

*Dedicated to*

*Maa & Deta*

## DECLARATION

I, Nivaj Gogoi, Research Scholar in the Department of Commerce, under the School of Management Sciences, Tezpur University, Assam, India, hereby declare that the thesis entitled "Industrial Growth and Environmental Degradation in India: Relevance of the Environmental Kuznets Curve Hypothesis" is a bonafide research undertaken by me under the supervision and guidance of Dr. Farah Hussain, Assistant Professor, Department of Commerce, Tezpur University, Assam, India. The work embodies the results of my original research and reflects achievement in this area of research. I also certify that, to the best of my knowledge, any help received in preparing this thesis, and all sources used have been acknowledged in this thesis.

This work has not been submitted elsewhere for award of any degree.

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(Nivaj Gogoi)

Place: Tezpur

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### CERTIFICATE FROM THE SUPERVISOR

This is to certify that the thesis titled "Industrial Growth and Environmental Degradation in India: Relevance of the Environmental Kuznets Curve Hypothesis" submitted to the School of Management Sciences, Tezpur University, in part fulfilment for the award of the degree of Doctor of Philosophy in Commerce is a record of research work carried out by Mr. Nivaj Gogoi under my supervision and guidance. All help received by him from various sources has been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

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## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>Expansion</b>
CPCB	: Central Pollution Control Board
CEEW	: Council on Energy, Environment, and Water
CER	: Certified emission reduction
CH <sub>4</sub>	: Methane
CMIE	: Centre for Monitoring Indian Economy
CO <sub>2</sub>	: Carbon dioxide
CRF	: Controlled-release fertilizer
EKC	: Environmental Kuznets curve
EPA	: Environmental Protection Agency
EPWRF	: Economic and Political Weekly Research Foundation
ETS	: Emission Trading Scheme
FEM	: Fixed-Effects Model
GDP	: Gross domestic product
GHG	: Greenhouse gas
ICI	: Index of Eight Core Industries
IEA	: International Energy Agency
IIP	: Index of Industrial Production
IPCC	: Intergovernmental Panel on Climate Change
IVA	: Industrial value added
LPG	: Liberalization, privatization and globalization
MoEF	: Ministry of Environment and Forest
MoEFCC	: Ministry of Environment, Forest and Climate Change
NDC	: Nationally Determined Contribution
PM	: Particulate matter
POOLS	: Pooled Ordinary Least Squares
R&D	: Research and development
REM	: Random Effects Model
SDG	: Sustainable Development Goals
SPCB	: State Pollution Control Board
US	: United States

WMO : World Meteorological Organization