



# DEPARTMENT OF MATHEMATICS GHAZI UNIVERSITY DERA GHAZI KHAN

Address: The Ghazi University  
City Campus, Dera Ghazi Khan.  
Email: [hod.math@gudgk.edu.pk](mailto:hod.math@gudgk.edu.pk)  
No.GU-DGK/MATH- 1457/25  
Dated: **30-09-2025**

## Notification

### Subject: PhD Mathematics Synopsis Open Defense (Session 2022–2025)

It is hereby notified that the PhD Synopsis Open Defense of the following PhD Mathematics students (Session 2022–2025) will be conducted on **2<sup>nd</sup> October 2025, 3<sup>rd</sup> October 2025, and 6<sup>th</sup> October 2025**. The defense will be held at 11:00 AM in the D Room, Department of Mathematics, Ghazi University, Dera Ghazi Khan. All faculty members, supervisors, supervisory committee members, and research scholars are cordially invited to attend this academic activity. Details of the Ph. D students are given below.

### Date: **2<sup>nd</sup> October 2025 (Thursday)**

Sr. No.	Reg. No.	Name of Student	Supervisor	Co-Supervisor	Title of Thesis/Synopsis
1	2022-GU-0152	Ghulam Murtaza	Dr. Abdul Ghaffar	—	Accretion Mechanism for Regular Black Holes with Asymptotically Minkowski Cores and Improved Schwarzschild Black Holes
2	2022-GU-0155	Karim Dad	Dr. Sadia Sattar	Prof. Dr. Muhammad Jamil Amir	Gravitational Collapse in $f(R, T^2)$ Gravity
3	2022-GU-0154	Khurram Faiz	Dr. Aqeel Ahmad	Dr. Zafar Ullah	Mathematical Modeling and Investigations of Plant Diseases by Taking Control Measures
4	2022-GU-0156	Muhammad Kamran	Dr. Abdul Rauf Khan	Dr. Zafar Ullah	Estimation of Physicochemical Characteristics for Molecular Graphs with Topological Descriptors and Prioritization through Multi-Criteria Decision Making
5	2022-GU-0157	Naveed Jamal	Dr. Abdul Rauf Khan	Dr. Jamshaid Ahmad	Fixed Point Theorems for Self and Multivalued Mappings in F-Metric Spaces with Applications

### Date: **3<sup>rd</sup> October 2025 (Friday)**

Sr. No.	Reg. No.	Name of Student	Supervisor	Co-Supervisor	Title of Thesis/Synopsis
1	2022-GU-0159	Nadeem Ul Hassan Awan	Dr. Abdul Ghaffar	—	Topological Descriptors and QSPR Modeling Applications in Characterizing Molecular Graphs
2	2022-GU-0160	Muhammad Suleman Khan	Dr. Aqeel Ahmad	—	Analysis of Global Warming Impact on Ecosystem within the Framework of Different Kernels

3	2022-GU-0161	Qazi Muhammad Farooq	Dr. Abdul Ghaffar	Dr. Aqeel Ahmad	Investigation to Control the Lumpy Cow Skin Virus and Bifurcation Analysis
4	2022-GU-0162	Safdar Abbas	Dr. Abdul Ghaffar	Dr. Aqeel Ahmad	Mathematical Modeling and Investigation of Chaotic Finance with Different Energy Sources Using Fractional Operators

**Date: 6<sup>th</sup> October 2025 (Monday)**

Sr. No.	Reg. No.	Name of Student	Supervisor	Co-Supervisor	Title of Thesis/Synopsis
1	2022-GU-0158	Muhammad Qasim	Dr. Abdul Rauf Khan	Dr. Muhammad Abubakar Siddique	Generalizations of Some Existing and New Topological Invariants for Graphs
2	2022-GU-0164	Sana Khan	Dr. Muhammad Saeed Akram	—	Improving Bounds for Numerical Radius-Type Functionals
3	2022-GU-0165	Fakher Abbas	Dr. Abdul Ghaffar	Dr. Aqeel Ahmad	Analysis with Modeling for Generalized Cholera Disease by Taking Symptomatic and Asymptomatic Measures
4	2022-GU-0153	Usama Atta	Dr. Aqeel Ahmad	Dr. Sadia Sattar	Mathematical Modeling and Control of Infectious Diseases Using Different Fractional Operators
5	2022-GU-0163	Asad Ullah	Dr. Abdul Rauf Khan	Dr. Shahbaz Ali	On Expanding Aggregation Operators and Methods within Single-Valued Neutrosophic Soft Environments for Multi-Attribute Decision Making

 *Thaffar/30/09/25*

Dr. Abdul Ghaffar (Chairperson)  
 Department of Mathematics  
 Ghazi University, Dera Ghazi Khan  
 Email: aghaffar@gudgk.edu.pk | hod.math@gudgk.edu.pk  
 Phone: +92-334-7138562

**Copy to:**

1. PS to Vice Chancellor, Ghazi University
2. Director BASAR, Ghazi University
3. Controller of Examinations, Ghazi University
4. Director Academics, Ghazi University
5. Deputy Director IT Services for publishing on university website
6. Office Copy