Faculty Details Proforma for Website

Name	Dr. Karuna Mamtani	Photograph
Designation & Department	Assistant Professor Mathematics	
Date of Joining the institution	Adhoc _____ Permanent 04.09.2023	
Date of Birth	10.01.1990	
Address		
Phone No Office		
Residence		
Mobile	9953313083	
Email Address	karunamamtani@gmail.com	

Educational Qualifications		
Degree	**Institution**	**Year**
Ph.D.	University of Delhi	2017
UGC-JRF		2012
M.A Mathematics	St. Stephen's College, University of Delhi	2012
B.A. (Hons.) Mathematics	Jesus and Mary College, University of Delhi	2010
Administrative Assignments		

1. Member, **Central Data Cell**, sub-committee of IQAC, Mata Sundri College for Women, 2022-2023.
2. Member, **Swachh Core Team** under the aegis of Ministry of Education, Mata Sundri College for Women, 2022-2023.
3. Department Representative, **Admission Committee**, 2021-2023.
4. Member, **Examination Committee,** Mata Sundri college for Women, 2021-2023.
5. Member, **Garden Committee**, Mata Sundri college for Women, 2021-2023.
6. Co-Coordinator, **Peer Mentoring Program**, Department of Mathematics, Mata Sundri College for Women, 2020-2023.
7. Member, **Decoration Committee**, Mata Sundri college for Women, 2018-2021.
8. Department Representative, **Admission Committee**, 2018-19.
9. Member, **Central Admission Committee**, Mata Sundri college for Women, 2017-2018
10. Member, **Alumni Committee**, Mata Sundri College for Women, 2017-2018.
11. Member, **Divinity Society**, Mata Sundri college for Women, 2016-2018.

Areas of Interest / Specialization

Operator Theory

Subjects Taught

Real Analysis, Differential Equations (Ordinary and Partial), Calculus, Linear Algebra, Mathematical Modelling, Graph Theory, Numerical Methods, Discrete Mathematics.

Research Guidance

Publications Profile (Articles/ Books Published/ Books Edited)

1. Gupta, A. and **Mamtani, K.**: *Variants of Weyl's Theorem for Direct Sums of Closed Linear Operators*, Advances in Operator Theory, 2 (no. 4) (2017) pp. 409 - 418. *DOI Number:* 10.22034/aot.1701-1087
2. Gupta, A. and **Mamtani, K.**: *Weyl Type Theorems for Unbounded Class-A Operators*, Afrika Matematika, 28 (2017) pp. 745-754. *DOI Number:* 10.1007/s13370-017-0479-7
3. Gupta, A. and **Mamtani, K**.: *Weyl-type Theorems for Unbounded Posinormal Operators*, Journal of Contemporary Mathematical Analysis, 52(no. 4) (2017) pp. 191-197. *DOI Number:* 10.3103/S1068362317040057
4. Gupta, A. and **Mamtani, K.**: *Weyl-type Theorems for Adjoints of Unbounded Operators with Ascent 0 or 1*, Journal of Advanced Mathematical Studies, 9 (no. 3) (2016) pp. 420–428.
5. Gupta, A. and **Mamtani, K**.: *Weyl-Type Theorems for Restrictions of Closed Linear Unbounded Operators*, Acta Universitatis Matthiae Belii: series Mathematics, 23 (2015) pp. 87–94.
6. Gupta, A. and **Mamtani, K.**: *Weyl Type Theorems for Unbounded Hyponormal Operators*, Kyungpook Mathematical Journal, 55(3) (2015); 531–540. *DOI Number:* 10.5666/KMJ.2015.55.3.531

Conference Organized

1. Co-Convenor, **Career Counselling Workshop** under the Peer Mentoring Program of the Department of Mathematics, Mata Sundri College for Women held on 5th February, 2022.
2. Co-Coordinator, **International Colloquium on Recent Trends in Mathematical Sciences** organized by Department of Mathematics, Mata Sundri College for Women (University of Delhi) from November 15-16, 2021.
3. Coordinator, **30-Hour Short Term Skill Development Certificate Course on** Python for Machine Learning and Data Science, organized by Department of Mathematics and IQAC, Mata Sundri College for Women in collaboration with 9-Ledge Pro from October 31-November 25, 2020.

Research Projects (Major Grants/Research Collaboration)

Awards and Distinctions

1. Awarded the **Sudarshan Kumar Memorial Prize** for being the best all-round student of Mathematics (St. Stephen's College), 2010-2012.
2. Secured **IInd position** in University of Delhi (South Campus) and **Ist** in college in IIIrd year B.A.(Hons.) Mathematics with 88.25% aggregate.
3. **Academic excellence award** in B.A. Honours Mathematics 2007-10.
4. Received **The Geeta Chopra Memorial Scholarship** 2007-2010.
5. Received **The Maria Philip Scholarship** for academic excellence, good conduct and discipline.
6. Secured **IInd position** in University of Delhi (South Campus) in IInd year with 92.5% aggregate.
7. Secured **IIIrd position** in University of Delhi (South Campus) in Ist year with 85% aggregate.
8. **Certificate of Merit** for being the **School topper** in Commerce Stream with 94.8% aggregate.
9. **Amul Vidya Bhushan Award** by **Amul India** for outstanding Academic performance at State Board Higher Secondary Examination.
10. **Best Student Award** for outstanding performance among Sindhi Language Schools of New Delhi.

