



SILDA CHANDRASEKHAR COLLEGE

CURRICULUM VITAE

Name : **Dr. NIRMAL KUMAR MANDAL**

Designation with Department : Associate Professor and HOD of Mathematics

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E-mail Id : nirmandal9@gmail.com

Date of Joining : 02-07-2004

Address : Inda, Kharagpur, Paschim Medinipur, 721305

Educational Qualification :

Degree	Institution	Year of Passing/Award
BSc(H)	Midnapur College (VU)	1994
MSc	Vidyasagar University	1996
BEd	VTT College, (VU)	1998
NET	CSIR-UGC	1999
PhD	Bengal Engineering and Science University (BESU), Shibpur, Howrah (Now <i>Indian Institute of Engineering Science and Technology (IIST)</i>)	2008

Area of Specialization : Operations Research

Area of Teaching

UG: i) Abstract Algebra
ii) Linear Algebra
iii) Real Analysis
iv) Differential Equation
v) Number Theory
vi) Numerical Analysis
vii) Mathematical Modelling
viii) Graph Theory
ix) Computer Programming

PG: i) Operations Research
ii) Optimization
iii) Differential Geometry
iv) Continuum Mechanics
v) Topology



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Teaching Experience : 21 years

Designation	Institution	Duration
Assistant Teacher	Haludbari High School (HS)	04-02-1999 to 22-05-2002
Lecturer	Subarnarekha Mahavidyalaya	23-05-2002 to 29-02-2004
Guest Faculty	BESU, Shibpur, Howrah	01-01-2003 to 31-10-2006
Lecturer	Silda Chandrasekhar College	02-07-2004 to 31-12-2005
Assistant Professor	Silda Chandrasekhar College	01-01-2006 to 01-07-2016
Associate Professor	Silda Chandrasekhar College	02-07-2016 –
Guest Faculty	Midnapur College (PG Section)	2015 – 2018
Guest Faculty	Netaji Subhas Open University (PG Section)	01-12-2005 –
Guest Faculty	Mahishadal Raj College (PG Section)	2016 – 2018
Guest Faculty	Raja Narendralal Khan Women's College (PG Section)	2019
Guest Faculty	Vidyasagar University, MCA Dept	2017
Guest Faculty	Vidyasagar University, DDE	2017

Participation in Administrative/Academic Activities :

1. Member of Governing Body 2006 –
2. Member of Finance Committee 2006 –
3. Member of Library Committee 2004 –
4. Superintendent of Boys' Hostel 2005 – 2008
5. Secretary and Programme Officer of NSS Advisory Committee 2006 – 2010
6. Convenor of Students' welfare Sub-Committee 2006 –
7. Coordinator of IQAC 2007 – 2016
8. Co-ordinator of Entry into Service 2011 – 2014
9. Supervisor of VU Examination Committee 2013 – 2015
10. Nodal Officer of UGC Community College 2013 – 2016
11. Member of Board of Management of Community College 2013 – 2016
12. Member of Board of Studies of Community College 2013 – 2016
13. Convenor of Grievance Redressal Cell 2013 –
14. Convenor of Admission Sub-Committee 2014 –
15. Member of advisory committee of VU Examination 2015 –
16. Coordinator of NAAC 2016 –
17. Member of routine committee 2018 –



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18. Member of BOS of BCA in VU

2009 – 2013

19. Member of UGC Building Committee of Kharagpur College

2011 – 2013

Conference/Seminar/Workshop organised :

Sl No	Title of the Seminar/Conference/Workshop	Year & Role in the Event	Funding Agency	Regional/State/National/International
1	7-day Orientation Programme on 'Marginal Stud A step Towards Dignity'	08.02.2014 to 14.02.2014. Secretary	UGC	State Level
2	Workshop on 'Motivating Programme to teacher for acquiring classroom skills'	12.08.14 Convenor	UGC	Regional
3	Seminar on 'Improvement of Teaching-Learning & Evaluation Process in Undergraduate Courses'	19.08.14 Convenor	UGC	Regional
4	Seminar on 'Future Prospects of Automobile Engineering (2 Wheeler Division)'	17.01.15 Convenor	Community College Scheme, UGC	State Level
5	Seminar on 'Human Rights'	11.02.15 Convenor	State Legal Authority, WB	Regional
6	Seminar on 'The Emerging Trends in Satellite and Wireless Communication Technologies'	15.06.15 Convenor	Community College Scheme, UGC	State Level
7	Workshop on 'Automobile Servicing (Two wheelers)' In association with George Insoft Pvt Ltd and Industry Partners, Honda, Hero, TVS, Yamaha	07.07.15 Convenor	Community College Scheme, UGC	State Level
8	Workshop on Quality Management and Enhancement	23.9.15 Convenor	Silda C S College	Regional



