yadav	Prof. Nagendra Kumar, IIT Roorkee
Dr. Vipul Kheraj, SVNIT Surat	-

# National Mathematics Day 2021

On the occasion of the 134<sup>th</sup> Birth Anniversary of Srinivasa Ramanujan on 22<sup>nd</sup> December 2021, which is called National Mathematics Day in India, the Department of Mathematics and Humanities celebrated Mathematics Day on 22–23 December 2021. On 22<sup>nd</sup> December 2021, the bust of S. Ramanujan was Inaugurated by the honorable director and the Chief Guest of the programme, Prof. R. V. Rao, the honorable Deputy Director, Prof. P. L. Patel, and Dr. Ravi Kant, the Dean of Student Welfare. The department's HoD, Dr. Jayesh M. Dhodiya, Associate Professor, welcomed the dignitaries warmly.

All the faculty members, research scholars and M.Sc. students were present in the inaugural ceremony. The Head



of the Department of Physics, Dr. Dimple Shah and the In-charge Head of the Department of Chemistry Dr. Suban K. Sahoo were also present in the programme. An introduction was given by Miss Parul Pandey, and the program began with the department's research scholars praying. Our Honorable Director, Deputy Director, Dean of Student Welfare, Prof. Shukla, Prof. Pradhan, Dr. Jayesh Dhodiya and other respected faculty members lit the candle.

Following that, the Chief Guests of Honor and the Heads of Physics and Chemistry Departments were welcomed with bouquets by Prof. A. K. Shukla, Prof. V. H. Pradhan, Dr. Hemant Bulsara, Dr. Jayesh Dhodiya and Dr. Sushil Kumar respectively. It was then unveiled the bust of Ra-



manujan.

Our Honorable Director Prof. R. V. Rao followed the presentation of the bust by a rousing speech about Ramanujan's early life, his significant work in mathematics, particularly in the area of numbers and continued fractions. Following his unfortunate death at age 32, succumbing to tuberculosis, he described his family's hidden struggle as they coped with their deep sense of sorrow.

After this, Prof. R. V. Rao congratulated the department on organising an excellent event and appreciated the efforts of our HoD, Dr. Jayesh Dhodiya for taking the initiative. Prof. P. L. Patel took to the stage and shared some kind and inspiring words, followed by Prof. Pradhan and our HoD Dr. Jayesh Dhodiya, all sharing words of wisdom learnt during their hardships. In addition, the students organized a cake



The Department organised an award ceremony on 28<sup>th</sup> April 2022 for the winners of National Mathematics Day competitions. The event was anchored by PhD scholar Parul Pandey, and Vandana Kakran assisted in the award presentation. Prof. Shukla and Prof. V. H. Pradhan presented trophies and gold medals to the winners, respectively. Prof. Neeru Adlakha gave silver and bronze medals to rank holders of the competitions. The department head Dr. Jayesh M. Dhodiya thanked all of the winners and participants in his speech. Eventually, he hopes this program will be organized at the state, national, and international levels. Mr. Divyesh Patel took the photographs and all the attendees were served soft drinks. PhD scholars and MSc students successfully coordinated the entire event.

cutting ceremony, followed by a short video about S. Ramanujan. The inaugural ceremony ended with a vote of thanks given by Prof. V. H. Pradhan.

Following the programme, high tea and snacks were served for everyone. After a short break, a video that depicted Ramanujan's life was screened. In the quest for more information about the man and in watching his life unfold on the big screen, it all contributed to a wonderful experience. Everyone was touched by Ramanujan's significant work, his talent, and his inspiring life. Prof. A. K. Shukla concluded the event by delivering a short, yet inspiring speech on Ramanujan's life, summarizing his contributions to Mathematics and inspiring everyone to contribute their time and efforts to the field.





## New Faculty Joining Program

An event was held on 13<sup>th</sup> August 2021 to welcome the newly joined faculty members. All the faculty members and the research scholars were present in the programme. Dr. Jayesh M. Dhodiya, Head of the Department, gave a brief introduction to the newly hired faculty members. Thereafter, newly joined faculty Dr. Amit Sharma, Dr. Raj Kamal Maurya, Dr. Sudeep Singh Sanga, Dr. Sourav Gupta, Dr. Saroj Yadav and Dr. Vaishali Dhingra were welcomed by Prof. A. K. Shukla, Prof. V. H. Pradhan, Dr. Hemant Bulsara, Dr. Sushil Kumar, Dr. R. K. Jana and Dr. Twinkle R. Singh respectively by flower bouquet.

Following that, each newly hired faculty member spoke about their goals in terms of teaching, research, and sharing their vision for the department and institute. The department was privileged to have Retired Professor Prof. M. N. Mehta (DoMH, SVNIT) on this occasion. He gave a speech of appreciation on how the department has grown



in terms of teaching and he further added that the department has around 65 research scholars which is highly commendable and indicative of the relentless efforts put in by the staff and students. Prof. M. N. Mehta's contribution towards the department was highly appreciated by

the head of the department as well as by other faculty members of the department during the programme.



The previous Head of the Department, Dr. Sushil Kumar handed over the charge and responsibility of the Head of the Department (DoMH) to Dr. Jayesh M. Dhodiya on 2<sup>nd</sup> August, 2021. His contribution towards the department was deeply appreciated by the Department of Mathematics and Humanities and on 2<sup>nd</sup> August, 2021. The Department of Mathematics and Humanities and every faculty member in the department profoundly appreciated the way he managed the department during the pandemic. His contribution towards the department was really commendable. Professors A. K. Shukla, V. H. Pradhan, Dr. H. P. Bulsara, and Urvashi Kaushal addressed the audience and motivated the newly recruited faculty members. Meanwhile, some snacks and tea were also served among the faculty members and the research scholars. Then Dr. Jayesh M. Dhodiya gave a speech and a vote of thanks, as well as introduced the new research scholars and teaching assistants.

## Personal Website Development Workshop

On 26<sup>th</sup> August 2021, a workshop was held to teach participants how to develop a personal website. It was organized in the seminar hall of the Department of Mathematics and Humanities (DoMH) from 1.30 pm. All the faculty members of DoMH, Dr. Dimple Shah (HoD, Department of Physics) and the research scholars from DoMH and Physics attended the session. The Head of the Department, Dr. Jayesh M. Dhodiya, introduced the speaker, Dr. Yogesh Sonvane, Assistant Professor in the Physics Department. Prof. A. K. Shukla presented a bouquet to Dr. Yogesh Sonvane on this occasion.

Dr. Yogesh began explaining how to prepare a personal website from scratch. It was discussed in detail how to edit text, font, align, upload an image, upload a vid-



eo, and make a personal page more attractive. It was a very informative and fruitful workshop for those who attended the session. The talk ended around 2:30 pm and a nice discussion ensued between the speaker and the audience. Finally, Dr. Jayesh M. Dhodiya, Head of the Department, explained the main purpose for organizing such workshops. The purpose was to provide students with exposure to various fields by interacting with professionals who have experience in those fields. The session ended with a vote of thanks by Dr. Jayesh M. Dhodiya, Head of the Department.



## Expert Lecture on “Basics of Investment and their Importance”

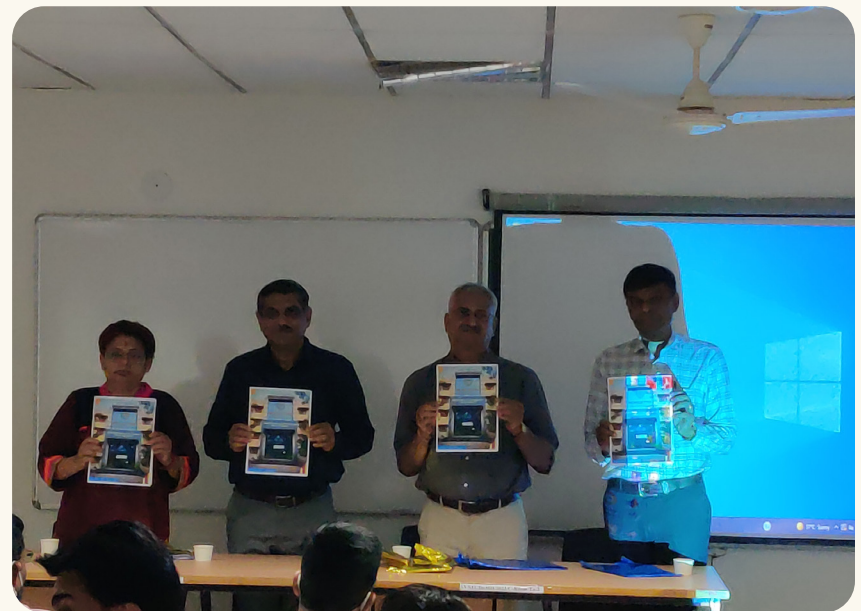
The Department of Mathematics and Humanities organized a session on 4<sup>th</sup> April, 2022 entitled “Basics of Investment and their Importance”. Mr. Adison Khankar,



a renowned insurance agent from Surat, was invited to speak. Dr. Jayesh M. Dhodiya, head of the department, welcomed him with a bouquet and highlighted the importance of financial management for working professionals. The speaker explained complex monetary concepts and terms in a lucid manner. He recommended the most suitable investment plan using the pyramid graphic. He also explained the nitty-gritty of financial planning. During the session, the speaker provided relevant examples to illustrate his message. Mr. Khankar expressed his gratitude for the given opportunity on this occasion. Dr. Dhodiya thanked the speaker for sharing valuable knowledge and the staff for their enthusiasm and active participation. He also promised to have such sessions in the future.

## International Day of Mathematics 2022

On 14<sup>th</sup> March 2022, there was a program held to celebrate the International Day of Mathematics. Dr. Jayesh M. Dhodiya, Head of the Department, organized the event. Faculty members and research scholars from the department were present to celebrate the event. The first issue of the department's newsletter was released on this occasion with information about departmental activities, achievements, publications, etc for a period of 4 months from November 2021 to February 2022. Prof. A. K. Shukla, Prof. V. H. Pradhan, Prof. Neeru Adlakha, and Dr. Jayesh M. Dhodiya released the newsletter. Dr. Saroj R. Yadav, faculty coordinator of the newsletter committee, thanked the department head, Dr. Jayesh M. Dhodiya, for helping the committee prepare a quality newsletter. The event ended with a vote of thanks by Dr Jayesh M. Dhodiya, Head of the Department.



## Panel Discussion



On 28<sup>th</sup> October 2021, a panel discussion was organized by Head of the Department, Department of Mathematics and Humanities, Dr. Jayesh M. hodiya an Associate Professor in the Department at Seminar Hall of the DoMH. The panel discussion was titled “Independent India @75: Self Reliance & Integrity”. The panel members were Prof. A. K. Shukla, Prof. V. H. Pradhan, Dr. Hemant Kumar Bulsara, Dr. Jayesh M. Dhodiya and Dr. Urvashi Kaushal. Speakers Prof. A. K. Shukla, Prof. V. H. Pradhan and Dr. Hemant Kumar Bulsara gave valuable knowledge on the topic. Faculty members and Research Scholars of the department were present during the Panel Discussion. At last the programme was concluded by Vote of Thanks given by Dr. Jayesh M. Dhodiya, Head of the Department.



