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(TO WHOM IT MAY CONCERN)

This is to certify that the work reported in this thesis entitled " STUDY OF PHYSICAL PROPERTIES OF LIQUID CRYSTALS AND THEIR MIXTURES" by Mr. Navin Kumar Pradhan has been carried out by the candidate himself under my direct supervision and guidance. Mr. Navin Kumar Pradhan has fulfilled all the requirements for the submission of the thesis for Ph.D. degree of the University of North Bengal. Some part of the research work presented in this dissertation has been performed in collaboration with others. However, even in those works his contribution is very substantial. In character and disposition Mr. Navin Kumar Pradhan is fit to submit the thesis for the Ph. D. degree.

Date: 29th June 1998

(Ranjit Paul)

Professor of Physics and Supervisor.