## CERTIFICATE

This is to certify that the project report entitled "Graphs and Matrices" is a bonafied work carried out by Ms. Shwetha Rai M bearing the Reg No. 218035, under the guidance of Ms. Apoorva Shetty and Dr. Shubha V S in the Department of PG Studies and Research in Mathematics, St. Aloysius College and St. Joseph Engineering College respectively.

The same is being submitted to the Post Graduation Department Mathematics, St. Aloysius College in partial fulfillment of the requirements for the award of Master of Science Mathematics. No part of this thesis has been presented for the award of any other degree.

Place : Mangaluru Date : 26-05-2023

22/06/2023

Signature of the HOD MS. ANUPRIYA SHETTY

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