## Final Year Farewell Program

On 20<sup>th</sup> May 2022, the Department of Mathematics and Humanities organized a small program for final-year students. Prof. A. K. Shukla, Prof. V. H. Pradhan, Prof. Neeru Adalakha, Dr. Hemanth P. Bulsara, Dr. Jayesh M. Dhodiya, Dr. Urvashi Kaushal and Dr. R. K. Jana extended their best wishes to the final-year students. The faculty of the department wished the students success in their future endeavors. Then a photo session and refreshments were arranged for students and faculty members. At last, the event concluded with a cheerful chat between faculty and final-year students.





# IntERAct

## About IntERAct

Dr. R. K. Jana initiated Internship Experiences and Research Activities (IntERAct) in 2017 with the help of a few final year students and hosted weekly seminar series from students relating to internship experiences and research activities. Alumni and faculty have started sharing their research activities and experiences with students since last year. Originally, it was an open discussion series on any mathematics-related topic.

The IntERAct seminars took place online during the pandemic and so far, 50 seminars have been held. Team\_IntER-Act looks forward to conducting more interesting seminars which will generate enthusiasm in students.

## Seminars during Academic Year 2021-22

Name of Speaker	Title
Dr. Mahesh Kumar	A note on semi-analytical methods for nonlinear differential equation
Dr. Sourav Gupta	Hypersingular Integral Equation Approach to Wave-Structure Interaction Problem
Ms. Priyanka Bhattar	Optimization Methods For Large-Scale Machine Learning
Ms. Vaishnavi Byreddy	Introduction to Data Analytics and Data Science
Mr. Ramkumar Radhakrishnan	Is $0.0=0$ true or false?: An investigation concerning quadratic equation
Mr. Roshan Raj Kaalkrit	Unification in Mathematics
Ms. Ishika Bhatt	Signal Generation Using Market Structure Data
Dr. Paritosh Jha	Do Mathematics make a good Economist?
Mr. Rutvij Tole	Introduction to Fractional Calculus
Mr. Vaibhav Gupta	Dirichlet theorem on primes in arithmetic progressions
Ms. Priya Singh	The Role of LUB Axiom in Real Analysis
Ms. Prakruti Kalsaria	Glimpses into Hyperbolic Geometry
Mr. Ramkumar Radhakrishnan	Inadequacy of classical logic in classical harmonic oscillator
Mr. Niraj Velankar	Aztech Diamonds and their tiling

# Achievements

## GATE Qualifiers



Urvashi Joshi : AIR 576



Saubhagya Tripathi :  
AIR 905



Rutvij Tole : AIR 1063



Prakruti Kalsaria: AIR 732



Niraj Velankar: AIR 1619



Sriharshitha Nalumasu:  
AIR 1619

## Doctor of Philosophy

### Haresh Jani

- He was awarded along with his supervisor (Dr. T. R. Singh) for presenting the Best Research Paper Award at the 5<sup>th</sup> International Conference on the current scenario in pure and applied mathematics, organized by Kongunadu arts and science college, Coimbatore, Tamilnadu, India during January 27-28, 2022.

### Nisha Pokharna

- She has received a Certificate of Excellence (1<sup>st</sup> prize) Slogan Writing competition organized by the Department of Physics, SVNIT Surat as a part of Vigilance Awareness Week, 2021 on November 1, 2021.
- She got 3<sup>rd</sup> prize in Deshbhakti Poem Competition organized by Hindi Cell, SVNIT Surat on January 7, 2022.

## Integrated Master of Science 2017–22 Batch

### Harshil Pathak

- He has done a Summer Internship with Prof. Kaushik Bal on “Distributions and Sobolev Space” from May to June 2021.
- He is selected for SURGE (Internship Program of IIT Kanpur) in 2021.
- He worked as Head of Malang-Dance Club during 2020–2021.

### Ishika Bhatt

- She was selected as a DAAD fellow in the summer of 2021.

### Urvashi Joshi

- She was Campus ambassador at IIT Kanpur, 2021.
- She has done her Summer Internship in EDULYT Company during June 2021.

### Ashwin Verma

- He has been selected as a Software Developer Intern in Savvy HRMS. The internship was extended to summer 2021 based on a good performance.

### Vishal Agarwal

- He has conducted the quiz as well as acted as Quiz-Master, alongside other members of the Literary Affairs Committee, SVNIT Surat which is an Inter NIT MELA Quiz in which students from 20+ NITs had participated in May 2021.
- He was awarded the first prize in a Paper Presentation at the second, online edition of Mathematics Colloquium organized by AMHD, SVNIT in March 2021.

## Integrated Master of Science 2018–23 Batch

### Vaibhav Gupta

- He has done his Winter Internship at Ramakrishna Mission Vivekananda Education and Research Institute under the guidance of Prof. Stephan Baier on the topic “The Siegel-Walfisz Theorem on Primes in Arithmetic Progression”.
- He got selected for SRFP 2021 and worked this summer under Prof. R. Thangadurai, HRI Allahabad, on the topic of “Dirichlets Prime Number Theorem”.
- He has done a project on “Basics of Analytical Number Theory” in which he has studied Analysis of Prime Number Theorem, Riemann Zeta Functions and Modular Forms under Dr. Saurabh Kumar, IIT Kanpur in 2021.

### Prakruti Kalsaria

- She worked with Dr. Gianluca Faraco on the study of Fuchsian Groups during December 2021 and January 2022.
- She was selected for the Summer Research Fellowship Programme in 2021 by the Indian Academy of Sciences for a research internship under Dr. Subhojoy Gupta, Indian Institute of Science (IISc), Bengaluru.
- She won Mathematics Quiz twice which was conducted in Mathematics Colloquium as a part of IDM 2020 and 2021 at SVNIT, Surat.

### Nakrani Dhruvi Babubhai

- She has attended the MTTs program for level 1 from June 2021 to July 2021.
- She was selected for the Visiting Student Research Program (VSRP) organized by TIFR from May 2021 to June 2021.

### Singh Priya Birendrakumar

- She was selected for Madhava Nurture Camp(MNC)–2021.



## Integrated Master of Science 2019–24 Batch

### Yashwardhan Pankaj Banta

- He has received a letter acknowledging the cloud deployment of a model distinguishing dogs from cats.
- He has secured a scholarship from the “All India data science student scholarship test”.

### Ashwani Kumar Dubey

- He has attended the MTTs Level 0 Summer program.
- He completed the two-semester course on Quantum Computing by IBM USA in May 2021.

### Sanghani Kaushik Chimanbhai

- He has completed the two-semester course on Quantum Computing by IBM USA in May 2021

### Chanchal Kumar Jaiswal

- He has done Summer Internship Program 2021 for the Sustainable Rural Development organized by PI UBA SVNIT, Surat during May–July, 2021.

## Integrated Master of Science 2020–25 Batch

### Sauparnika Nair

- She was presented with Silver Honour in the final round of the International Youth Math Challenge 2021 for being one of the top 15% of participants across the world.

### Pansuriya Tarang Bharatbhai

- He and his Team have become the Zonal Toppers Of Gujarat Region in MIMAMSA 2021 (for institutes like IITs, NITs, IISERs, AIIMs, etc.) organized by Indian Institute of Science Education and Research (IISER), Pune.

### Urmik Bhavsar

- He was ranked 1<sup>st</sup> at Kalamahakumbh 2021 (state level Harmonium competition organized by Government of Gujarat) in 15–21 Age Category.
- He was ranked 1<sup>st</sup> at Youth Festival 2021 (Harmonium Category) in South Gujarat (zonal level).

### Adarsh Kumar

- 2<sup>nd</sup> Position in patriotic poem competition held in SVNIT.
- 2<sup>nd</sup> position in the Rangoli competition organized by Umang in SVNIT.
- He won 1<sup>st</sup> prize in Water Conservation Creative Hindi Slogan Competition.
- He won 1<sup>st</sup> prize in Kahani Lekhan in SVNIT Rajbhasha Hindi Pakhwada Competition.
- He won 3<sup>rd</sup> prize in Shruti Lekhan in SVNIT Rajbhasha Hindi Pakhwada Competition.

## Integrated Master of Science 2021–26 Batch

### Veer Kamdar

- He was presented with Gold Honour in the final round of the International Youth Math Challenge 2021 for being one of the top 2% participants across the world.

### Gadariya Priya

- 1<sup>st</sup> Position in PRP (PROPOSE RESEARCH PUBLISH), PROJECT NAME: Comparison study on different methods of Inverse kinematics.
- 3<sup>rd</sup> Position in Masked Bandits, TEAM NAME: PARADOXERS.

### Lalit Agrawal

- 1<sup>st</sup> Position in PRP (PROPOSE RESEARCH PUBLISH), PROJECT NAME: Comparison study on different methods of Inverse kinematics.
- 3<sup>rd</sup> Position in Masked Bandits, TEAM NAME: PARADOXERS.

# Ph.D. Awarded



## Ms. Riddhi Rekh

**Thesis :** A study on some Multi-Objective Project management problems and their solution by Fuzzy programming technique.  
Guide : Dr. Jayesh M. Dhodiya

## Mr. Baradol Pravin R

**Thesis :** A Study on Fixed points in Graphical  $(s)$  - Metric Spaces and its Applications  
Guide : Dr. Dhananjay Gopal, Dr. Twinkle R. Singh



## Mr. Dhawal J. Bhatt

**Thesis :** On Approximations properties of Some Linear Positive Operators based on Beta Function  
Guide : Dr. R.K. Jana, Prof. V. N. Mishra

## Mr. Ankit Pal

**Thesis :** A study on Mittag-Leffler type hypergeometric function (R-function) and its application  
Guide : Prof. A. K. Shukla, Dr. R.K. Jana



## Mr. Rishikesh Yadav

**Thesis :** A Study on Consequential Development for Approximation Properties of Modified Szasz-Mirakjan Operators with Generalization in Bivariate Sense  
Guide : Dr. Ramakanta Meher, Prof. V. N. Mishra

## Mr. Vaghela Pratiksinh Sureshsinh

**Thesis :** A Study on Consumers' Online Shopping Intention for Consumer Electronics Products in Select Cities of Gujarat State  
Guide : Dr. Hemantkumar P. Bulsara



