# Dr. Taqseer Khan

## 1. PERSONAL AND SERVICE DETAILS

**Name:** Dr. Taqseer Khan
**Position:** Assistant Professor , Department of Mathematics, Faculty of Sciences, Jamia Millia Islamia (a Central University) New Delhi-110025, India, since September 14, 2017
**Nationality:** Indian
**Gender**: Male
**Place of Birth**: Bareilly, Uttar Pradesh-243303, India
**Address (Office):** Office 06, Department of Maths, Faculty of Sciences, Jamia Millia Islamia, Jamia Nagar, New Delhi-110025, India
**e-mail**: tkhan4@jmi.ac.in
**Phone:** +91-7060009525

## 2. ACADEMIC QUALIFICATIONS

- **Field of Specialization:** Mathematics (Analysis): Approximation Theory & Operator Theory
  **Ph.D. Title**: *Approximation by some Positive Linear Operators*, awarded on May 31, 2017, Aligarh Muslim University (AMU), Aligarh, India with 5 months research visit at the Ohio State University (OSU), Ohio, USA.
  **Ph.d. Supervisor: Prof. M. Mursaleen, Aligarh Muslim University (AMU), Aligarh, India; Co-supervisor**: **Prof. Jan Lang, Ohio State University, USA**
- **MS Mathematics,** 2011, CGPA 3.22 on a 4 point scale, Central European University (CEU), Budapest, Hungary (Accredited by Board of Education New York, USA)
  **Dissertation Title:** Distributive Lattices
  **Dissertation Guide:** Prof. Pal Hegedus, Renyi Institute of Mathematics, Budapest, Hungary
- **M.Sc. Mathematics**, 2008, **83.83%**, Aligarh Muslim University (AMU), Aligarh, Uttar Pradesh, India
  **Project Title:** A Study of Categorical Concepts

**Project Guide:** Prof. (late) S.M.A. Zaidi, Dept of Mathematics, AMU, Aligarh, India

- **B.Sc. (Hons.) Mathematics**, 2005, **72.26**%, Aligarh Muslim University (AMU), Aligarh, Uttar Pradesh, India
  **Major: Mathematics, Subsidiaries:** Physics, Chemistry, English
- **Intermediate** (Grade 12), 77.20%, 2001, UP Board Allahabad, Uttar Pradesh, India
- **High School** (Grade 10), 63.83%, 1999, UP Board Allahabad, Uttar Pradesh, India

## 3. <u>ADDITIONAL QUALIFICATION</u>

- Qualified **State Eligibility Test (U-SET) (**Mathematical Science**),** eligibility for Assistant Professor in Indian University, Roll No.: 03161847, 2015

## 4. <u>ACADEMIC ACHIEVEMENTS</u>

- **Topper** of Science group of college in High School (Grade 10), N. A. & I. Inter College Sirauli, Bareilly, UP, India, 1999
- **Topper** of college in Intermediate (Grade 12), N. A. & I. Inter College Sirauli, Bareilly, UP, India, 2001
- **Topper** (2nd) in B.Sc. (Hons.) of Dept of Mathematics, AMU, Aligarh, India, 2005
- **Topper** (Gold Medalist) in M.Sc. of Dept of Mathematics, AMU, Aligarh, India, 2008
- Only Indian among 7 selected for MS program to the Central European University (CEU) out of 3800 candidates from more than 100 countries in 2009
- Felicitated by the **CURSA (Central Universities Research Scholars Association), India,** with a momento and certificate for qualifying the international test of the CEU for MS program in 2009
- Selected for PhD program at the **University of Malaya, Kuala Lumpur, Malaysia** in 2013.
- Selected for the short term research at the Ohio State University under **the Indo-US STEM program** (formerly *"OBAMA-SINGH 21st CENTURY KNOWLEDGE INITIATIVE")* program between USA and India, funded by the US-India Educational Foundation (USIEF) and the Ohio State University, USA, 2016-17
- Recipient of the **Alburuj Best PhD Thesis Award**, Dept of Mathematics, Aligarh Muslim University, Aligarh, UP, India, 2018
- Awarded the **Best Paper Presentation** in the International Conference on Mathematics and Applications (ICMA 2024), organized by Deptt. Of Mathematics, Mata Sundri College for Women (University of Delhi), New Delhi, during Jan 10-12, 2024