Association With Professional Bodies

Seminars/Webinars/Conferences /Workshops Attended

1. Participated in **Career Counseling Workshop on "Actuarial Science"** organised by the Department of Mathematics, Mata Sundri College for Women, University of Delhi on September 18, 2021.
2. Participated in Two Day Webinar on "**Enhancing Online Teaching-Learning using G-Suite Tools Google classroom and Google Meet**" with Hands-on Practical Sessions organised by IQAC, Mata Sundri College for Women, University of Delhi from July 15-16, 2020.
3. Participated in Webinar on "**Migration Matters**" organised by IQAC, Jesus and Mary College, University of Delhi on May 15, 2020.
4. Participated in Webinar on "**Cyber Crime and Prevention during Lockdown**" organised by IQAC in collaboration with Department of Commerce, Mata Sundri College for Women, University of Delhi on May 6, 2020.
5. Participated in the **National Conference on Advances in Mathematical Analysis and its Applications** organized by P.G.D.A.V. College, University of Delhi, sponsored by SERB-DST, Govt. of India from November 8-10, 2019.
6. Attended a **Workshop on Python** entitled `**Exploratory Data Analysis'** organized by the Department of Computer Science, Mata Sundri College for Women held on August 31, 2019.
7. Participated in the **International Meet on Analysis** held at the Department of Mathematics, University of Delhi on November 24, 2018.
8. Functioned as a **Resource Person** in the **DU Pre-Entrance Summer School, 2018** for imparting training to undergraduate students in Mathematics from June 1-16, 2018.
9. Participated in the **National Conference on Advances in Applied Mathematics and Statistics** organized by the Department of Mathematics, Mata Sundri College for Women, University of Delhi, on September 7-8, 2017.
10. Presented a paper entitled "Weyl-type theorems for Unbounded Hyponormal operators" in the **Research Scholar Seminar** organised by the Department of Mathematics, University of Delhi from February 23-24, 2015.
11. Presented a paper entitled "Weyl-type theorems for direct sum of a closed linear unbounded operator and a bounded operator" in the **International Conference on Algebra, Geometry, Analysis and their Applications** (Under UGC-DRS programme) held at Jamia Milia Islamia from November 27-29, 2014.
12. Completed the training course on **Introduction to MATLAB** conducted by Delhi University Computer Centre from September 01-05, 2014.
13. Attended the **Workshop on Foundation Course** "Building Mathematical Ability" at CPDHE, University of Delhi from February 01-02, 2014.
14. Participated in **MATLAB and Simulink Academic Tour 2013** of MathWorks at Cluster Innovation Centre, University of Delhi held on September 23, 2013.
15. Participated in the **National Seminar for Research Scholars** held at the Department of Mathematics, University of Delhi from September 20-21, 2013.
16. Volunteered in the International Conference "**The Legacy of Srinivas Ramanujan**" held from December 17-22, 2012

Other Activities (FDP's/Refresher Course)

1. Successfully completed a **One-Week Online Faculty Development Programme on "Data Analysis Using R Software"** organised by P.G.D.A.V College (Eve.) and Maharaja Agrasen Institute of Management Studies (GGSIPU) from January 17-23, 2023.
2. Successfully completed a **One-Week Online Faculty Development Programme on "Academic Research Writing"** organised by Teaching Learning Centre, Ramanujan College under the aegis of Ministry of Education PMMMNMTT from May 02-08, 2022 with **Grade A++.**
3. Successfully completed a One-Week (Online) International FDP on "Advanced Linear Algebra" organised by Miranda House, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi from September 27-October 01, 2021.
4. Successfully completed a **Two-Week Refresher Course in "Mathematics"** organised by Teaching Learning Centre, Ramanujan College under the aegis of Ministry of Education PMMMNMTT from March 16-30, 2021 with **Grade A+**.
5. Successfully completed a **7-day FDP on G-Suite Apps for Effective Online Teaching** organized by 9Ledge-Pro, a Microsoft Partner from July 25-31, 2020.

Past experience (If any, Give details)

1. **Assistant Professor** (Ad-hoc) in Mata Sundri College for Women, University of Delhi (6 years 8 months from 08.08.2016 to 17.04.2023).
2. **Guest Faculty** in Zakir Husain Delhi College, University of Delhi (3 months from 14.08.2015 to 12.11.2015).
3. **Guest Faculty** in Delhi College of Arts and Commerce, University of Delhi (3 months from 10.01.2014 to 24.04.2014).