

# Faculty Profile: Name of the Faculty Department of Faculty Member Ram Lal Anand College, University of Delhi



Title	Mr.	First Name	Basant Kumar	Last Name	Mishra	Photograph	
Designation		Assistant Professor					
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	Mobile	+91-98	10331830				
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Institut	ional Web page						
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Researc	ch Gate	basantmishra.maths@rla.du.ac.in					
ORCID	ID	0009-0004-5760-8356					
Scopus	ID						
Researc	cher ID						
Vidwan	ı ID	566943					
Educati	ional Qualificatio	ns					
Degree			Insti	itution		Year	
PhD		University of Delhi Pursuing			Pursuing		
MPhil VMU, Salem 2008			2008				
MSc Uni			University of Delhi 200			2002	
Career	Profile						
Organization			Designation		Duration		
Ram Lal Anand College, University of Delhi			Assistant Profe	essor	July, 200.	5 - till date	

## **Administrative Assignments**

- **❖** Teacher-in-charge of Department of Mathematics, Ram Lal Anand College for the session 2017-18, 2018-19, 2019-20, 2022-23 (Nov-March), 2023-24
- **❖** Co-Convener, Time-table committee for the session 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22
- Member, IKS, RLA Center
- ❖ Member, Criterion-V, NAAC committee
- ❖ Member, NIRF Committee for the session 2023-24
- ♦ Member of Examination Committee, which is responsible to conduct semester examination/ SOL examinations for the session 2013-14, 2014-15, 2015-16, 2016-17.
- ❖ Member, Discipline committee from 2010-2015
- ♦ Member, Placement Cell of RLA for the session 2010-11, 2011-12, 2012-13, 2013-14.
- Member, Student's Union and Advisory committee for the session 2015-2016, 2016-17, and 2023-24
- ♦ Member, Yoga and Meditation committee for the session 2017-18, 2018-19, 2019-20.
- ♦ Member, North-East society for the session 2021-22, 2022-23, 2023-24, 2024-25
- ❖ Member, Alumni Committee for the session 2018-19.
- Member, BA(Prog.) Committee for the session 2015-16, 2016-17, 2016-17, 2016-17, 2016-17.
- ♦ Member of Library Committee for the session 2017-18, 2018-19, 2019-20, 2023-24

## **Areas of Interest / Specialization**

Numerical Analysis (Finite Difference Method), Mathematical Modelling, Differential Equation, Dynamical System and Space Dynamics, Computational Method of Partial Differential Equation, Operational Research and Vedic Mathematics

## **Subjects Taught**

- 1. Calculus
- 2. Multivariate Calculus
- 3. Probability and Statistics
- 4. Numerical Analysis
- 5. Operational Research
- 6. Abstract Algebra and Linear Algebra
- 7. Differential Equations
- 8. Partial Differential Equation
- 9. Discrete Mathematics
- 10. Skill Enhancement Course: Latex & HTML, Computer Algebra System
- 11. Vedic Mathematics

## **Research Guidance**

- Supervised and Guide ten students in Innovation Project RLA-208 entitled: Connecting digital Word to the Physical world Through social Media, (2013-2014) as Principal Investigator of the Project (developed App "SUDHAR")
- Supervised and Guide ten students in Innovation Project RLA-301 entitled: AUTOMATIC GREEN CORRIDOR USING SENSORS TO SAVE HUMAN LIFE IN DELHI, (2015-2016) as Principal Investigator of the Project (developed Transmitter and Receiver "CRISS-CROSS" for emergency Vehicles using Radio sensors)

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**Patents:** 

Papers:

S.No.	Author	Title	Publication Type	ISSN/ISBN No.	Publishers/ Country & Year
1	Mishra, B.K, Pandey, P.K	The approximate solution of the Third order boundary value problem with an integral boundary condition, using Hybrid Finite difference Method.	Research Paper	1454-5101 Vol-24, 235-244	Applied Sciences 2022 (Romania)
2	Basant K Mishra, R Kumar	A study on impact of social media on e-commerce in India	Research Article		Journal by MAC (2017)
3	Basant Kumar Mishra	COVID-19 Pandemic: Challenges, Impact and Strategies in the Education Sector in India"	Research Article		Communicated
4	Basant Kumar Mishra	Nutrition Schemes and Learning Outcomes for Schedule Tribes Population	Research Article		NITI AAyog, Govt, of India
		3			

of India: Evidence from

NDAP

# Chapters in books and e-chapters (Published)

1	Basant Kumar Mishra (Co-Author, Contributor)	Finite Mathematics with Application in the Management, Natural and Social Sciences	Chapters in book	978-1-292 - 05863-4	Pearson Education Limited (Global Edition) (2013)
2	Basant Kumar Mishra (Co-Author)	Discrete Mathematics	e~Book	978-93- 85611-38-4	ILLL, University of Delhi (2012)
3	Basant Kumar Mishra (Co-Author)	Discrete Mathematics	e~Quiz	2349-154X	ILLL, University of Delhi (2012)