## 5. <u>EMPLOYMENT</u>

- **Assistant Professor (permanent),** Dept of Mathematics, Jamia Millia Islamia (central university), New Delhi-110025, India, since Nov. 17, 2017 till present
- **Assistant Professor (contractual),** Dept of Mathematics, Jamia Millia Islamia (central university), New Delhi-110025, India, during Sept. 14- Nov. 16, 2017
- **Lecturer** of Mathematics, Mass College of Engineering and Management, Hathras-Aligarh, UP, India, during the session 2012-2013
- Appointed Lecturer of Mathematics at **College of Preparatory Year at Mzahmiah, King Saud University**, KSA, 2013
- One semester teaching experience of undergraduate classes in the Department of Mathematics, Aligarh Muslim University, Aligarh during the academic session 2015-2016

## 6. <u>SUPERVISIONS (M.Sc./M.Tech./Ph.D.)</u>

- Shuzaat Ali Khan, **Ph.D. awarded**, August 23, 2022 *(Topic: On Approximation by Positive Linear Operators and Applications*), Dept of Mathematics, JMI, New Delhi-110025
- Mohd Shahbaz, **Ph.D. Submitted** on Oct. 1, 2024 (Topic: *A Study of s-Numbers and Entropy Numbers of Linear Operators*), Dept of Mathematics, JMI, New Delhi-110025, India
- Gufran Malik, **Ph.D. pursuing** (Topic: *A Study on Approximation Properties of Positive Operators*), Dept of Mathematics, JMI, New Delhi-110025, India, since September 9, 2021
- Jay prakash, **M.Sc. Project**, completed in June 2024, *(Title: Bair Category Theorem and its Applications)*, Dept of Mathematics, JMI, New Delhi-110025, India
- Mujahid Khan, **M. Tech. Dissertation** awarded, 2021, in Computational Mathematics (Topic: *Approximation by Operators and its Applications*), Dept of Applied Sciences and Humanities, F/o Engg. & Technology, Jamia Millia Islamia, New Delhi-110025, India

## 7. <u>RESEARCH PUBLICATIONS</u>

1. Santosh Kaushik, Satish Kumar Dagar, Harindri Chaudhary, **Taqseer Khan,** *On generalized forms of Hilbert's inequality*, Filomat, 38:21 (2024) 7377-7388.

2. **Taqseer Khan,** Gufran Malik, M. Mursaleen, *On Approximation properties of Blended variant of Kantorovich-Stancu type Lupas operators*, Appl. Anal. Discrete Math. **18** (2024), 387-407.

3.  **Taqseer Khan**, Mohd Shahbaz, M. Mursaleen, *Strict s-numbers of weighted Hardy type operators on trees,* **Accepted**, Filomat (2024)

4.  **Taqseer Khan**, Mohd Shahbaz, *Finite strict singularity, co-singularity and entropy numbers of Laplace Transform,* **under revision** (2024)

5.  **Taqseer Khan**, Mohd Shahbaz, *Finite strict singulariy of Sobolev Embeddings,* **under review** (2024)

6.  **Taqseer Khan,** Gufran Malik, M. Mursaleen, *Approximation by Kantorovich type q-Mittag Leffler operators,* **submitted** (2024)

7.  Santosh Kaushik, **Taqseer Khan**, Harindri Chaudhary, *A Study of weights on grand Lebesgue spaces,* Southeast Asian Bull. Maths., accepted (Sept 2023)

8.  Mohd Shahbaz, **Taqseer Khan**, *On finite strict co-singularity of Volterra operators on non-reflexive space,* J. Ineq. Special Funct., 14:4 (2023), 1-12.

