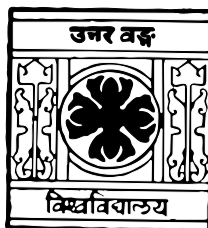


## UNIVERSITY OF NORTH BENGAL

Prof. P. Ghosh,  
DEPARTMENT OF CHEMISTRY  
University of North Bengal,  
Darjeeling – 734 013, India.



Ph: +91 3532776 381 (off)  
+91 9474441468 (M)  
Fax: +91 353 2699 001  
Email: [pizy12@yahoo.com](mailto:pizy12@yahoo.com)

Ref. No.....

Dated: 05/12/2016

### CERTIFICATE

I certify that **Mr. Mainul Hoque** has prepared the thesis entitled ***VISCOSITY INDEX IMPROVER AND POUR POINT DEPRESSANT PROPERTIES OF ADDITIVES FOR LUBRICATING OIL*** for the award of Ph.D Degree of the University of North Bengal, under my guidance. He has carried out the research work at the Department of Chemistry, University of North Bengal. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

**Professor**  
**Department of Chemistry**  
**University of North Bengal**  
**Darjeeling - 734013, India**

Prof. Pranab Ghosh (Research Supervisor)  
Department of Chemistry  
University of North Bengal  
Raja Rammohunpur, Darjeeling - 734013  
West Bengal, India

Date: 05/12/2016