# **Conference Organization/ Presentations**

## **Events Organized:**

## Conference/Workshop/seminar/Webinar Organized

Sr. No.	Dates	Торіс	National	Source of funding/ Organized by
1.	09-01-2016	Workshop on Utility of Sensor Network in Traffic Control with Onyx Electricals	National	Innovation Project, University of Delhi
2	02-02-2014	Workshop on <b>Digital Media and App development</b>	National	Innovation Project, University of Delhi

3	29-02-2020	Organized National Workshop on <b>Dynamical System</b> at <b>IIT Mandi</b>	National	SBS, IIT Mandi in collaboration with RLA(DU)
4	09-11-2022	Workshop on <b>Cryptography: A</b> recent trend in <b>Mathematics</b> , by Prof. R.K. Sharma, <b>IIT Delhi</b>	National	Department of Mathematics, RLAC
5	19-03-2023	Webinar on <b>Application of Number Theory</b> , by Prof. Srinivas Kotyada, <b>IMSC</b> , <b>Chennai</b>	National	Department of Mathematics, RLAC
6	08-01-2022	Webinar on Mathematics Behind Investment Decision Making, by Dr. Ruchika Sehgal, Assistant Professor in the Department of Mathematics & Computing at IIT(ISM) Dhanbad.	National	Department of Mathematics, RLAC
7	19-06-2017 to 29-06-2017	Workshop on Yoga & Meditation on International Yoga Day	National	Ram Lal Anand College, University of Delhi
8	24-07-2021	Webinar on Introduction to Data Science by Industry expert Mr. Nikhil Chauhan.	National	Department of Mathematics, RLAC
9	28-11-2023	Lecture/Seminar on Role of Mathematics to inculcate Scientific Thinking by Prof. Pankaj Sharma, Department of Mathematics, Pondicherry University	National	Department of Mathematics, RLAC
10	06-03-2022	Webinar on <b>Some Concepts from Linear Algebra</b> Prof. Aparna Mehra, Department of Mathematics, <b>IIT Delhi</b>	National	Department of Mathematics, RLAC
11	29-02-2024	Lecture/Seminar on Journey through Dynamical System: Bifurcation, Chaos and Evolutionary Models by Prof. Sachin Kumar, Department of Mathematics, University of Delhi	National	Department of Mathematics, RLAC

## Invited Talks, Resource person, invited Chairperson, Conference Paper presentations (Oral):

- 1. Invited Speaker in the Annual Conference of Indian Society for Mathematical Modelling and Computer Simulation (ISMMACS) and International Conference on Differential Equations: Theory, Computation and Applications and delivered an invited talk titled "NUMERICAL SOLUTION OF THIRD-ORDER BOUNDARY VALUE PROBLEM USING FOURTH-ORDER CONVERGENT FINITE DIFFERENCE METHOD" organised by the Department of Mathematics, South Asian University, New Delhi, during 29 November 1 December, 2024.
- 2. Resource Person for the Outreach program on *Vedic Mathematics at Government Inter College, Deenapani, Almora Uttarakhand* on 13-11-2024.
- 3. Resource Person for the Outreach program on Vedic Mathematics at Krishi Inter College, Vijaypur, Patiya, Almora Uttarakhand on 14-11-2024.
- 4. Resource Person for the Outreach program on *Vedic Mathematics at Government Inter College, Kamleshwar, Almora Uttarakhand* on 13-11-2024.
- 5. Resource Person for the workshop on *Chaos Theory and Dynamical System* organized by the School of basic Science, IIT Mandi in association with Ram Lal Anand College, University of Delhi on 29-02-2020.