9.  Santosh Kaushik, **Taqseer Khan**, Harindri Chaudhary, *Integral Operators on grand Lebesgue spaces and related weights with properties*, Filomat , 37:6 (2023) 1767-1776

10. Shuzaat Ali Khan, Nadeem Rao, **Taqseer Khan**, *Approximation Properties of (p, q) Bivariate Szasz Beta type Operators*, Ital. J. Pure Appl. Math., **49,** 382-399 (2023)

11. Gufran Malik, **Taqseer Khan,** M. Mursaleen, *Approximation properties and q-statistical convergence of Kantorovich variant of Stancu type Lupas operators,* Filomat 37:29 (2023) 10107-10124

12. **Taqseer Khan,** S.A. Khan, N. Rao, *On Approximation by Bivariate Szasz- Gamme Type Hybrid Operators*, Bull. Math. Anal. Appl. **14**(1), 11-27 (2022)

13. **Taqseer Khan** and Shuzaat Ali Khan, *Approximation by Stancu Type Lupas Operators*, Palestine J. Math., 11(3), 700-707, (2022)

14. **Taqseer Khan**, Nadeem Rao, Shuzaat Ali Khan and Pradeep Malik, *On alpha-Baskakov-Gamma operators with two shifted nodes,* Palestine J. Math., **11**(2), 457-468 (2022)

15. **Taqseer Khan**, Mohd Saif and Shuzaat Ali Khan, *Approximation by Generalizes q-Szasz-Mirakjan Operators*, J. Math. Anal., **6**(2), 9-21 (2021)

16. Ayub Khan, Pushali Trikha and **Taqseer Khan**, Secure Communication Using Modified Fractional and Inverse Matrices Synchronization Methods, SN Computer Science (2021) 2:91

17. **Taqseer Khan**, A. Khan and H. Chaudhary, *Controlling Chaos in a Newly Designed Chaotic Hamiltonian System Based on Hénon-Heiles Model using Active Controlled Hybrid Projective Synchronization*, J. Sci. Res. **13** (2), 415-421 (2021)

18. **Taqseer Khan** and Harindri Chaudhary, *Adaptive Controllability of Microscopic Chaos Generated in Chemical Reactor System Using Anti-Synchronization Strategy*, Numer. Algebra Control Optim., 2021

19. **Taqseer Khan** and Harindri Chaudhary, *Combination anti-synchronization for chaos generated by generalized Lotka-Volterra biological systems using parameter identification method*, MESA **12** (2), 383-393 (2021)

20. **Taqseer Khan** and Harindri Chaudhary, *Estimation and Identifiability of Parameters for Generalized Lotka-Volterra Biological Systems Using Adaptive Controlled Combination Difference Anti-Synchronization*, Differ. Equ. Dyn Syst *(2020)*

21. **Taqseer Khan** and Harindri Chaudhary, *Projective Synchronization in Hyperchaotic Systems Using Adaptive Control Method*, Adv. Math. Sci. J. **9** (10), 7841-7849, (2020)

22. **Taqseer Khan** and Harindri Chaudhary, *Controlling and Synchronizing Combined Effect of Chaos Generated in Generalized Lotka-Volterra Three Species Biological Model using Active Control Design*, Appl. Appl. Math **15** (2), 1135-1148, (2020)

23. A. Khan, L. S. Jahanzaib, Nasreen, P. Trikha, **Taqseer Khan**, *Compound Difference Anti-Synchronization between Hyper-Chaotic Systems of Fractional Order*, J. Sci. Res. **12** (2), 175-181, (2020)

24. Ayub Khan, Lone Seth Jahanzaib, Pushali Trikha, **Taqseer Khan,** *Changing Dynamics of the First, Second & Third Approximates of the Exponential Chaotic System & their Synchronization,* J. Vib. Test. Sys. Dyn. **4** (4), 337-361, (2020)

25. **Taqseer Khan**, *On Statistical Approximation Properties of (p, q)-Bleimann-Butzer-Hahn operators,* JMI Int. J. Math. Sci. **10**, 26-47 (2019) (ISSN: 0976-5913)

26. M. Mursaleen, **Taqseer Khan**, *On (p, q)-analog of Stancu-Beta operators and their approximation properties,* TWMS J. App. Eng. Math. **8** (1), 136-143 (2018)

27. Mohammad Mursaleen, **Taqseer Khan**, Md Nasiruzzaman, *On the q-parametric Stancu type Dunkl generalization of the Kantorovich-Szasz-Mirakjan operators,* J. Math. Ext. **12** (3), 105-129 (2018) (ISSN: 1735-8299)