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Sl No	Title of the Seminar/ Conference/ Workshop	Year & Role in the Event	Funding Agency	Regional/ State/ National/ International
9	Seminar on Women Empowerment	29.01.16 Secretary	Silda CS College	State Level
10	Seminar on 'Impact of Global Warming and its Remedies'	13.03.16 Secretary	Silda C S College	Regional
11	Excellence in Higher Education: Challenges And Remedies. (NSEHECR-2016)	18.03.2016 Convenor	Silda C S College	National
12	Human Rights: Trend and Issues in Contemporary World.	17.03.2017 Secretary	Silda CS College	National
13	Seminar on 'Computer Programming Language'	20.03.17 Convenor	Dept of Mathematics, Silda CS College	Regional
14	Webinar on 'International Yoga Day'	21.06.20 Co-ordinator	Silda CS College	State Level
15	International Webinar on 'COVID-19 Pandemic and Its Psychological Consequences'	07.07.20 Secretary	Silda CS College	International

Research Interest : Inventory, Reliability, Supply Chain, Fuzzy number, Fuzzy Optimization

List of research publications in national/international journals:

1. **A multi-item inventory model with demand dependent unit cost: a geometric programming approach**, *Advances in Mathematical Statistical and Computational Methods in Science and Technology*, (2003) 259-274, Edited book by Prof S. Dey, Dept of Applied Mathematics, ISM, Dhanbad, Published by Pragati Prakashan, Meerut, UP, ISBN: 81-7556-598-5
2. **Multi-objective fuzzy inventory model with three constraints: A geometric programming approach**, *International Journal of Fuzzy Sets and Systems*, 150 (2005) 87-106. ISSN: 0165-0114. Impact Factor-3.505



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3. **A fuzzy inventory problem with stock dependent inventory costs via geometric programming approach**, *Tamsui Oxford Journal of Management Science*, Vol. 21, No. 1, (2005) 89-98. ISSN: 0258-5375
4. **Interactive fuzzy geometric programming method for multi-objective inventory problem**, *Fuzzy Logic and Optimization*, (2006), 15-29, Edited book by Prof S Nanda, Vice Chancellor, North Orissa University, Published by Narosa Publishing House Pvt Ltd, New Delhi, ISBN: 13: 978-81-7319-746-8.
5. **Multi-item deteriorated inventory model with a constraint: A geometric programming approach**, *European Journal of Operational Research*, Vol. 173, No. 1 (2006), 199-210. ISSN: 0377-2217. Impact Factor: 4.213
6. **Multi-item fuzzy inventory problem with space constraint via geometric programming method**, *Yugoslav Journal of Operations Research*, Vol. 16, No. 1, (2006) 55-66. ISSN: 0354-0243, EISSN: 2334-6043
7. **A displayed Inventory model with L-R fuzzy number**, *Fuzzy Optimization and Decision Making*, Vol. 5 (2006) 227-243. ISSN: 1568-4539. Impact Factor: 4.319
8. **Multi-item imperfect production lot size model with hybrid number cost parameters**, *Applied Mathematics and Computation*, Vol 182 (2006) 1219-1230. ISSN: 0096-3003. Impact Factor: 3.472
9. **An MC² level inventory problem: A Geometric Programming approach**, *Tamsui Oxford Journal of Management Science*, Vol. 23, No. 4 (2007), 49-66. ISSN: 0258-5375
10. **A Multi-criteria Multi-constraint Level Economic Production and Marketing Planning Problem with Fuzzy Cost Parameters: A Geometric Programming Approach**, *International Journal of Fuzzy Mathematics*, Vol. 16 (4), (2008). 835-852. ISSN: 1066-8950
11. **Geometric programming approach to an interactive fuzzy inventory problem**, *Advances in Operations Research*, Vol. 2011, (2011), 1-17. ISSN: 1687-9147. Cite Score: 1.3
12. **Fuzzy Economic order quantity model with ranking fuzzy number cost parameters**, *Yugoslav Journal of Operations Research*, Vol 22, 2012, pp. 247-264. ISSN: 0354-0243, EISSN: 2334-6043
13. **An Imperfect Quality Inventory Problem: A Geometric Programming Approach**, *International Journal of Mathematical Sciences and Engineering Applications*, Vol 7, No 1, Jan 2013, pp-185-195, ISSN: 0973-9424. Impact Factor: 0.5650
14. **An Economic Production Inventory Problem with Reworking of Imperfect Items in Fuzzy Environment**, *MATEMATIKA (Malaysian Journal of Industrial and Applied Mathematics)*, Vol. 30, No. 1, 2014, pp. 17-35. ISSN: 0127-8274, EISSN: 0127-9602. h-index: 19, i10-index-41.