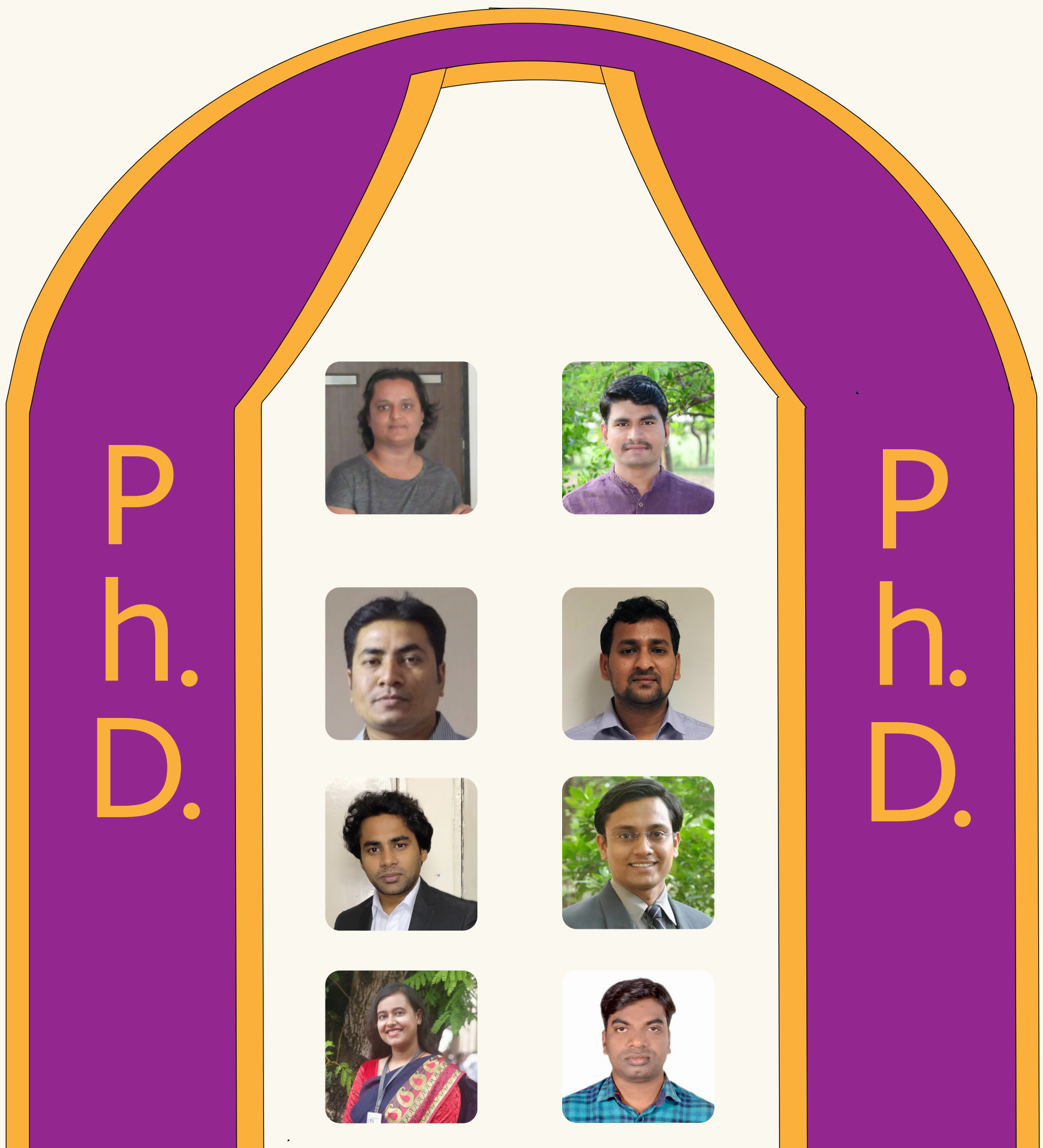


### Ms. Pandya Esha Avinashbhai

**Thesis :** A Study on Factors Influencing Consumers' Initial Trust in Mobile Payments in Select Cities Of Gujarat  
**Guide :** Dr. Hemantkumar P. Bulsara

### Mr. Vijay Kumar Saw

**Thesis :** Chebyshev Collocation Method For Fractional Differential Equations  
**Guide :** Dr. Sushil Kumar





# Ph.D. Students

**Guide: Prof. A. K. Shukla**



**Vishal Eknath Nikam (D18MA002)**

PEC

**Research Area** Fixed point theorem

FIR

**Vinod Kumar Jatav (D19MA006)**

**Research Area** Special Functions and Integral Transforms



**Patel Farhatbanu Hasmatiali (D19MA009)**

FSF

**Research Area** Special Functions and Integral Transforms

FIR

**Samiksha Mahajan (DS21MA003)**

**Research Area** Special Functions



**Gajera Jeet Bhovanbhai (DS21MA006)**

FRS

**Research Area** Higher Transcendental Function

PEC

**Thakker Yogesh Mohanlal (DS19MA004)**

**Research Area** Special Functions



## Guide: Prof. V. H. Pradhan



**Palav Mansi Subhash (DS20MA001)**

FIR

**Research Area** Fluid flow through porous media

FIR

**Gosiya Sanjaybhai Lilabhai (DS20MA002)**

**Research Area** Fluid flow through porous media



## Guide: Prof. Neeru Adlakha

FIR

**Hemant Bhardwaj (D19MA002)**

**Research Area** Bio-Mathematics



**Kothiya Ankit Babubhai (DS19MA008)**

FRS

**Research Area** Bio-Mathematics

FIR

**Vedika Mishra (D20MA001)**

**Research Area** Bio-Mathematics



**Vaishali (D20MA002)**

FIR

**Research Area** Computational Biology



FIR

**Yogita (D21MA009)**

**Research Area** Mathematical and Computational Biology



**Guide: Dr. Hemantkumar P. Bulsara**

PEC

**Purnima Sehrawat (D19MG001)**

**Research Area** Adoption of Industry 4.0 in automobile industry



**Himanshu Bagdi (D19MG002)**

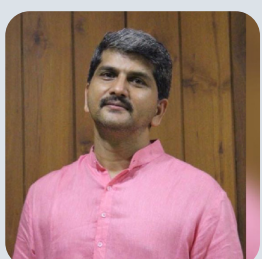
FIR

**Research Area** Consumer Behaviour, and E-learning

FIR

**Latika Sharma (D19MG003)**

**Research Area** Social entrepreneurship and Organisational behaviour



**Gopal Goswami (DS19MG001)**

PEC

**Research Area** Management Research / PMAY Scheme

FIR

**Mridul Trivedi (DS19MG002)**

**Research Area** Consumer behaviour and Green Marketing



**Guide: Dr. Sushil Kumar**

PEC

**Arvind Kumar Mishra (DS17MA001)**

**Research Area** Fractional differential equation and its application





**Rohit verma (DS18MA001)**

FIR

**Research Area** RBF Meshfree method for the non-Fourier bio heat equation with and without phase change

FRS

**Rupali Gupta (D18MA007)**



**Research Area** Numerical solutions of differential equations by chebyshev collocation method



**Harshad Sakariya (DS19MA001)**

FIR

**Research Area** Numerical Study of Non-Linear Fractional PDEs

FRS

**Bhagya Shree Meena (DS19MA006)**



**Research Area** Collocation method for the fractional partial differential equation using Chebyshev polynomials & Radial basis function with application in bio-heat transfer



**Rakesh Meena (D20MA006)**

FRS

**Research Area** Biological Mathematical Modelling

FIR

**Raghupati Vyas (DS19MA006)**



**Research Area** Radial Basis Functions, Chemotherapy

**Guide: Dr. Jayesh M Dhodiya**

FIR

**Surbhi Tilva (D18MA003)**



**Research Area** Multi-objective optimization problem





**Shubha Agnihotri (D19MA001)**

Research Area Optimization

FIR

**Aniket Todkar (DS19MA009)**

Research Area Optimization Technique



**Aaishwarya Bajaj (D20MA003)**

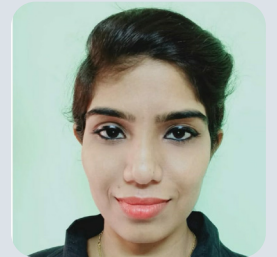
FIR

Research Area Optimization

FRS

**Vandana Yashwant Kakran (DS17MA002)**

Research Area Multi objective optimization problem



**Bhoi Sunil Bhaidas (DS17MA001)**

PEC

Research Area University Course Scheduling Problem

**Guide: Dr. Urvashi Kaushal**

FSF

**Parekh Krupali Sanjaybhai (D17EN001)**

Research Area A Study of Violence in the Works of Tahmima Anam and Sorayya Khan



**Pillai Anila Arvindakshan (D18EN001)**

FSF

Research Area Mytho Fiction and Management Studies

FIR

**Vasava Mithunbhai Gambhirbhai (DS19EN001)**

Research Area Film Studies



**Kiran Kumar Francis Vaghela (D20EN001)**

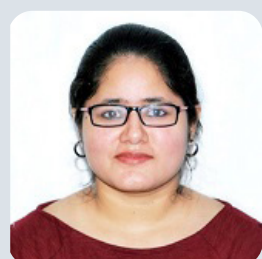
FIR

Research Area Employability skills for engineering graduates

FIR

**Parul Pandey (D20EN002)**

Research Area Employability Skills



**Pallavi Panda (D21EN001)**

FIR

Research Area Graphic Narrative

**Guide: Dr. T. R. Singh**

FIR

**Yadav Jyoti Ugrasen (DS19MA003)**

Research Area Fluid



**Haresh Jani (D19MA007)**

FIR

Research Area Aboodh transform homotopy perturbation method for various fluid flow phenomena

FIR

**Bhavin Mansukhbhai Rachhadiya (D20MA008)**

Research Area Hermite-Hadamard inequalities







**Akshey (D21MA005)**

FIR

Research Area Mathematical modelling

FSF

**Archana C. Varsoliwala (D18MA004)**

Research Area Mathematical modeling and its solutions



**Shruti S. Sheth (D18MA005)**

PEC

Research Area Mathematical modelling

**Guide: Dr. R. K. Jana**

FIR

**Rituparna Mondal (D19MA003)**

Research Area Operation Research



**Bhammar Kanubhai Madhubhai (D21MA003)**

FIR

Research Area Fractional calculus

FIR

**Kanchan Kushwaha (D21MA008)**

Research Area Operation Research



**Jeet Bhovanbhai Gajera (D20MA007)**

Research Area Mathematical Analysis

FRS

**Animesh Mondal (DS19MA010)**

**Research Area** Study on Supply chain problems in im-  
precise environment



**Radharaman Roy (DS16MA001)**

PEC

**Research Area** Mathematical modelling

**Guide: Dr. Ramakanta Meher**

FIR

**Parthkumar Pravinbhai Sartanpara (DS19MA002)**

**Research Area** Fluid dynamics and differential equations



**Lalchand Verma (D19MA005)**

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**Research Area** Fluid dynamics and differential equation