28. O. Baksi, **Taqseer Khan**, J. Lang, Vit Musil, *Strict s-Numbers of the Volterra operator,* Proc. Amer. Math. Soc. (2017), Article ID: PROC13769

29. M. Mursaleen, **Taqseer Khan**, *On Approximation by Stancu Type Jakimovski-Leviatan-Durrmeyer Operators,* Azer. J. Math. **7** (1), 16-26, (2017) (ISSN: 2218-6816)

30. M. Mursaleen, **Taqseer Khan**, Md Nasiruzzaman, *Approximating properties of generalized Dunkl analogue of Szasz operators,* Appl. Math. and Inf. Sci. **10** (6), 1-8, (2016)

31. M. Mursaleen, **Taqseer Khan**, *Approximation properties of the generalized q-Bernstein-Schurer-Kantorovich Operators,* J. Nonlinear Funct. Anal. 2016 (2016), Article ID 28.

32. M. Mursaleen, **Taqseer Khan**, *Some approximation results for the Stancu type q-Bernstein-Schurer-Kantorovich operators,* Comm. Appl. Anal. **20**, 187-208, (2016)

*33.* Mohammad Mursaleen, Abdizhahan M. Sarsenbi, **Taqseer Khan**, *On (p, q)-analogue of two parametric Stancu-Beta operators,* J. Inequal. Appl., 2016 (2016):190

*34.* L. N. Mishra, A. Srivastava, **Taqseer Khan**, S. A. Khan and V. N. Mishra, *Inverse theorems for some linear positive operators using Beta and Baskakov basis functions,* AIP Conference Proceedings **2364,** 020028 (2021); https://doi.org/10.1063/5.0062925

*35.* Ayub Khan, Lone Seth Jahanzaib, **Taqseer Khan** and Pushali Trikha, *Secure Communication: Using Fractional Matrix Projective Combination Synchronization,* AIP Conference Proceedings **2253**, 020009 (2020); https://doi.org/10.1063/5.0018974

## 8. <u>ATTENDED CONFERENCE/PRESENTATIONS/TALKS</u>

- Participated in the "**International Conference on Analysis and its Applications (ICAA-08)**" held at the Department of Mathematics, Aligarh Muslim University, Aligarh, India during Nov. 3-5, 2008
- Participated in the "*International Conference on Recent Trends in Algebra and Analysis with Applications* **(ICRTAAA-2014)**" held at the Department of Mathematics, Aligarh Muslim University, Aligarh, India during Feb.12-14, 2014
- Participated in the "*International Conference on Recent Advances in Mathematical Biology, Analysis and its Applications* **(ICMBAA-2015)**" held at the Department of Applied Mathematics, Aligarh Muslim University, Aligarh, India during June 4-6, 2015
- Participated in the "*International Conference on Analysis and its Applications* **(ICAA-2015)**" held at the Department of Mathematics, Aligarh Muslim University, Aligarh, India, during Dec. 19-21, 2015 and presented a paper entitled "Some Approximation properties of (p, q)-Bleimann-Butzer- Hahn operators"
- Participated in the **"Current Developments in Mathematics 2016 Conference"** held at the Department of Mathematics, Harvard University, Boston, USA, during Nov. 18-19, 2016
- Delivered an **invited talk** in the seminar of Analysis and Operator Theory at the Department of Mathematics, **The Ohio State University, USA**, on December 28, 2016 (Length of the talk: 55 minutes)
- Chaired a session in the **International Conference on Mathematical Analysis and its Applications (ICMAA-2019)** held at Department of Mathematics, The South Asian University (SAU), New Delhi, INDIA, during Dec. 14-16, 2019