#### **Presentations: International**

- 1. Presented a research article titled "FOURTH-ORDER CONVERGENT NUMERICAL SOLUTION OF THIRD-ORDER BOUNDARY VALUE PROBLEM USING HYBRID FINITE DIFFERENCE METHOD" in the International Conference on Recent trend in Mathematics (ICRTM-2025) organised by the Department of Mathematics, Hansraj College University of Delhi, from 07-08 February 2025 in Delhi, India.
- 2. Presented a research article titled "NUMERICAL SOLUTION OF THIRD-ORDER BOUNDARY VALUE PROBLEM USING FOURTH-ORDER CONVERGENT FINITE DIFFERENCE METHOD" in the Annual Conference of ISMMACS and International Conference on Differential Equations: Theory, Computation and Applications organised by the Department of Mathematics, South Asian University, New Delhi, during 29 November 1 December, 2024.

## **Presentations: National**

1. Presented a research article titled "A Study on Impact of Social media on e-commerce in India" in the national Conference on Innovation and Challenges in Indian Economy held on April 24, 2017 organised by Department of Commerce, Maharaja Agrasen College, University of Delhi.

## **Internships Conducted:**

➤ One-day workshop on *Basic IT Tools & Document Preparation* for Non-teaching Staff of Ram Lal Anand College on 27-02-2024

# **Research Projects (Major Grants/Research Collaboration)**

Sr.	Name of Faculty	Title	Major	Period years	Grant	Name of the
No			/ minor	& Months	received	funding
					(INR)	agency
1	Mr. Basant	Connecting Digital	Major	2013-14	3,00,000	University
	Kumar Mishra	World To The	1110501	(12 Months)	2,00,000	of Delhi
		Physical World				
		Through Social				
		Media				
2	Mr. Basant	Automatic Green	Major	2015-16	5,00,000	University
	Kumar Mishra	Corridor using		(12 Months)		of Delhi
		Sensors to save				
		human life in Delhi				
		8,00,00	00 (8 Lakh)			

## **Awards and Distinctions**

S.No	Award Type	Award Name	Awarding Institution or Body	Date
1	TEACHING AWARD	TEACHING EXCELLANCE AWARD	University of Delhi	1st MAY, 2015
2	INNOVATION AWARD	Certificate of appreciation for <b>BEST INNOVATIVE</b> <b>IDEA</b> for Innovation Project RLA-208	University of Delhi	February, 20-22, 2015
3.	INNOVATION RESEARCH AWARD	Selected for best Poster Presentation of Innovation Research RLA-301	University of Delhi	November, 19, 2016
4.	CSIR-UGC NET	CSIR-UGC NET 7	CSIR	December, 2008

## (Mathematical Science)

### **Association With Professional Bodies**

- Mathematical Society of India
- > International Mathematical Association

## **Other Activities**

#### Research

## **Certificate Course Organized**

- Porganized Certificate Course of 40 hours on Python for data Science for students, Research Scholar and teachers from 24<sup>th</sup> September, 2022 to 12<sup>th</sup> November, 2022 by Industry expert Mr. Nikhil Chauhan & Dr. Anisha Khaitan.
- > Organized **The Skill Enhancement Certificate Course of 40 hours on the topic "Latex: The Mathematical Typesetting Software**" from 9th January, 2021 to 21st February 2021 by Dr. Kuldip Singh Patel, Department of Mathematics, IIIT, Naya Raipur, Chhattisgarh.

## **Participations:**

## Conference/Workshop/seminar/Webinar attended

- ➤ Refresher course (Two-weeks) in Mathematical science organized by the center for Development in Higher Education (CPDHE), UGC-MMTTC, University of Delhi from September 18, October 1, 2024.
- ➤ Faculty Induction Program organized by TLC, Ramanujan College under the aegis of Pandit Madan Mohan Malavia National Mission on Teachers and teaching (PMMMNMTT), MOE, Govt. of India from July 22, 2023 to August 20, 2023
- Two weeks Refresher Course in Mathematics: Python Programming & Vedic Mathematics organized by Teaching Learning Center(PMMMNMTT), MOE, Govt. of India & Department of Mathematics, Ramanujan College, university of Delhi in collaboration with JSS Science and Technology University, Mysuru from July 13, 2023 to July 26, 2023
- > Three day workshops for educators on Vedic Mathematics from April 11, 2023 to April 13, 2023 organized by VAC committee, university of Delhi in collaboration with KMC,