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15. **Imperfect Production Inventory Problem with Interval Valued Coefficients**, *International Journal of Mathematical Sciences and Engineering Applications*, Vol 9, No 1, March 2015, pp-241-248, ISSN: 0973-9424. Impact Factor: 0.5650
16. **An Imperfect Production Inventory Problem with Inspection Errors**, *Journal of Mathematics and Informatics*, Vol 5, 2016, 45 – 55, ISSN: 2349 – 0632. Impact Factor: 1.627

Presentation of research papers in seminars/conferences

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Sl. No.	Title of the paper Presented	Title of Conference/ Seminar	Organized By	Whether International/ National/State/ Regional/College Or University Level
1	A multi-item inventory model with demand dependent unit cost: A GP approach	Recent Advances in Operations Research 15-16.03.2001	Dept of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University	National
2	Multi-item fuzzy inventory model with geometric programming approach	Advances in Mathematical, Statistical and Computational Methods in Science & Technology 29-30.2001	Department of Applied Mathematics, Indian School of Mines (ISM), Dhanbad	National
3	Multi objective fuzzy EOQ model with three constraints: A geometric programming approach	Information and Optimization 31.12.2001-01.01.2002	University of Calcutta	National
4	Interactive geometric programming method for multi-objective economic production quality	Analysis and Discrete Structure 22-24.12.2002	Dept of Mathematics, IIT Kharagpur	International
5	Geometric programming method for solving MC^2 level inventory problem with fuzzy cost parameters	Recent Advances in Mathematics 18-19.03.2004	Dept of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University	National



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Sl. No.	Title of the paper Presented	Title of Conference/ Seminar	Organized By	Whether International/ National/State/ Regional/College Or University Level
6	Signomial geometric programming approach to multi-item fuzzy inventory problem	Mathematics and its Application 27.03.2004	Department of Mathematics, Bengal Engineering College (Deemed University)	National
7	Multi-item Fuzzy inventory model with ranking fuzzy numbers of cost parameters	Mathematics and its Applications 13-14.01.2011	Dept. Of Mathematics, Jadavpur University	National
8	Fuzzy economic order quantity model with ranking fuzzy number cost parameters	Frontiers in Applied Mathematics and its Computational Aspects 15-17.03.2011	Dept of Mathematics, University of Calcutta	International
9	Mathematical Analysis in School level	Learning as enjoying: Co-curricular and recreational activities in Mathematics 18-19.2.11	Sevayatan Sikshan Mahavidyalaya	State Level-Regional
10	An imperfect production fuzzy inventory problem	Recent Developments in Applied Mathematics and its Applications 30-31.03.2011	Dept of Applied Mathematics with Oceanology and Computer Programming, VU	National
11	An imperfect production inventory problem with rework in fuzzy environment	Emerging Trends in Mathematics 19-20.12.2012	Vidyasagar University	National
12	An economic production inventory problem with reworking of imperfect quality items in fuzzy environment	Recent Trends in Mathematics and its Applications 20-21.03.2013	Vidyasagar University	International
13	Application of Graph Theory in Optimization	Design and Analysis of Graph Algorithms 13-14.08.2012	Dept of Mathematics, Raja N L Khan Mahavidyalaya	National
14	Sir Asutosh Mookerjee: A Legend Mathematician	Educationist Asutosh and His Humanistic Approach 21.12.2013	Chandrakona Vidyasagar Mahavidyalaya, Chandrakona	State Level



