

**Faculty Profile
2018-2023**

1. Personal Details:

Name: SAMBHU CHARAN BARMAN

Qualification: M.Sc., Ph.D.

Designation: Assistant Professor

Department: Mathematics

Email id: barman.sambhu@gmail.com

Teaching Experience [substantive post only]: 8 yrs. 4 months

2. Previous work places: Government General Degree College, Singur (27.02.2015 - 18.06.2015)

3. Academic Credentials: 2002 B.Sc. (Hons) (1st class) Bajkul Milani Mahavidyalaya, 2004 M. Sc. (1st Class) Vidyasagar University (specialization in Operation Research), 2008 B.Ed. (Panskura Banamali College)

2013 Ph.D. on Applied Mathematics (Vidyasagar University) under the supervisor of Prof. Madhumangal Pal & Sukumar Mondal

4. Courses Taught: B.Sc., B.Sc. (CBCS)

5. Administrative Experience (if any): NO

6. Specialization and Research Interests: Operation Research; Graphs Theory

7. Publications: (Research article, General article, Books, Books chapter etc.)

Sl No._ Title of Publication_ Level (international/national/state)_Publishing Agency or Journal Name_ Year, Volume, Page_ ISBN/ISSN/DOI

Research Article:

Sl. No	Title of Publications	Level	Journal Name	Year, Page	Volume,	Link
1.	An efficient algorithm to find next-to-shortest path on trapezoid graphs	International	Advances in applied mathematical analysis	2007, 02, 97 - 107		https://v
2	An efficient algorithm to find next-to-shortest path on permutation graphs	International	J. Appl. Math. Comput.	2009, 31(1), 369-384		
3	A linear time algorithm to construct a tree 4-spanner on trapezoid graphs	International	International Journal of Computer Mathematics	2010, 84(4), 743-755		

4	The k-neighbourhood-covering problem on interval graphs	International	International Journal of Computer Mathematics	2010, 87(9), 1918-1935	
5	Computation of a Tree 3-Spanner on Trapezoid Graphs	International	Annals of pure and applied mathematics	2012, 2(2), 135-150	
6	Minimum 2-tuple dominating set of permutation graphs	International	Journal of Applied Mathematics and Computing	2013, 43(1), 133-150	
7	An Optimal Algorithm to Find Minimum k -Hop Dominating Set of Interval Graphs	International	Discrete Mathematics Algorithms and Applications	2019, 11(2), 1950016(1-18)	https://w
8	An Optimal Algorithm to Find Next-to-Shortest Path between Two Vertices of Cactus Graphs	International	International Journal of Research in Advent Technology	2019, 7(4), 711-717	http://ww
9	An $O(n)$ -time algorithm to compute minimum k -hop connected dominating set of interval graphs	International	Malaya Journal of Matematik,	2020, S(1), 576-580	https://w
10	AN OPTIMAL ALGORITHM FOR COMPUTING MINIMUM k-HOP DOMINATING SET OF PERMUTATION GRAPHS	International	Serdica Mathematical Journal	2020, 46(1), 43-60	http://w
11	An Optimal Algorithm to Find Minimum k -hop Connected Dominating Set of Permutation Graphs	International	Asian-European Journal of Mathematics	2021, 14(2), 2150049(1-12)	https://v
12	Minimum r -Neighbourhood Covering Set of Permutation Graphs	International	Discrete Mathematics Algorithms and Applications	2021, 13(6), 2150081(1-14)	
13	Computation of diameter, radius and center of permutation graphs	International	Discrete Mathematics Algorithms and Applications	2022, 14(8), 2250039(1-23)	

13	Measurement of Height of Mount Everest by Radhanath Sikdar	National	Himalaya Samiksha Parishad	2021, 1-4	https://h
12	Computation of minimum d-hop connected dominating set of trees in $O(n)$ time	International	JOURNAL OF ALGEBRA COMBINATORICS DISCRETE STRUCTURES AND APPLICATIONS	2022, 9(3), 133-147	https://j 6
14	Edge-Vertex Domination on Interval Graphs	International	Discrete Mathematics Algorithms and Applications	2023, 2350015(1-12)	
15	Vertex betweenness centrality of corona graphs and unicyclic graphs	International	Journal of Mathematical Extension	2023, 17(4) 1-43	https://i

Book/Book chapter:

Sl. No	Title of Publications	Level	Publishing Agency	Year, Page	V
1.	Innovation of Multidisciplinary Research in Present and Future Time (Volume-4): Closeness Centrality of Friendship and Lollipop Graphs	National	THE HILL PUBLISHING	2023, 4, 44	
2	Beginners' Guide to Graph Theory	National	Techno World	2020	

8. Patents (if any): NO

9. Research Project (if any):NO

Serial No._Title_Funding Agency_ Duration of the Project_ Grants Amount_ Date of Award_
Status of the Project

10. Research Supervision (Ph.D./M.Phil.)

Serial No._Name of the student_Research Topic_Name of the institution_Date of
Registration_Year of Award of the Degree

Sl. No.	Name of the Student	Research Topic	Institution	Date of registration	Year of award of degree
1	Amita Samanta Adhya	A study on some	Research Centre in	27.6.2019	continue

		domination problems of intersection graphs	Natural and Applied Sciences(Department of Computer Science)Raja N. L. Khan Women's College (Autonomous), India	(Reg. No-381/PhD (Science) dated 27.06.2019	
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11. Seminar/Workshop participated:

Serial No. Title Date Organized by Place

Sl.No	Title	Date	Organized by
1.	State level seminar on Interrogating Knowledge and Power: Perceptions Across Disciplines	03.05.2015	Govt. General Degree College, Singu
2.	National Conference on "Optimization and Computational Mathematics(NCOM 2016)"	01.03.16 - 02.03.16	Department of Applied Mathematics Oceanology and Computer Programm Vidyasagar University
3.	National Seminar on "Advanced Level of Mathematical Science	9th to 10th February, 2017	Department of Mathematics of Raja N. L. Khan Women's College and Chandra Vidyasagar Mahavidyalaya
4.	One day Symposium on New UG Syllabus of Mathematics	13th September, 2017	Department of Applied Mathematics Oceanology and Computer Programm Vidyasagar University
5.	National Workshop on "Introduction to Algorithms with Special Emphasis to Graph Algorithms	27th to 29th March, 2018	Department of Applied Mathematics Oceanology and Computer Programm Vidyasagar University and Academy Discrete Mathematics and Application (ADMA) at Vidyasagar University
6.	workshop and hands on training programme (under UGC(CPE) Scheme) on "Object Oriented Programming in C++ and MATLAB	1st to 5th August, 2018	Department of Mathematics of Raja N. L. Khan Women's College, Midnapore
7.	workshop on "Algebra and Analysis"	30th to 31th October, 2018.	Department of Mathematics, Pingla Thana Mahavidyalaya
8.	National Seminar on "Recent Advances in Mathematics and Applications (RAMA-2019)	February 21, 2019	Department of Pure Mathematics, University of Calcutta
9.	National Seminar on celebration of national mathematics day and mathematics for all	18 March, 2019	Raja N. L. Khan Women's College
10.	International seminar on systematic approach to modern sciences and its philosophical impacts	6-8 February, 2020	Bajkul Milani Mahavidyalaya

11.	International seminar on mathematics and computing	20 – 21 February, 2020	Dept. of mathematics and computer science
12.	International conference on mathematical sciences and applications	26 – 28 March, 2020	Dept. of mathematics, University of Kalyani
13.	Webinar on RECENT RESEARCH DIRECTIONS IN DISTANCE IN GRAPHS	28th May, 2020	Department of mathematics, AYYA NADAR JANAKI AMMAL COLLEGE
14.			
15.	Webinar on trends in publishing	16 June, 2020	Springer Nature
16.			
17.	International Webinar on English in a global world	25 June, 2020	Oxford Education
18.	Online Summer School -2020 on Mathematics	27 June-6 July, 2020	Department of Mathematics, Presidency University
19.			
20.			
21.	International Webinar presentation (of one hour) on ‘Ramification of some precautions for controlling disease under the global sustainable supply chain management	3rd July, 2020	Department of Mathematics and the IQAC, Narasinha Dutt College
22.	National Webinar on "Online Education in the Changing Times: Problems and Prospects"	7th - 8th July, 2020	Vidyasagar University Teachers' Association (VUTA), Vidyasagar University
23.	Virtual Math Fest 2020	July 20-26, 2020	ISI, Kolkata, IISc, Chennai, HRI, Allahabad
24.	International Conference on Recent Trends in Graph Theory ICRTGT-2020	July 27-29, 2020	Department of Mathematics, Karnataka University
25.	International webinar on the role of applied mathematics in present global crises	5-7, August, 2020	Department of Applied Mathematics Oceanology and Computer Programming Vidyasagar University
26.	National webinar on recent development in mathematics and its social impact	8-9 August, 2020	Sukumar Sengupta Mahavidyalaya
27.	A Two-day International Webinar on Algebra, Analysis & Topology	13th -14th August, 2020	Department of Mathematics, Bankura University & Bankura Mathematical Society, Bankura University
28.	One Day National Webinar on Recent trends of Mathematics and its Application in Real Life Situation	16th August, 2020	Department of Mathematics in association with IQAC, Malda College
29.	ONE DAY WEBINAR ON “Application of Mathematics on Epidemiology	AUGUST 21, 2020	Department Of Mathematics, Vivekananda Satavarshiki Mahavidyalaya, Manikpara, Jhargram

30.	One-day Interactive Webinar on “Mental Health in pandemic State: Stress and its Management”	27 August, 2020	Vidyasagar University Alumni Association (VUAA), Vidyasagar University
31.	Webinar on recent trend in pure and applied mathematics	9-11 July, 2020	Department of mathematics,
32.	One day webinar on Statistical Physics Models of Epidemic Spreading	16th October, 2020, 11 am–12.30 pm	Department of Physics, Shahid Matangini Hazra Government General Degree College for Women
33.	National webinar on “Recent Advances in Mathematics and Applications (RAMA-2019)	10 – 11 March, 2022	Department of Pure Mathematics, University of Calcutta
34.	International conference on recent development in research (Offline)	28 June, 2023	Department of mathematics, Tamluk College

12. Programmes Conducted / Organised as Convenor / Organising Secretary etc. :NO

Serial No._Name of the Programme_ Sponsored By_Date

13. Achievements/Awards/Membership:

Member of

1. International Graph Theory Research Center
2. Himalaya Samiksha Parishad
3. International Association of Engineers

14. Any Other Relevant Information: NO