- Participated and presented a paper (online) titled Controlling Chaos Generated in Predator-prey Interactions Using Adaptive Hybrid Combination Synchronization in the **3rd International Conference on Computing Informatics & Networks (ICCIN-2020),** organized by Department of Computer Science and Engineering, Bhagwan Parshuram Institute of Technology, New Delhi, INDIA
- Participated and presented a paper (online) titled Chaos Synchronization among Identical Chaotic New Hamiltonian Systems using Active Control Method in the **International Conference on Discrete and Applied Mathematics (ICDAM-2020),** organized by the Center for Studies in Discrete Mathematics (CSDM), Vidya Academy of Science and Technology, Trissur, Kerala, in association with Kerala Mathematical Association (KMA), during Sep 18-19, 2020, INDIA
- Participated and presented a paper titled Sobolev Embeddings into space of continuous functions, in the **International Conference on Mathematics and Applications (ICMA-2024),** organized by Mata Sundri College for Women, University of Delhi, New Delhi, India during Jan 10-12, 2024, INDIA
- Chaired a session in the **International Conference on Analysis and its Applications (ICAA-24)** held at Department of Mathematics, Jamia Millia Islamia (JMI), New Delhi, INDIA, during Jan 19-21, 2024

## 9. TRAINING/REFRESHER COURSE ATTENDED

- Attended workshop: Instructional School for Teachers on Topology held at **Indian Institute of Technology Bombay (IITB)** conducted jointly by IITB and Tata Institute of Fundamental Research (TIFR) Bombay, India, during May 09-21, 2016
- Attended **One Month Induction Training** of Faculty in Universities/Colleges/ Institutions jointly organized by the School of Education and the at UGC-Human Resource Development Center, Jamia Millia Islamia (a central university), New Delhi, India, during February 20-March 23, 2018
- Attended the 01st **three-week Refresher Course in Computational and Mathematical Studies (Computer Science, Mathematics and Statistics)** organized by the UGC-HRDC, Jamia Millia Islamia, New Delhi, India, during August 29-Sept 19, 2018.
- Attended **two-week Rerfresher Course in Mathematics** organized by "Department of Mathematics", Ramanujan College, University of Delhi, New Delhi, India, during March 16-30, 2021
- Attended the webinar **If You Know- The Art of Accurate Referencing in Academic Works** organized by ProQuest, held on August 27, 2021
- Attended One Week Interdisciplinary online Faculty Development Program (FDP-56) on **Graph Theory and its Applications** conducted by Deshbandhu College, University of Delhi, India, in collaboration with Hansraj College, University of Delhi, New Delhi, India, during

September 15-21, 2021

- Attended **two-week Rerfresher Course in Applicable Mathematics** organized by Teaching Learning Center, Ramanujan College, University of Delhi, New Delhi, India, during December 15-29, 2021
- Attended **two weeks Rerfresher Course in Mathematics (Theme: Python and Vedic Mathematics)** organized by Teaching Learning Center and Department of Mathematics, Ramanujan College, University of Delhi, New Delhi, India, during July 13-26, 2023
- Attended **two-week Rerfresher Course in Basic Sciences** organized by the UGS-HRDC, Jamia Millia Islamia, New Delhi, India, during August 22 –Sept 4, 2023
- Attended **10 days NEP 2020 Orientation & Sensitization Programme** under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) organized by **MMTTC**, Jamia Millia Islamia, New Delhi, India, during Feb 19 –Feb 28, 2024

## 10. FOREIGN VISITS

- Hungary (study)
- United States of America (study)

## 11. Reviewer

- American Mathematical Society since April 2021
- Pure and Applied Mathematics Journal, ISSN (print) 2326-9790 , (online) 2326-9812 since February 2022
- JMI International Journal of Mathematical Sciences, since 2019

## 12. Editorial Membership

- **JMI International Journal of Mathematical Sciences**, ISSN: 0976-5913, published by Dept of Mathematics, JMI, New Delhi-110025, India, since 2017
- **Guest Editor** for special issue of Journal of Mathematical Analysis to publish papers presented in the **International Conference on Analysis and its Applications (ICAA-24)** held at Department of Mathematics, Jamia Millia Islamia (JMI), New Delhi, INDIA, during Jan 19-21, 2024

- AWARDS/FELLOWSHIPS

- Received a certificate and momento, for obtaining first position in Science group in High School (Grade 10) in 1999, conferred by the N.A.& I. Inter College, Sirauli, Bareilly, UP-243303, India
- Received a certificate and momento, for being topper of the College in

Intermediate (Grade 12) in 2001, conferred by the N.A.&I. Inter College, Sirauli, Bareilly, UP-243303, India