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Sl. No.	Title of the paper Presented	Title of Conference/ Seminar	Organized By	Whether International/ National/State/ Regional/College Or University Level
15	An Imperfect Production Inventory Problem with Reworking of Items in Fuzzy Environment	Recent Aspects in Mathematics and their Applications 25-26.02.2014	Vidyasagar University	National Level
16	An Imperfect Production Fuzzy Inventory Problem with Reworking of Imperfect Items and Limited Capacity	National Workshop on Optimization And Fuzzy Optimization 9.9.14-13.9.14	Department of Appl. Math with Ocean. and Comp. Prog. Vidyasagar University	National Level
17	An Imperfect Production Inventory Problem with weighted Trapezoidal Approximation of Fuzzy Cost Parameters	International Conference on Recent Trends in Mathematics and its Applications 18.3.15-19.3.15	Department of Appl. Math with Ocean. and Comp. Prog. Vidyasagar University	International Level
18	An EOQ Problem with Defective Production Rates and imprecise Cost Parameters	National Seminar on Recent Developments in Mathematics and its Applications 21-22.01.2016	Dept of Mathematics, Kalyani University	National
19	Effect of Global Warming and its Solution	Global Warming 08.02.16	NSS Units, Silda Chandrasekhar College	College
20	An Imperfect production inventory problem with inspection errors	National Conference on Optimization and Computational Mathematics 01-02.03.2016	Dept of Applied Mathematics and Oceanology and Computer Programming, Vidyasagar University	National
21	An economic production quantity model for imperfect quality items with shortages	National Seminar on Analysis and Applications: Celebrating 100 years of the General Theory of Relativity 10-11.03.2016	Dept. of Mathematics, West Bengal State University, Barasat	National



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Other activities (if any):

- **UGC Minor Research Project: UGC (No. PSW – 096/11-12 dated 03.8.11) for the period 15.11.11 – 14.11.13**
- **Reviewer of international journals**
 - i) Computers & Industrial Engineering (CAIE)
 - ii) European Journal of Operations Research (EJOR)
 - iii) Applied Mathematical Modelling (AMM)
 - iv) IEEE Transactions on Fuzzy Systems (IEEE TFS)
 - v) International Journal of Operational Research (IJOR)
 - vi) Yugoslav Journal of Operations Research (YJOR)
 - vii) American Journal of Operations Research (AJOR)
 - viii) Mathematical Modelling and Analysis (MMA)
 - ix) Asian Journal of Mathematics and Computer Research
 - x) British Journal of Mathematics & Computer Science
 - xi) Archives of Current Research International
 - xii) Asian Research Journal of Mathematics
 - xiii) Journal of Advances in Mathematics and Computer Science
- **Citation of papers by other researchers:** 173 as per the data from *ResearchGate* (an European social networking site www.researchgate.net for scientists and researchers)
- Organizing member of Gender sensitization programme on ‘Save the Girl Child’ in association with MANT, NGO on 02.09.13
- Organisation of awareness programme on ‘Women Empowerment’ in collaboration with ‘Suchetana’, NGO on 09.09.14 at Silda CS College
- Organisation of cultural competition on ‘International Students’ Day’ on 17.11.14 at Silda C S College
- Organization of 3-day ‘First Aid Training Camp’ in association with ‘St John Ambulance Brigade’ from 05.01.15 to 07.01.15.
- Organization of Science awareness programme in association with Paschim Banga Vigyan Mancha on 11.09.15
- Organising 1st ever **Reunion** on 02.10.15
- Organising member of Thalassemia detection camp on 18.12.15



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- Organization of Placement and Counselling Programme on 'Mobile Repairing and DTH Installation' by Globsyn Skills and Development Programme on 30.12.15
- Organization of 3-day 'First Aid Training Camp' in association with 'St John Ambulance Brigade' from 23.03.18 to 25.03.18
- Organisation of cultural programme on International Women's Day on 08.03.19
- Organisation of cultural programme on the 158th Birth anniversary of Rabindranath Tagore on 09.05.19
- Organisation of Model exhibition on World Environment Day, 5th June 2019
- Secretary of State Level Online Drawing Competition on 'Effect of COVID 19 on Education' on 18.07.20
- **Examiner, Paper setter, Head Examiner** of Vidyasagar University