PEC

**Pandya Darshak Pankajbhai (DS19MA011)**

**Research Area** Fluid Dynamics and Differential equations



**Ajay Kumar (D20MA009)**

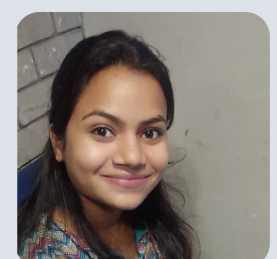
FRS

**Research Area** Differential Equations, Fluid Dynamics

FIR

**Kiran Dhirawat (DS21MA007)**

**Research Area** Fluid Dynamics, Fractional calculus







**Vishal Kumar Jayantibhai Prajapati (D18MA002)**

FIR

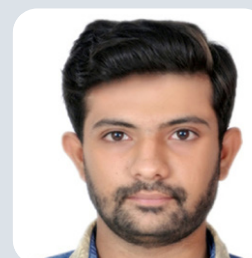
**Research Area** Differential Equations, Fluid Dynamics

**Guide: Dr. Indira P. Tripathi**

FIR

**Mahamadsohil Arora (DS21MA004)**

**Research Area** Nonlinear programming



**Nisha Pokharana (DS19MA012)**

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**Research Area** Operations research

**Guide: Dr. Shailesh Kumar Srivastava**

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**Sachin Bhikhalal Devaiya (DS19MA007)**

**Research Area** Approximation theory



**Guide: Dr. Shailesh Kumar Srivastava and Dr. Dhananjay Gopal**

FIR

**Jayesh Dineshbhai Savaliya (DS19MA005)**

**Research Area** Fixed Point Theory



**Guide: Dr. Raj Kamal Maurya**

FIR

**Aman Prakash (D21MA007)**

**Research Area** statistics



## Guide: Dr. Amit Sharma



**Aditi (D21MA004)**

**Research Area** Algebraic coding theory

FIR

**Soumya Shah (DS21MA005)**

**Research Area** Algebraic coding theory



## Guide: Dr. Sudeep Singh Sanga

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**Khushbu Antala (DS21MA002)**

**Research Area** Queueing Theory



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**Sahu Nagesh Sumanshankar (D21MA002)**

**Research Area** Fluid Flow Through Porous Media



## Guide: Dr. Sourav Gupta

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**Tapas Mal (D21MA001)**

**Research Area** Fluid dynamics (water waves)





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Method of solving differential and integral equations Haar wavelets  
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**Akash Mer (I17MA001)**

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Dissertation title:  
Some Extensions of the classical theorems for well-poised hypergeometric functions  
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**Vishal Choudary (I17MA002)**

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Dissertation title:  
Prediction of stock market data and comparison of different machine learning and deep learning models  
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Increasing the profitability in financial market using Fibonacci ratio  
Guide: Dr. Neeru Adlakha



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Dissertation title:  
Umbral Calculus  
Guide: Prof. A. K. Shukla

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On number of Hamiltonian paths and cycles in complete directed graph  
Guide: Dr. Amit Sharma





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Comparative study of models and neural network modelling  
Guide: Dr. Raj Kamal Maurya

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Dissertation title:  
Double orbit retrial queue with customers' balking  
Guide: Dr. Sudeep Singh Sanga



### Ronak Sharma (I17MA008)

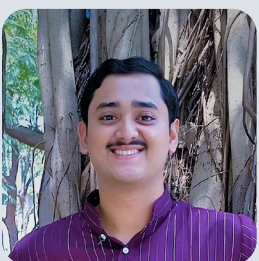
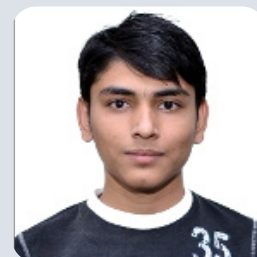
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Statistical Analysis of Growth in Area, Production & Yield of Soyabean Crop  
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Comparison of 1D consolidation equation and 1D heat equation using FEM Method  
Guide: Dr. V. H. Pradhan



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Dissertation title:  
Applications of Graph Theory  
Guide: Dr. Saroj R. Yadav

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Dissertation title:  
Solution of diffusion equation involved in drying of a fruit slice using RDTM  
Guide: Dr. Saroj R. Yadav




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Dissertation title:  
Mathematical model of tumor growth  
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Single Server Double Orbit Retrial Queue With Feedback and Balking


Guide: Dr. Sudeep Singh Sanga

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Dissertation title:

Quantum Computation


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Dissertation title:

Study of Rings and Modules with Chain conditions


Guide: Dr. Amit Sharma

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Dissertation title:

Rate of contamination in soil by using reduced differential transformation method


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Dissertation title:

Solution to Portfolio Optimization Problems using Classical and Evolutionary Techniques


Guide: Dr. Jayesh M. Dhodiya

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Dissertation title:

Extended gamma, beta and hypergeometric function and new contiguous relations

Guide: Prof. A. K. Shukla

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Admission control for queuing system with F policy with balking and feedback

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Mathematical modeling on predicting athletes performance in Olympic  
Guide: Dr. Sourav Gupta

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A Study of Non-Triangular Metric Spaces, their Basic Topological Properties and Generalization of Fixed Point Results to such Spaces  
Guide: Dr. Shailesh Kumar Srivastava

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Solution of multi-objective train scheduling problem using both classical and evolutionary techniques.  
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Solution of Fractional Differential equations using Adomian Decomposition Method  
Guide: Dr. Ramakanta Meher

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Uncertain multiobjective assignment problem in a Hospital environment  
Guide: Dr. Jayesh M. Dhodiya

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Solving EigenValue Problems using Radial Basis Functions.  
Guide: Dr. Sushil Kumar

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Mathematical model of chemotherapy using fractional order differential equations  
Guide: Dr. Sushil Kumar



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Predictive Analysis of Data using ML algorithms  
Guide: Dr. Raj Kamal Maurya

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Dissertation title:  
Analytical solution of Terzaghi equation  
Guide: Dr. V. H. Pradhan

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**Gaurav Kumar (I17MA031)**

Dissertation title:  
Integral Transforms – Laplace & Fourier Transforms And their Applications  
Guide: Dr. Twinkle R. Singh

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Dissertation title:  
Summability theory and Its application  
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Dissertation title:  
Applications of Homotopy Analysis Method of nonlinear evolution equations  
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Dissertation title:  
Approximate analytical solution for non-linear equations  
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**Tejaswi Singh (I17MA035)**

Dissertation title:  
Calcium Signalling in pancreatic Alpha cell  
Guide: Prof. Neeru Adlakha

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Dissertation title:  
Application of Machine Learning In Airfare Revenue System  
Guide: Dr. R. K. Jana

**Vatsal Moradiya (I17MA037)**

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Dissertation title:  
Object Recognition  
Guide: Dr. Sushil Kumar



**Nakul (I17MA040)**

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Dissertation title:  
Modelling  
Guide: Prof. Neeru Adlakha

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Dissertation title:  
Mathematical Models for determining earthquake casualties and damages in India  
Guide: Dr. Twinkle R. Singh



**Prudhvi Raj Ganta (I17MA042)**

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Dissertation title:  
Real Analysis  
Guide: Dr. Shailesh Kumar Srivastava

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Dissertation title:  
Homotopy Analysis Method  
Guide: Dr. Ramakanta Meher




**Saubhagya Tripathi (I17MA044)**

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Dissertation title:  
Inverse Euler Phi Function  
Guide: Dr. Amit Sharma

**Ashwany Kumar Verma (I17MA045)** ashwin2567@gmail.com


Dissertation title:  
Computer Vision – Image Processing  
Guide: Dr. Indira P. Tripathi

**Premjit Kumar (I17MA046)** premjitkumar403@gmail.com


Dissertation title:  
Generalized Incomplete Gamma Function  
Guide: Dr. A. K. Shukla

**Anjali Ranjan S. Kumar Pal (I17MA047)** anjaliranjana025@gmail.com


Dissertation title:  
Application to the solution of consolidation problems using finite difference method  
Guide: Dr. V. H. Pradhan

**Shashank Gupta (I17MA048)** guptashashank552552@gmail.com

Dissertation title:  
Email Text Classification Using Machine Learning Techniques  
Guide: Dr. Indira P. Tripathi

**Pooja Podila (I17MA049)** podilapooja9398@gmail.com

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Mathematical Model of Crime and Unemployment  
Guide: Dr. Sourav Gupta

**Waseem Ahmad (I17MA053)** ahmd.waseem5@gmail.com

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The study of moisture content in one dimensional medium through unsaturated porous medium by Elzaki Adomian Decomposition Method  
Guide: Dr. Twinkle R. Singh

**Manurag don (I17MA054)** manuragdon1998@gmail.com

Dissertation title:  
Homotopy perturbation method  
Guide: Dr. Ramakanta Meher





## 4<sup>th</sup> year (Class of 2023)



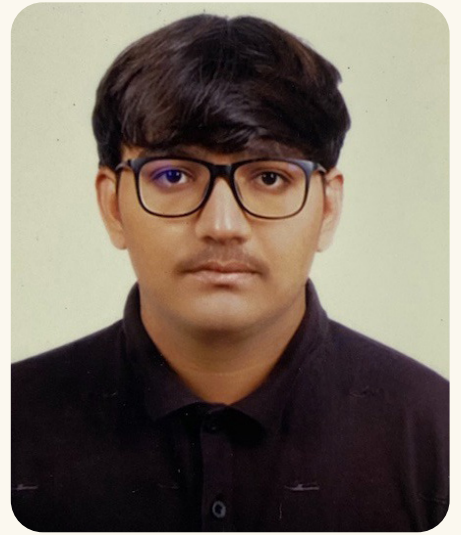
**Aditya Desai**  
I18MA001



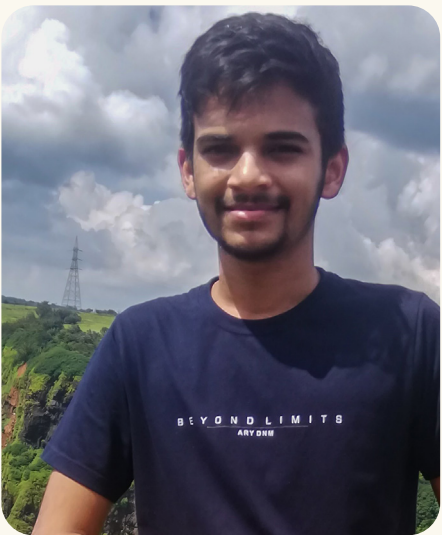
**Vatsal Rajeshkumar Rana**  
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**Dev Arora**  
I18MA003



**Aash Makwana**  
I18MA004



**Niraj Velankar**  
I18MA005



**Prakruti Kalsaria**  
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**Harsh Chauhan**  
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**Patel Mitkumar Dilipkumar**  
I18MA008



**Tulsi Patel**  
I18MA009



**Singh Priya Birendrakumar**  
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**Charmi kamleshbhai surati**  
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**Anusree C. B.**  
I18MA012