- Awarded Ozair Ahmad Memorial PG scholarship for standing first in the competitive test held at Department of Mathematics, Aligarh Muslim University, Aligarh, Uttar Pradesh-202002, India, during M.Sc. in 2007
- Awarded full fellowship by the **Central European University, Hungary,** Europe for the 2 years MS program in 2009
- Awarded **UGC-JRF (MANF) 2014**, Award No. F1-17.1/2013-14/MANF-2013-14-MUS-UTT-23310 by UGC, New Delhi, India during PhD, 2014-2016
- Awarded the **UGC-SRF 2016** Award No. F1-17.1/2013-14/MANF-2013-14-MUS-UTT-23310 by UGC, New Delhi, India, 2017
- Awarded the **US-India Educational Foundation (USIEF)** funds for five months research training at the Ohio State University, USA, 2016
- Awarded the travel grant of $500 by Harvard University to attend the conference CDM 2016 at the **Dept. of Mathematics, Harvard University, Boston, USA** during Nov. 18-19, 2016
- Conferred the **Alburuj Best PhD thesis award by** Department of Mathematics, Aligarh Muslim University, 202002 Aligarh, India in 2018

## 13.  ADMINISTRATIVE DUTIES

- **Assistant Superintendent** for PG Examination (Compartment), Department of Mathematics, JMI, New Delhi, India, during Oct. 14-25, 2019
- **Attendance In-Charge**, Department of Mathematics, Jamia Millia Islamia, New Delhi, India, 2020
- **Course Adviser**, B.Sc. (Hons.)/ Applied Mathematics, Semester-III, Department of Mathematics, Jamia Millia Islamia, New Delhi, India, 2020
- **Assistant Superintendent** for PG Examinations (Compartment), Department of Mathematics, JMI, New Delhi, India, during Dec. 1-11, 2020
- **Member of Pre-Screening Committee for the post of Assistant Professor (Mathematics),** University Polytechnic, JMI, New Delhi, India, held on Nov. 23, 2020 in Recruitment and Promotion Section (RPS), JMI, New Delhi, India
- **Time Table and Examination In-charge** (2021, 2022, 2023, 2024), Department of Mathematics, Jamia Millia Islamia, New Delhi, India
- **Member of Technical-cum-Sub-Purchase Committee** (2021, 2022, 2023, 2024) at Department of Mathematics, Jamia Millia Islamia, New Delhi, India
- **Member of Weeding of Records Committee** at Department of Mathematics, Jamia Millia Islamia, New Delhi, India, during December 2021-till present

- **Library In-Charge** (2020, 2021, 2022), Department of Mathematics, Jamia Millia Islamia , New Delhi, India
- **Referee** to conduct interviews for award of JTA (Jamia Teachers Associations) need-cum-merit Scholarship (2021), Jamia Millia Islamia, New Delhi, India
- **Moderator** of UG/PG Courses for Odd/Even Semester Examinations, Department of Mathematics, JMI, New Delhi, India, during 2018-till present
- **Member of Committee** for conversion of M.A./M.Sc. Mathematics (Self-Financed, Evening) from annual mode to semester mode (Session 2024-25)
- **Member of Committee** for resumption of publishing volumes of the journal "JMI International Journal of Mathematical Sciences" and to revise its Editorial Board (2024)
- **Paper Setter, Moderator & Evaluator**: Academic/Entrance UG, PG and Ph.D. Examinations since 2018-till present
- **Attended Interview Board as Subject Expert for selection of TGT Mathematics Teachers in Kendriya Vidayala Sangathan,** Kendriya Vidayala, Old JNU Campus, New Mehrauli Road, New Delhi-110067, May 20-25, 2023
- **Attended Interview Board as SC/ST and Minority Member for selection of Primary Teachers in Kendriya Vidayala Sangathan**, Kendriya Vidayala-2, Delhi Cantt., New Delhi-110010, Nov. 3-8, 2023
- **Member of Board of Studies**, Deptt of Mathematics, JMI, since 2018-till present
- **In-Charge & Coordinator, Extension Lectures**, Deptt of Mathematics, JMI, Since Oct. 4, 2023
- **Organized Extension Lecture** in the department on the topic: 'Introduction to Coding Theory' by Prof. Noah Aydin, Deptt of Mathematics, Kenyon College, Gambier, Ohio, USA, Dec. 13, 2023
- **Organized Extension Lecture** in the department on the occasion of National Mathematics Day on the topic 'Srinivasa Ramanujan-The man who played with numbers' by Prof. Zafar Ahsan (Retd.), Deptt of Mathematics, AMU, Aligarh, Dec. 22, 2023
- **Organizing Secretary** of International Conference on Analysis and its Applications (ICAA-2024), organized by Deptt of Mathematics, JMI, New Delhi, during Jan 19-21, 2024


