

**TO DERIVE GROUP MULTIPLICATION OF  $C_{3v}$  POINT GROUP AND ITS  
APPLICATIONS IN IR SPECTROSCOPY**

A Dissertation for  
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Submitted in partial fulfilment of Master's Degree  
M.Sc. in Physical Chemistry  
by

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### DECLARATION BY STUDENT

I hereby declare that the data presented in this Dissertation report entitled, "**TO DERIVE GROUP MULTIPLICATION OF  $C_{3v}$  POINT GROUP AND ITS APPLICATIONS IN IR SPECTROSCOPY**" is based on the results of investigations carried out by me in the M.Sc. Chemistry at the School of Chemical Sciences, Goa University under the Supervision of Dr. **RAJENDRA. N. SHIRSAT** and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities will be not be responsible for the correctness of observations / experimental or other findings given the dissertation.

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Place: Goa University



### COMPLETION CERTIFICATE

This is to certify that the dissertation report "TO DERIVE GROUP MULTIPLICATION OF  $C_{3v}$  POINT GROUP AND ITS APPLICATIONS IN IR SPECTROSCOPY" is a bonafide work carried out by Mr. SAMUEL ANTHONY FERNANDES under my supervision in partial fulfilment of the requirements for the award of the degree of Master of Science in the Discipline Chemistry at the School of Chemical Sciences, Goa University.

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Dr. RAJENDRA .N. SHIRSAT

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Date: 02/05/24

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