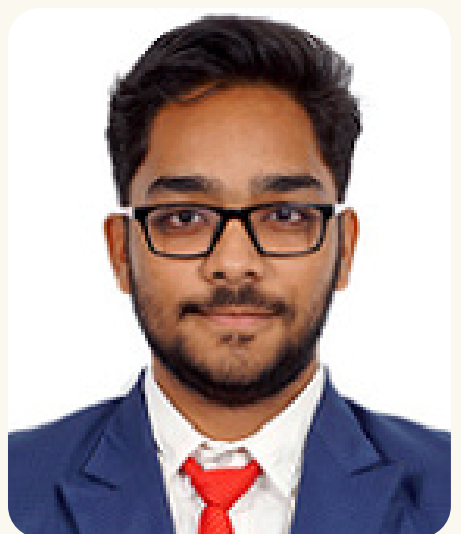
**Vaibhav Gupta**  
I18MA013



**Bollam Sravya**  
I18MA014



**Dhruvi B. Nakrani**  
I18MA015



**Vishal Parmar**  
I18MA016





**Soham Dalasukhbhai Sagar**  
I18MA017



**Chetla Bhaskar**  
I18MA018



**Singarapu Varun**  
I18MA019



**Dhapa Darshan Rameshbhai**  
I18MA020



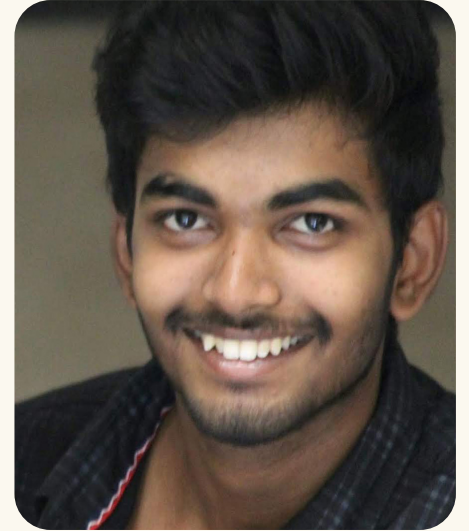
**Chennuru Venkata Sai teja**  
I18MA021



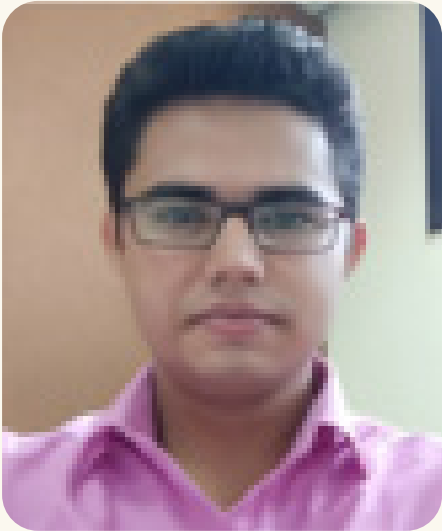
**Kattamuri rohithgupta**  
I18MA022



**Manoj P.**  
I18MA023



**Polamarasetty Desik**  
I18MA024



**Shivam Sharma**  
I18MA025



**Nalumasu Sri Harshitha**  
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**Angidi Vamshi**  
I18MA027



**Gargi Patil**  
I18MA028



**Tarang Chaudhari**  
I18MA029



**Kanak Sethi**  
I18MA031



**Nitish Kumar Dubey**  
I18MA032



**Dhwani Pachchigar**  
I18MA033





**Bhukya Rambabu**  
I18MA034



**Lakshay**  
I18MA035



**Piyush Prajapati**  
I18MA036



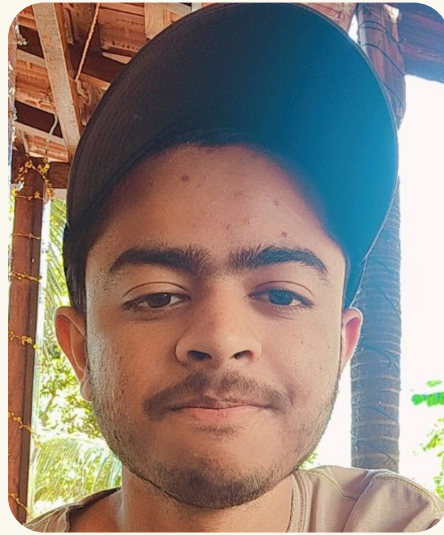
**Jitendra Kumar**  
I18MA037



**Saurav Prakash**  
I18MA038



**Surendra Kumar**  
I18MA039



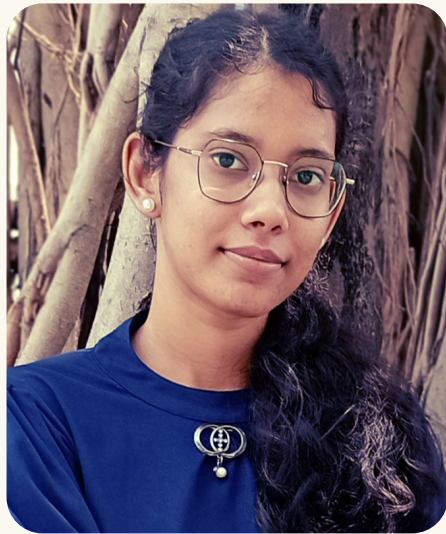
**Rohit Verma**  
I18MA040



**Rakesh Matcha**  
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**Ankit Bhatia**  
I18MA042



**Ayushi Gupta**  
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**Ankit Jaiswal**  
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**Vangari Sri Charan**  
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**Jekki Aswini**  
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**Atul Kumar**  
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**Ankit Birla**  
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**Sanath Thumma**  
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**Mihir khambhati**  
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**Divyanshu**  
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**Roopak Koyya**  
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**Rajesh meena**  
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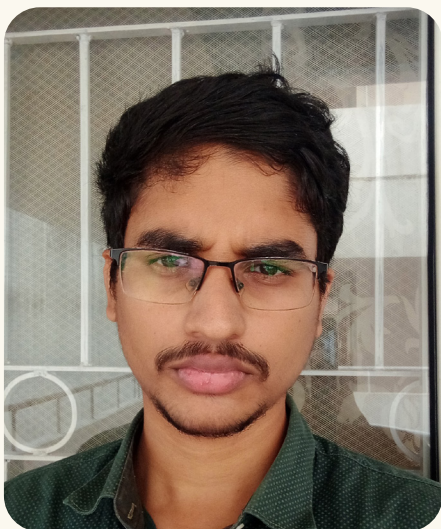


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### 3<sup>rd</sup> year (Class of 2024)



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**Gannamaneni Sai Charan**  
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**Divya**  
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**Mridul Sehgal**  
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**Ayushi Singh**  
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**Sagar Saini**  
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**Kaushik Sanghani**  
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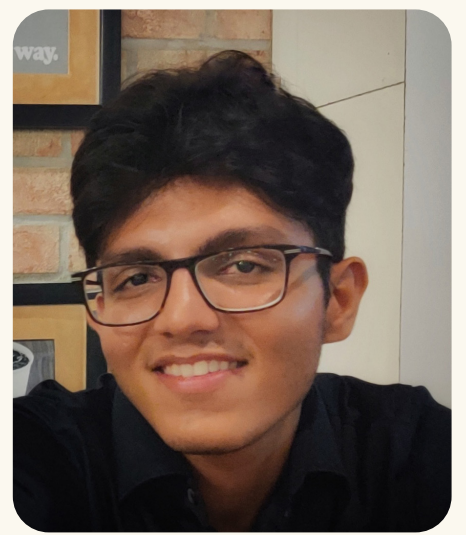
**Sanjeev Meel**  
I19MA014



**Mansi Solanki**  
I19MA015



**Sakshi Hirani**  
I19MA016



**Purvil Rathod**  
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**Deepshikha Rathore**  
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**Gopani Nemil Thakarshibhai**  
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**Gouri Chirag**  
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**Karansinh Makwana**  
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**Khandelwal Dhruv**  
I19MA022



**Dinesh Kumar**  
I19MA023



**Theophilus Gera**  
I19MA024

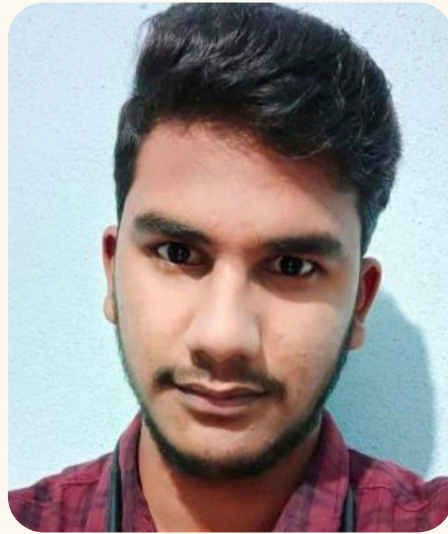


**Deepak Meena**  
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**Yashwardhan Banta**  
I19MA026



**B. Ajay Kumar Reddy**  
I19MA027



**Kuldeep Vaghamshi**  
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**Pavan**  
I19MA030



**Mahesh keshvala**  
I19MA031



**Pandor Axaykumar Vikramsinh**  
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**Patel Zeelvika Vijendrakumar**  
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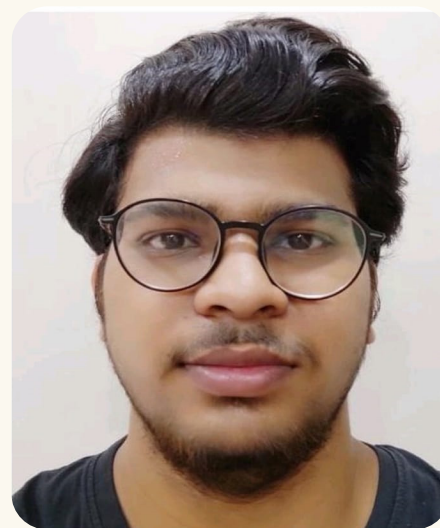
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I19MA038



**Shivam Rajpoot**  
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I19MA044



**Karamthote Dinesh Naik**  
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**Gumma Venkata Surya Vamsi**  
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**Harshwardhan Swami**  
I19MA047



**Bathi Rama Krishna**  
I19MA048



**Vamshi Krishna Marumalla**  
I19MA049



**Bonu Sai Venkata Deepak Naidu**  
I19MA050



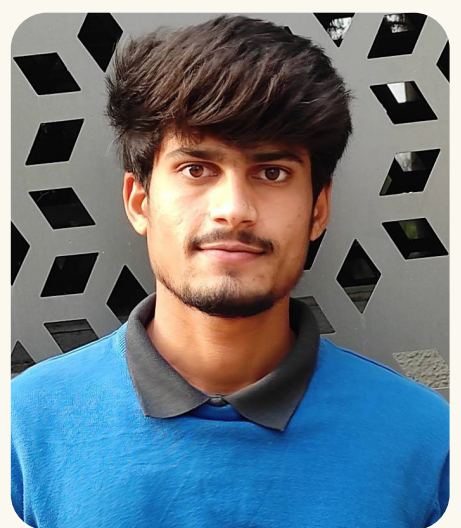
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**Naman Rohilla**  
I19MA052