## 14. CURRICULUM DESIGNED

- **Designed Syllabus** (Semester System), M.A./M.Sc. Mathematics (SF) Program  (Deptt of Mathematics, JMI) 2024
  Courses:
  1.  General Topolgy

2. Advanced Functional Analysis
- **Designed Syllabus for** Ph.D. Course Work (First Paper) 2024
- **Designed curriculum** of following UG courses under **NEP 2020** Program:
  1. Riemann Integration and Series of Functions (BHM-51)
  2. Riemann Integration and Series of Functions (BAM-51)
  3. Real Analysis (BHM-41)
  4. Real Analysis (BAM-41)
  5. Topology (BHM-81)
  6. Topology (BAM-81)

## 15. EXTRA CO-CURRICULAR ACTIVITES

- **Anchored the Inaugural Session** of the International Conference on Analysis and its Applications (ICAA-2024), organized by Deptt of Mathematics, JMI, New Delhi, Jan 19, 2024
- **Conducted the Valedictory Session** of the International Conference on Analysis and its Applications (ICAA-2024), organized by Deptt of Mathematics, JMI, New Delhi, Jan 21, 2024
- **Organizing Secretary** of the International Conference on Analysis and its Applications (ICAA-2024), organized by Deptt of Mathematics, JMI, New Delhi, Jan 19-21, 2024
- **Team Manager of Faculty of Natural Sciences Volleyball Team** (men) for the Inter Faculty Tournament, March 14-16, 2023

## 16. COURSES TAUGHT

- **UG Level**
  Trigonometry, Linear Algebra, Group Theory, Ring Theory, Probability & Statistics, Real Analysis, Ordinary Differential Equations, Partial Differential Equations, Complex Analysis, Matrices And Vector Calculus, Co-ordinate Geometry, Integral Equations, Riemann Integration and Series of Functions
- **PG Level**
  Complex Analysis, Funtional Analysis, Metric Spaces and Topology
- **Ph.D. Corse Work** (2022-23, 2023-24)
- **Paper Setter, Moderator and Evaluator** for above courses for semester exam as well as for Admission Entrance Tests of JMI during 2018-till date
- **Paper setter for B.Arch. Admission Entrance Test**, Faculty of Engg. And Tech., JMI, 2019

## 17. COMPUTER

- LateX, MS Office, MS Excel, power point, internet

## 18.  LANGUAGES

- **English** (efficient in writing, reading and speaking)
- **Arabic** (read only)
- **Urdu** (both read and write)
- **Hindi** (native)

## 19.  REFERENCES

- **Professor Shehzad Hasan,** Head, Department of Mathematics, Jamia Millia Islamia (a Central University), Jamia Nagar, New Delhi-110025, INDIA**,** Phone: +91-9818317176, Email: shasan@jmi.ac.in
- **Professor Jan Lang** (Ph.D. Co-supervisor)
  Department of Mathematics, Ohio State University, Ohio, USA, Email: lang.162@osu.edu
- **Professor M. Mursaleen** (retd.) (Ph.D. Supervisor)
  Department of Mathematics, Aligarh Muslim University, Aligarh, UP-202002, India; Visiting Professor: China Medical University, Taiwan, Phone: +91-9411491600, Email: mursaleenm@gmail.com
- **Professor Pal Hegedus,** (M.S. dissertation Supervisor)
  Department of Mathematics, Renyi Institute of Mathematics, Budapest, Hungary, Email: hegedus.pal@renyi.hu

I vouch for the authenticity of the aforementioned facts.

(Dr. Taqseer Khan)