- University of Delhi
- ➤ Two weeks FDP on NEP 2020 Orientation and Sensitization Program organized by CPDHE, University of Delhi from Feb-1, 2024 to Feb 9, 2024.
- ➤ One week Faculty Development Programme (FDP) on "Moodle Learning Management System" organized by Atal Bihari Vajpayee University, Bilaspur in association with IIT Bombay Spoken Tutorial (An Initiative of National Mission on Education through ICT, MHRD, Govt. of India) from 12 May, 2020 to 17 May, 2020.
- ➤ Twelve day FDP on SCILAB(Scientific Laboratories) from 22<sup>nd</sup> May to 2<sup>nd</sup> June, 2020 organised by IIT Mumbai through spoken tutorials, Remote Learning (An Initiative of National Mission on Education Through ICT, MHRD, Govt. of India)
- ➤ One Week Faculty Development Program on "<u>Recent Trends in Applications of Mathematics</u> (RTAM)" organized by Department of Freshman Engineering, Chadalawada Ramanamma Engineering College (Autonomous), Tirupati from 12th 17<sup>th</sup> July 2021.
- ➤ International FDP on <u>World of Cyber Crimes and Future Robotics of Industry: COBOTICS</u>, organized by Department of Electronics and Communication RCIT, Shirpur on 11<sup>th</sup> -12<sup>th</sup> July, 2020.
- ➤ One week Online International Faculty Development Programme on "<u>Advanced Materials & Mathematical Tools</u>" from 10th July 2020 to 14th July 2020, organized by Engineering Department of GWCET, Nagpur.
- ➤ One Week Online FDP on <u>Mathematical Modeling & Numerical Techniques 2020</u> held from 27/7/2020 to 31/7/2020 by the Faculty of Mathematics, Department of Mathematics and Humanities, Kakatiya Institute of Technology and Science, Warangal.
- ➤ National level One Week online Faculty Development Programme on "<u>MATHEMATICS</u>: <u>A Practical Approach in Science and Technology</u>" Organised by Department of Basic Science and Humanities from 28th June to 3rd July 2020
- Attended webinar on "NAAC: Systematic Data Organization and Presentation", organized by IQAC, Vidyalankar Institute of Technology, Mumbai on 16-05-2020.
- ➤ Participated in webinar titled *Computer vision for AI application* organized by Department of Electronics and communication engineering, Anna University on 26-05-2020
- Attended webinar on *Understanding The Corona Virus: Some Good News* organized by Kalindi College, Delhi university on 20-05-2020
- ➤ Participated in the webinar on the topic "Current Trends in Information Technology" organized by Department of Computer Science in Collaboration with Department of Mathematics, Bharati College, University of Delhi on 15th May 2020.
- ➤ National Workshop on Application of <u>Mathematica Type Setting Software: LaTex</u> organized by MHRD & Guru Angad dev Teaching Learning Centre on 26th March, 2018.
- ➤ National Workshop on Application of <u>Mathematica: A Scientific and Mathematical Tool</u> organized by MHRD & Guru Angad dev Teaching Learning Centre in collaboration with Wolfram Mathematica INC. on 9<sup>th</sup> March 2018.
- National Conference on Innovation & Challenges in Indian Economy organized by Maharaja Agrasen College, University of Delhi on 24-04-2017.

- ➤ Workshop on *Foundation Courses (Mathematics) Under UGC-ASC program* organized by CPDHE, University of Delhi from 12-06-2013 to 12-06 2013.
- ➤ National Webinar on 'Financial Mathematics: Pedagogy and Career Perspectives' organised by the Department of Mathematics, Lady Shri Ram College For Women from July 27 to July 31, 2020.
- ➤ Workshop on <u>Mathematics in Virtual Learning Method under Virtual Learning program</u> organized by CPDHE, University of Delhi from 12-06-2013 to 12-06 2013
- ➤ Trained in <u>Statistical Software SPSS</u> by Delhi University Computer Centre (DUCC) from 05-08-2013 to 09-05-2013.
- Attended three day national level <u>workshop on MATLAB for beginners</u> organized by the Department of Mathematics, SAASC, Trichi from 28.07.2021 to 30.07.2021.

## International

#### National

## SOFTWARE KNOWLEDGE/COMPUTER PROFICIENCY

- > SPSS Certified from DUCC [Statistical Software]
- > MATHEMATICA, Mathematical software certified
- > MATLAB, Mathematical software
- > TORA, Mathematical Software for Operational Research
- ➤ HNC Diploma in computer software from NIIT.
- Friendly with MS-DOS, WINDOWS X, MS-OFFICE. MS-Excel.

**Signature of Faculty Member**