

# Certificate

This is to certify that the thesis entitled "**Common Fixed Point Theorems in  $G$ -metric Spaces**" being submitted for the award of Ph.D. Degree in Mathematics by **Sejal Vikramsinh Puvar** (Reg. No: FOS/2266, Date: 10-02-2021), incorporates the original research work carried out by her under my guidance and no part of this work has been previously submitted by her to any other University or Institution for the same or any other degree.

She has put into research for the requisite number of terms as required by the University.



**Dr. R. G. Vyas**  
(Guide)

Professor

Department of Mathematics

Faculty of Science

The M. S. University of Baroda

Vadodara 390002.

Forwarded through:



**Head**

Department of Mathematics

Vadodara

January 2024


**Head**  
**Department of Mathematics**  
**Faculty of Science,**  
**The M.S. University of Baroda**  
**Vadodara.-390 002**

**Professor**  
**Department of Mathematics**  
**Faculty of Science**  
**The M.S. University of Baroda**  
**Vadodara-390 002**

# Certificate

This is to inform that the following publications have resulted from the research work of my Ph.D. student Sejal Vikramsinh Puvar, who wishes to submit her thesis titled “**Common Fixed Point Theorems in  $G$ -metric Spaces**” to the Department of Mathematics, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara for the award of the degree of Doctor of Philosophy in Mathematics.

1. S. V. Puvar, R. G. Vyas, Coincidence and Common Fixed Point results in  $G$ -metric Spaces using Generalized Cyclic Contraction, **Thai Journal of Mathematics**, (2022), 20(3), 1109-1117. ISSN: 1686-0209. (Indexed in Scopus, ESCI) (MR4524767).
2. S. V. Puvar, R. G. Vyas, Ćirić type results in quasi-metric spaces and  $G$ -metric spaces using simulation function, **Problemy Analiza-Issues of Analysis**, (2022), 11(2), 72-90. ISSN: 2306-3424. (Indexed in Scopus, ESCI) (MR4459168).  
DOI: 10.15393/j3.art.2022.11230
3. S. V. Puvar, R. G. Vyas,  $(\psi, \phi)$ -Wardowski contraction for three maps in  $G_b$ -metric spaces, **Acta et Commentationes Universitatis Tartuensis de Mathematica (ACUTM)**, (2023), 27(1), 69-82. ISSN: 1406-2283. (Indexed in Scopus, ESCI) (MR4611960).  
DOI: <https://doi.org/10.12697/ACUTM.2023.27.06>
4. S. V. Puvar, R. G. Vyas, Rational type cyclic contraction in  $G$ -metric Spaces, **Problemy Analiza-Issues of Analysis**, (2023), 12(3), 119-131. ISSN: 2306-3424. (Indexed in Scopus, ESCI) (MR4660808).  
DOI: 10.15393/j3.art.2023.13110

  
Dr. R. G. Vyas  
Professor (Guide)  
Department of Mathematics  
Faculty of Science  
The M.S. University of Baroda  
Vadodara-390 002