**Arvind kumar**  
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**Banavath Anil Naik**  
I19MA054

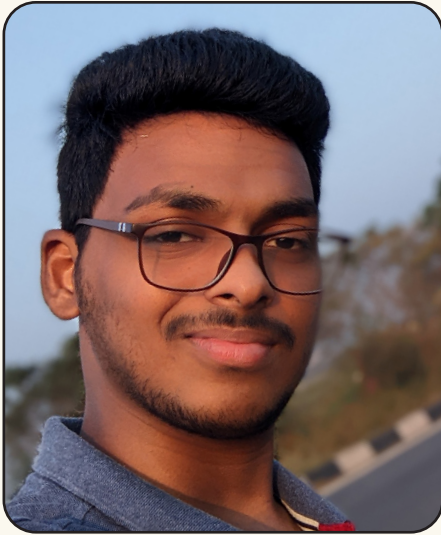


## Mini Project Details of 3<sup>rd</sup> year

Name	Title	Guide
Mridul Sehgal (I19MA006)	Recommendation System	Dr. Sushil Kumar
Vibhav Garg (I19MA034)		
Harshwardhan Swami (I19MA047)		
Vamshi Krishna Marumalla (I19MA049)	“Cost Optimization using Harmony Search Method for M\ M\ 1\ K Retrial Queueing Model under F – Policy with Customer’s Feedback using Fuzzy parameters”	Dr. Sudeep Singh Sanga
Banavath Anil Naik (I19MA054)		
Gannamaneni Sai Charan (I19MA002)		
Theophilus Gera (I19MA024)	A Study on Topological Groups	Dr. Amit Sharma
Sagar Saini (I19MA011)		
Gumma Venkata Surya Vamsi (I19MA046)		
Suryam Gupta (I19MA038)	Credit Card Default Detection by analysing various features using Mathematical and Statistical tools in Python	Dr. Jayesh M. Dhodiya
Kaushik Sanghani (I19MA013)		
Ayushi Singh (I19MA009)		
Chirag (I19MA020)	Soft Set Based Mining of Nucleotide Association in DNA sequence of Coronaviridae, Cancer and Muridae	Dr. Neeru Adalakha
Sanjeev (I19MA014)		
Zeelvika (I19MA033)		
Disha (I19MA001)	Analysis for the methods on the solutions of fractional differential Equation.	Dr. Sourav Gupta
Mansi (I19MA015)		
Dhruv (I19MA022)		
Divya (I19MA005)	Portfolio Management and its Applications	Dr. Indira P. Tripathi
Karansinh Makwana (I19MA021)		
Dinesh Kumar (I19MA023)		
Deepshikha (I19MA018)	Numerical and Analytical Study of Vibration Model	Dr. Ramakant Meher
Mital (I19MA003)		
Nemil (I19MA019)		
Priyanshi Chandra (I19MA012)	Statistical Analysis of Life Expectancy Data	Dr. Raj Kamal Maurya
Sakshi Hirani (I19MA016)		
Yashwardhan Banta (I19MA026)		
Arvind kumar (I19MA053)	A study of some practical aspects in Mechanics	Dr. V. H. Pardhan
Vijay Kumar (I19MA040)		
Sweta saroj (I19MA041)		
Chanchal Kumar Jaiswal (I19MA044)	“Mathematical Modelling of Global Warming: Greenhouse Gases Effect”	Dr. Saroj Yadav
Ajeet Kumar Yadav (I19MA043)		
Pavan (I19MA030)		
B. Rama Krishna (I19MA048)	Study on Runge-Kutta Methods and it’s application	Dr. Twinkle R. Singh
B. S. V. Deepak Naidu (I19MA050)		
Sooryadas K (I19MA051)		
Naman Rohilla (I19MA052)	Some Methods for Stock Price Prediction	Dr. A. K. Shukla
Yogeshkumar Goyal (I19MA037)		
Khasiya Ajay Muskeshbhai (I19MA036)		
D. Abdul Rahiman (I19MA004)	Summability Methods and its Applications	Dr. Shailesh Kumar Srivastava
M. Dhikshith Reddy (I19MA007)		
B. Ajay Kumar Reddy (I19MA027)		
Mukul raj mishra (I19MA035)	Applications of Image Processing using MATLAB	Dr. R. K. Jana
Shivam Rajpoot (I19MA039)		
Vaibhav Maurya (I19MA042)		
Purvil Rathod (I19MA017)	To study some Cryptographic algorithms and their Applications	Dr. Jayesh M. Dhodiya
Deepak Meena (I19MA025)		
Ashwani Kumar Dubey (I19MA010)		
Keshavala Maheshkumar Subhashbhai (I19MA031)	On Optimization of Gas Drainage System in Coal Mines using Graph Theory	Dr. Amit Sharma
Vaghamshi Kuldeep Laljibhai (I19MA029)		
Pandor Axaykumar Vikramsinh (I19MA032)		
Dinesh Naik (I19MA045)		



