

## Notice for the PhD Viva Voce Examination

Ms Divya Antoney (Registration Number: 1881507), PhD scholar at the School of Sciences, CHRIST (Deemed to be University), Bangalore will defend her PhD thesis at the public viva-voce examination on Thursday, 16 May, 2024 at 9.30 am in Room No. 044, Ground Floor, R & D Block, CHRIST (Deemed to be University), Bengaluru - 560029.

Title of the Thesis

A Study on Labeling Problems in Signed

Graphs

:

Discipline

Mathematics

External Examiner (Outside Karnataka)

Dr Tarakeshwar Singh

Professor

Department of Mathematics

BITS Pilani, K K Birla Goa Campus, NH-17B,

Zuarinagar, Goa - 403726

External Examiner (Within Karnataka)

Dr K Meenakshi

Professor and Head

Department of Mathematics CMR Institute of Technology

132 AECS Layout

ITPL Road, Kundalahalli Bengaluru - 560037

Karnataka

Supervisor

Dr Paradesi Tabitha Rajashekar

Associate Professor

Department of Mathematics

School of Sciences

CHRIST (Deemed to be University)

Bengaluru-560029

Karnataka

The members of the Research Advisory Committee of the Scholar, the faculty members of the Department and the School, interested experts and research scholars of all the branches of research are cordially invited to attend this open viva-voce examination.

Registrar

Place: Bengaluru Date: 13 May 2024

## **ABSTRACT**

A signed graph can be considered as a weighted graph G; that is, edges of G have been given the weights + and -. We initiate a study on S-cordial, total S-cordial, C- labeling and total C-cordial labelings. We define two labelings of a properly colored graph, namely parity labeling of a properly colored graph, product labeling of a properly colored graph and initiate a study on them.

Keywords: signed graph, parity labeling of a properly colored graph, chromatic rna number, product labeling of a properly colored graph, frustration index of a graph, color product rna number, S-cordial signed graph, total S-cordial signed graph, C- cordial signed graph, total C-cordial signed graph

## Publications:

- 1. D. Antoney, T. A. Mangam and M. Acharya, "C-cordial labeling of line Signed Graphs-1", AIP Conference Proceedings, 2261(1), 1-7 (2020).
- 2. D. Antoney, T. A. Mangam and M. Acharya, "Signed graphs from proper coloring of graphs-1", 3c technologia, 12(2), 148-161, 2023.
- 3. D. Antoney, T. A. Mangam and M. Acharya, "Chromatic rna number of operations on graphs", Informatica, 34(5), 39-48, 2023.