## 2<sup>nd</sup> year (Class of 2025)



**Lakkakula Guru Preetam**  
I20MA001



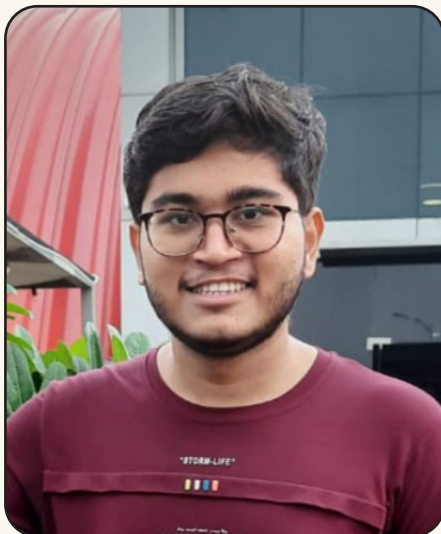
**Rajarapu Mahesh**  
I20MA002



**Shruti N. Shah**  
I20MA003



**Soumyadeep Mandal**  
I20MA004



**Pansuriya Tarang**  
I20MA005



**Abhijeet Bansood**  
I20MA006



**Shaikh Khalid Shammi**  
I20MA008



**Gurram Mahipal**  
I20MA010



**Sanghavi Ishika Sandeep**  
I20MA011



**Yerrapati Venkata Subbaiah**  
I20MA012



**Parmar Harsh Vinod Bhai**  
I20MA013



**Chippakurthi Shruthi**  
I20MA014



**Abhishek Deshmukh**  
I20MA015



**Vankudothu Ramesh**  
I20MA017



**Kunjera Chetan Bhai Daya Bhai**  
I20MA018



**Gaurav Deepak Gupta**  
I20MA019

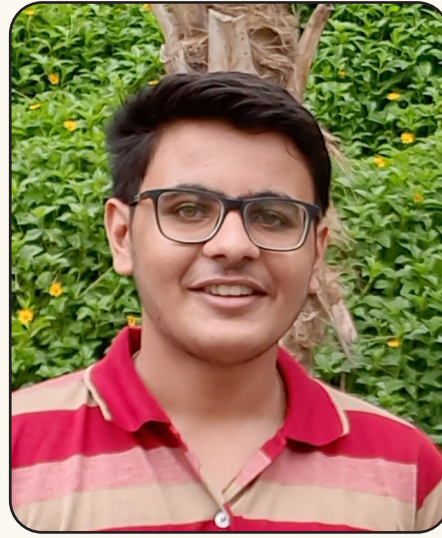




**Dharmik Patel**  
I20MA020



**Sauparnika Nair**  
I20MA021



**Dhanani Jatin Bhai**  
I20MA022



**Siddarth Sreevatsa**  
I20MA024



**Ninad Joshi**  
I20MA025



**Parmar Unnatiben Suresh Bhai**  
I20MA026



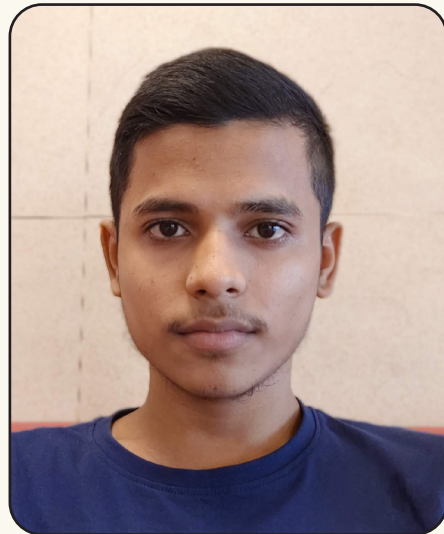
**Adarsh Kumar**  
I20MA027



**Bhatt Fatema**  
I20MA028



**Urmik Bhavsar**  
I20MA029



**Maurya Rahul Kailash**  
I20MA030



**Satyam Singh**  
I20MA031



**Sahina**  
I20MA032



**Vennela Vinay Kumar**  
I20MA033



**Dushyant**  
I20MA034



**Athul Raj K.**  
I20MA035



**Shivkesh Meena**  
I20MA036





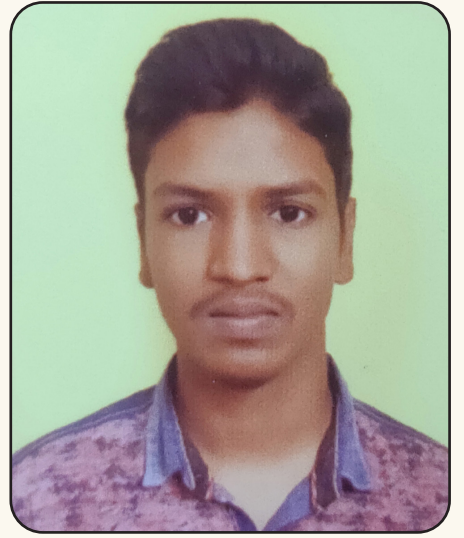
**AMIT HALDER**  
I20MA037



**PODILI MOHAMMED IMRAN**  
I20MA038



**HEMANT KUMAWAT**  
I20MA039



**TIRUMANDYAM SAITEJA**  
I20MA041



**BOMMU CHAKRAVARTHI**  
I20MA042



**BOSMIYA AMAN RAJUBHAI**  
I20MA043



**BOMBALE TARANG KISHOR**  
I20MA044



**RAJ KUMAR SAH**  
I20MA045



**MAHESH KUMAR**  
I20MA046



**CHANDAN SARAF**  
I20MA047



**PAWAN MEENA**  
I20MA048



**MEGHNA R. PATEL**  
I20MA050



**Rohit Rai**  
I20MA051



**Prashant Shrivastava**  
I20MA052



**Mortha Rajesh**  
I20MA054



**Rajveer Singh**  
I20MA056





**Deepak Kriplani**  
I20MA058



**Abdul Mohammad Adam**  
I20MA059

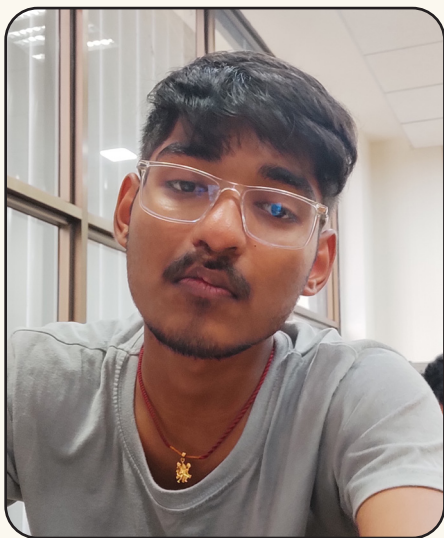


**Deepak Singh**  
I20MA060



**Adarsh Kumar**  
I20MA061

## 1<sup>st</sup> year (Class of 2026)



**Nishant**  
I21MA001



**Vaghasiya Jansi Sureshbhai**  
I21MA002



**Tanay Parikh**  
I21MA003



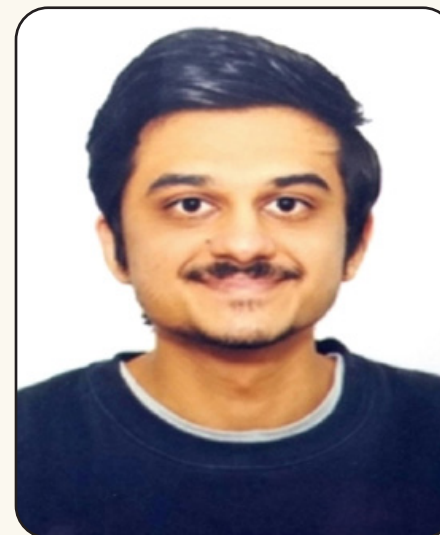
**Shruti Gaurang Upadhyay**  
I21MA004



**Shah Mansi**  
I21MA005



**Panchal Vidhi Vimalkumar**  
I21MA006



**Veer Kamdar**  
I21MA007



**Yash Bansal**  
I21MA008



**Sohan Nayak**  
I21MA009



**Darain Shahedi**  
I21MA010



**Vinay Ramteke**  
I21MA011



**Govind Gupta**  
I21MA012





**Abhishek Bisoyi**  
I21MA013



**Punam Singh**  
I21MA014



**Mohit Raj**  
I21MA015



**Shashwat Rajwade**  
I21MA016



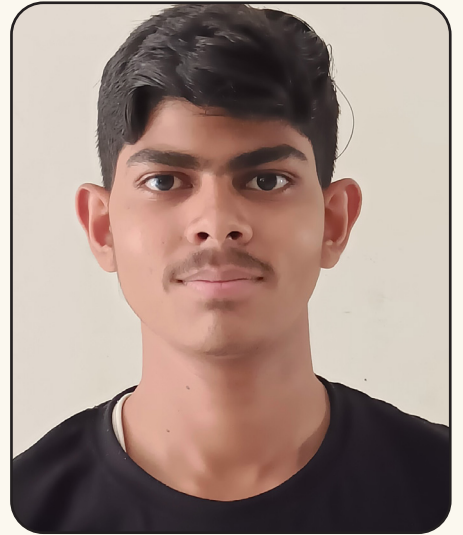
**Parmar Vidhi**  
I21MA017



**Trivedi Tirthkumar**  
I21MA018



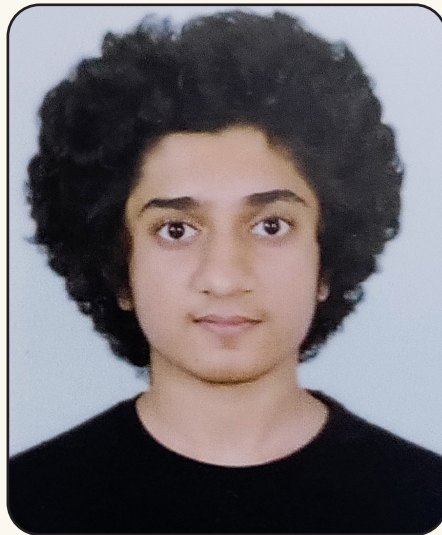
**Devarala Lalith Kumar**  
I21MA019



**Mahajan Lekesh Dilipbhai**  
I21MA020



**Pittaliya Bhavya Rakeshkumar**  
I21MA021



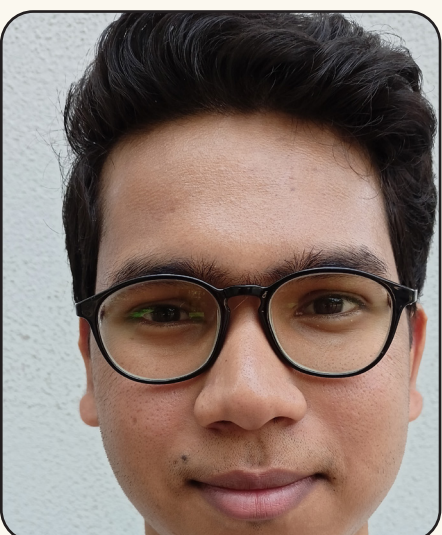
**Shrihan Ashutosh Pande**  
I21MA022



**Kritika Goyal**  
I21MA023



**Adarsh Radheshyam Singh**  
I21MA024



**Chaitanya Verma**  
I21MA025



**Patel Chals Chetankumar**  
I21MA026



**Khushi Toshniwal**  
I21MA027



**Deepak Kumar**  
I21MA028





**Vatsal Pugalia**  
I21MA029



**Verma Divyansh Ravindra**  
I21MA030



**Pachimatla Dinesh Kumar**  
I21MA031



**Rohit Kumar**  
I21MA032



**Garima Batra**  
I21MA034



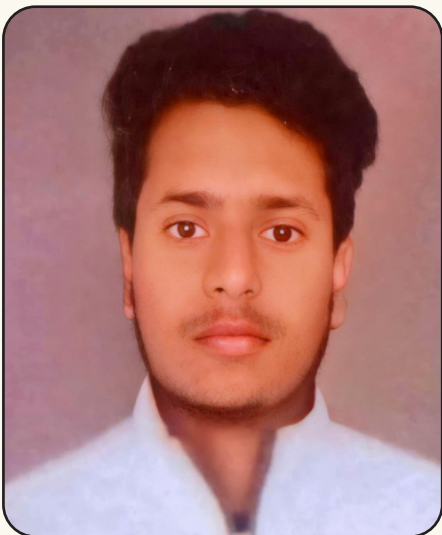
**Dharmarajula Vamsi**  
I21MA035



**Manikanth Gaddam**  
I21MA036



**Gadariya Priya**  
I21MA037



**Kanhai Gupta**  
I21MA038



**Saurav Suresh Tembhurkar**  
I21MA039



**Patel Nirdeshkumar M.**  
I21MA040



**Lunasiya Kishan Pravinbhai**  
I21MA041



**Hriteek Roushan**  
I21MA042



**Nai Jigarkumar**  
I21MA043



**Bhawesh Jain**  
I21MA044



**Rahul Shah**  
I21MA045





**Aman Petwal**  
I21MA046



**Padia Varun Jagdishbhai**  
I21MA048



**Raval Kartikkumar Harichandra**  
I21MA049



**Akshat Kumar**  
I21MA050



**Sanjyot Signapurkar**  
I21MA051



**Sukhda Baruna**  
I21MA052



**Abhishek Kumar**  
I21MA053



**Aslam Ansari**  
I21MA054



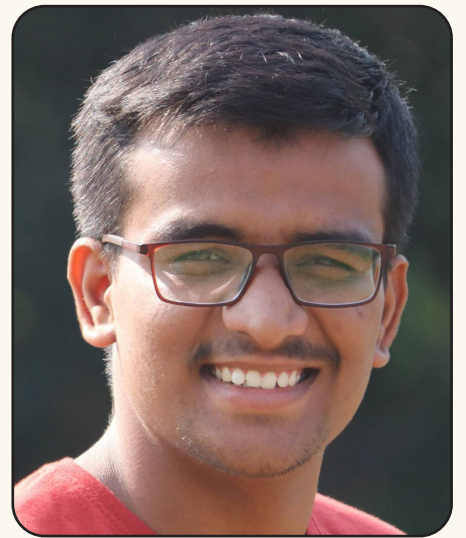
**Shalini D. Pandey**  
I21MA055



**Maddineni Poornachandra Rao**  
I21MA056



**Thutan Tsomu**  
I21MA058



**Pathlavath Pavan Naayak**  
I21MA059



**Polimetla Sanhith Raju**  
I21MA060



**Vishal Madrecha**  
I21MA061



**Lalit Agrawal**  
I21MA062



**Helly**  
I21MA063





**Ahir Rahulbhai Asyabhai**  
I21MA064



**Pathak Pushya Chandraprakash**  
I21MA065



**Pipaliya Rajan**  
I21MA066



# Alumni

## Sarthak Gupta



✉ Sarthakgupta1000@gmail.com

He is currently a M2 ALGANT Masters student at Université de Bordeaux, France. He has finished his first year of masters at Leiden University, Netherlands. He is also the recipient of the Charpak Master's scholarship program 2021 for study in France. He got selected for ALGANT (Algebra, Geometry and Number Theory) master's program and was awarded a 75% tuition fee waiver. He even attended Park City Mathematics Institute (PCMI) 2021- Graduate Summer School (online) organized by Institute for Advanced Study (IAS), Princeton, USA. He went to the University of Gottingen to work with Prof. Preda Mihailescu for his master thesis in 2020.

### Message to the students of SVNIT

The only way to reach your goals is to work hard and stay away from people you dislike so you can concentrate on your strengths.

### Motivating words for the students of SVNIT

Explore your field of interest through various projects and internship programs rather than relying too heavily on the institute's curriculum. Feel free to reach out to professors around the world as they are incredibly helpful and encouraging.

## Aman Bakshi

✉ amanbakshi4@gmail.com



At the moment, he is working remotely for a London-based startup as a Software Developer.

### Message to the students of SVNIT

"College is not just about learning what is in the curriculum; it is about your personal development as well. You might forget the subjects that you learn but skills like how you learn things, how to interact with people etc. Will always stay with you. My only advice would be to try out all sorts of different things (taking part in different clubs, learning new things which are even outside of your curriculum if you want to) and not limit yourself to any one field!

**And always feel free to reach out to me, your teachers or any of your seniors if you ever need any help."**

## Himani Maheshbhai Patel

She is currently working in V.T. Choksi Sarva-janik College of Education, Surat.



✉ hirenpambhar95@gmail.com

## Hiren Kalubhai Pambhar



He is currently working in Vidyamandir Classes Pvt Ltd.

✉ hirenpambhar95@gmail.com



## Praveen Kumar



✉ praveensvnit1@gmail.com

Currently, he works as an Artificial Intelligence Engineer at an AI-based company with many clients in India and abroad.

### Message to the students of SVNIT

You should not chase your CGPA; you should chase your dreams, set a goal, and find a way to accomplish it. Focus on the basics that will help you and enjoy college life; you will never get back this time.

### Motivating words for the students of SVNIT

Fear of failure is the only thing that makes a dream impossible.

## Pankaj Kumar



✉ nitianpankaj@gmail.com

He is currently working in Furlenco. He is also the founder of VillMate (an early stage startup aimed at developing rural India).

### Message to the students of SVNIT

One should know by 2nd year whether he is going for PhD post graduation or will be sitting for placement, please don't keep in mind both because if you do, then might not be able to get a Ph.D. In the end, you will end up being a minimum in both fields, and nowadays no one gives importance to a person who is a minimum.

### Motivating words for the students of SVNIT

Get creative and enjoy college life to the fullest, don't worry about jobs, there are many opportunities for creative minds out there.

## Harsh Jariwala



✉ harshjariwala60@gmail.com

He is currently working in Aakash Education Private Limited.

### Message to the students of SVNIT

Don't give up, the moment you give up is the moment you lose.

## Raghav Choudhary



✉ rchoudhary7737@gmail.com

He is currently working as Probationary Officer in Canara Bank.

### Motivating words for the students of SVNIT

Even if you feel out of place among your peers, everything will work out eventually. Keeping your strengths in mind will certainly help you to succeed.

# Aniruddha Deshmukh

✉ aniruddha480@gmail.com



He is currently pursuing his Ph.D. at Indian Institute of Technology Indore.

## Message to the students of SVNIT

As a student of Integrated MSc, you will spend five years on campus, you can expect many new and pleasant experiences, as well as many more opportunities. An institute of national importance offers a variety of benefits, so make the most of them. With the implementation of the new education policy, the opportunities will also increase since interdisciplinary studies will also be encouraged, as opposed to what was the case a few years ago. This does not mean, however, that only interdisciplinary studies should be prioritized. Most of you will be inclined to some field of mathematics during your first two or three years, so I encourage you to find your area of interest. Explore as much as possible, talk to your seniors, visit various other institutes (through some programmes) to see what's going on there. Once you have chosen your area of interest, start developing the necessary prerequisites. You may find it difficult in the initial years, but building prerequisites does pay off later. With this, I wish all of you “all the best and a pleasant stay at the campus.”

## Motivating words for the students of SVNIT

It is both exciting and apprehensive transitioning to higher education. Excited for something new and moving forward in life, and concerned about the uncertainties that life may bring. It's completely normal to feel this way. It is also possible that the subject you have chosen may seem overwhelming to you at first. When situations like these arise, submission is the wisest course of action. Accept things as they are, but don't forget to ask questions. The second most important thing is to keep asking questions, particularly in mathematics. It is through asking questions that you will be able to find out what you need to know.





## माँ

डॉ. जयेश ऐम. ढोडिया

माँ तो माँ होती है।  
हर दूःख की दवा होती है।  
प्रेरणा की मूरत होती है।  
सबसे खूबसूरत होती है।

माँ तो माँ होती है।

हर घर की शान होती है।  
परिवार की जान होती है।  
घर की कमान होती है।  
अच्छी इंसान होती है।

माँ तो माँ होती है।

सबकी सांस होती है।  
जीने का ऐहसास होती है।  
मिठासा आभास होती है।  
अच्छा उपन्यास होती है।

माँ तो माँ होती है।

सुनाने के लिए आसान होती है।  
बचाने के लिए पहलवान होती है।  
आशा का किरन होती है।  
बच्चों का जीवन होती है।

माँ तो माँ होती है।

परिवारकी दोर होती है।  
कभीना कमज़ोर होती है।  
भुलाना शके ऐसी तसवीर होती है।  
पत्थर पे लिखी लकीर होती है।

माँ तो माँ होती है।

उनकी ममता ना जोल होती है।  
दुनिया में वो अनमोल होती है।  
वो जो करती है, जैसे करती हैं करने दो।  
वो माँ है उसे माँ ही रहने दो।

माँ तो माँ होती है।

## જીવનનું સર્કલ

-ડૉ. જયેશ એમ. ઢોડિયા

જીવનનું સર્કલ છે ભાઈ,  
જીવન જીવતા રહેવાનું.

નંબરો નથી એક સમાન, થોડું રિયલ થોડું ફઝી રહેવાનું,  
અન્સર્ટિનિટીની દુનિયામાં સરટેન જીવતા રહેવાનું.

રિયલની કોમ્પ્લેક્સ દુનિયામાં એનાલિસિસ કરતા રહેવાનું,  
સમીકરણો સાથે તાલ મિલાવી, આનંદથી જીવતા રહેવાનું.

નવી સિક્વેન્સો અને સિરીઝો મળશે, સરવાળો કરતા રહેવાનું,  
કનવરજન્સની ચિંતા છોડી સ્ટેબલ બની રહેવાનું.

નવા નવા મોડેલ બનાવી, સમસ્યાઓ ઉકેલતા રહેવાનું,  
મલ્ટિઓબ્જેક્ટીવની દુનિયામાં યોગ્ય ઓબ્જેક્ટિવો સાથે રહેવાનું.

જાતજાતના ટ્રાન્સફોર્મો મળશે, ટ્રાન્સફોર્મ થતા રહેવાનું,  
પોતાનાજ જીવનનો ગ્રાફ દોરી આગળ વધતા રહેવાનું.

પોલીગોનીક ભવાઈઓથી દૂર રહી, પ્રોગ્રેસ કરતાં રહેવાનું,  
સારા સંભારણા યાદ રાખી નિર્ભયતાથી કામ કરતા રહેવાનું.

ઇમેજનું એનાલિસિસ કરી ઇમેજ સુધારતાં રહેવાનું,  
ડેટાનું માઇનિંગ કરી નોલેજ સાથે લોજીક વધારતા રહેવાનું.

આછા પાતળા રિલેશનોનું પ્રિડિક્શન કરી, હિસાબ કરતા રહેવાનું,  
ક્યાં ખબર છે? ક્યારે ટિકિટ કપાસે એટલે ટાઈમ સાથે નોર્મલ રહેવાનું.

જીવનનું સર્કલ છે ભાઈ,  
જીવન જીવતા રહેવાનું.



नारी

निशा पोखरना

नारी लक्ष्मी है, कोई नौकर या दास नहीं  
है देवी का रूप, कोई अभिशाप नहीं

ना समझो इसे पैरों की धूल, ये चरणामृत है  
ना कहो इसे अबला, ये शक्ति साक्षात् है  
इसकी तुलना के योग्य आप नहीं  
है देवी का रूप, कोई अभिशाप नहीं

नारी माँ है, बनी सखा भार्या तो कभी भगिनी है  
कभी ममता का सागर तो कभी रणचण्डी बनी है  
इसके अपमान से बड़ा कोई पाप नहीं  
है देवी का रूप, कोई अभिशाप नहीं

नारी लक्ष्मी है, कोई नौकर या दास नहीं  
है देवी का रूप, कोई अभिशाप नहीं  
आज ही से नारी का सम्मान करो  
इस समाज में बराबरी के इंतेजाम करो

इससे बड़ा कोई पश्चाताप नहीं  
है देवी का रूप, कोई अभिशाप नहीं

अकेला

निशा पोखरना

उलझी उधड़ी जाने किस हाल जिंदगी,  
बेज़ार ख़याल अनिश्चितता फिलहाल  
कभी स्वतंत्र स्वछंद बालपन सा मन  
अगले ही पल पसरा यहाँ सूनापन

बड़े अरमान कभी सपनों की ऊँची उड़ाने  
अनमना सा कभी थका सा मन क्यूँ ना जाने

क्षण भर मुस्काये, पल में दुनिया में घुल जाये  
बेचारा सा मन फिर क्यूँ खुद को अकेला पाये

रोज़ थोड़ा बदल रही हूँ कभी खुद में खो रही हूँ  
अतीत के छूटे गलियारे भविष्य के सुनहरे उजियारे

जानती हूँ समस्या कोशिशें भी कर रही हज़ार  
असफल सा रहा हर प्रयास हारी हूँ मैं हर बार

पर अब ठान लिया है कर लिया है इंतेजाम  
अब ना रहेगा कोई अकेलेपन से परेशान  
बस करना होगा सबको इतना सा काम  
दिलाना होगा भरोसा जब दिखे लाचार इंसान  
"तुम अकेले नहीं हो!"



" हे मनुष्य तू कुछ भी बन , पर कायर मत बन "

आदर्श

हे मनुष्य तू कुछ भी बन , पर कायर मत बन ।  
रूकावटे राह पड़े , तुझे आता नहीं है रुकना ।  
आंधी हर मोड़ खड़े , तुझे आता नहीं है झुकना ॥  
मंजिल की ओर चल दिया तू , अपने सिर बांध कर कफन ।  
हे मनुष्य तू कुछ भी बन , पर कायर मत बन ॥

समय बिलकुल तेरे साथ है , उसके साथ तू चल ।  
इक बार छूट गया साथ , तो वापिस नही आयेंगे ये पल ॥  
देख इधर तू अकेला , उधर शत्रुओं से भरा पड़ा है रण ।  
हे मनुष्य तू कुछ भी बन , पर कायर मत बन ॥

मां-पिता का आशीर्वाद , ईश्वर की तुझपर नज़र है ।  
जब तक तुझमें है हौंसला , तब तक तेरा ये सफ़र है ॥  
मंजिल पानी है! , तूने ठान ली है अपने मन ।  
हे मनुष्य तू कुछ भी बन , पर कायर मत बन ॥



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## Non-Teaching Staff





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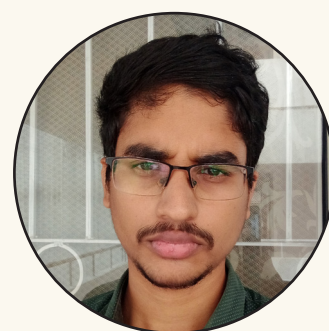
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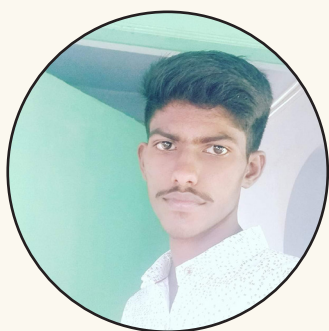
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Gera Theophilus





Computer lab





**"We will always have STEM with us. Some things will drop out of the public eye and go away, but there will always be science, engineering, and technology. And there will always, always be mathematics."**

**-Katherine Johnson**



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